



Differences in Learning Outcomes Between Conventional Learning and Video Tutorial Learning in Traditional Bun Courses

Ifa Nurhayati*, Godham Eko Saputro

Beauty Education, Universitas Negeri Semarang, Gunungpati, Semarang, Indonesia

*Corresponding author. Email: ifa.nh@mail.unnes.ac.id

ABSTRACT

This study aims to examine the differences in learning outcomes in Traditional Bun courses after learning using video tutorial media and conventional learning. The method used in this study is the pre-test pattern – post test group design, namely the existence of pre-test and post test in the experimental group and control group. Based on the results of the study, the average learning outcome in the control group which was originally 66.35 increased to 77.65 while in the experimental group the average learning outcome which was originally 65.24 increased to 81.00. The difference in learning outcomes in conventional learning and video media learning was tested using the t test with tcount is 4.48568 with $t_{table} = 1.69$ ($t_{calculate} > t_{table}$) at $\alpha = 5\%$ with $dk = 32$. So it can be concluded that the learning outcomes of students using video tutorial media learning are different from conventional learning in traditional bun courses for students of the UNNES Beauty Education Study Program, Class of 2021.

Keywords: *Video Tutorial media, Traditional Bun, Education.*

1. INTRODUCTION

Educators as pillars of fostering the younger generation can motivate students not to regard students as learning objects, but to position students as learning subjects [1]. Learning is a word that is familiar to all walks of life [2]. In the learning process in tertiary institutions, lecturers are important figures in achieving these goals, so it is expected that lecturers have expertise in conveying material, choosing appropriate learning models and learning media, so that learning becomes effective. Teaching and learning is an important component in education [3]. Students nowadays are asked to balance the theory and practice that they receive from school and outside [4].

The conventional learning model is a term that is used for daily learning activities model. The model tends to focus on memorization learning and exercises in texts. In addition, the assessment is still in the form of paper and pencil tests, which only requires one correct answer. The steps of this model generally start from explaining the material provided by the teacher, doing the exercises given and ending with homework assignments [5].

Here are some of the reasons why conventional learning model is often used and also its advantages, the teacher can easily control the class, easy to organize the seating or class, can be followed by a large number of students, easy to prepare and implement and the teacher can easily explain the lesson well [6].

However, conventional learning models also have weaknesses. These weaknesses include, verbalism is easy to occur, facilitates auditory learners, but not visual learners, not facilitate visual learners, the class will become boring, the teacher concludes that students understand and are interested in the class [7].

There is an argument that conventional learning is the best way in maintaining a learning process. Other learning methods consider it to be less efficient. Conventional learning also gives more chance to students to meet their lecturer and discuss with them directly [8].

Conventional method basically deals with traditional face to face system [9]. conventional learning are known to possess methods, structure, content, strategy and learning activities. This depends on teachers' ability to

adopt, develop and inculcate standard learning components [10].

Learning media is one of the technologies that can be utilized as learning media, namely video media. Video media is a set of components or media that can display images and sound at the same time [11]. Video is a recording, storage and processing of still images so that it looks like a movie moving images [12]. Video comes from the word *vidi* or *visum* which means seeing or having vision [13] [14].

Learning the practice of traditional buns in the Cosmetology Education Study Program requires a deeper understanding of the practical learning process so that learning media is needed that can clarify the messages conveyed by lecturers to students [15]. The right learning media can help in the process of conveying information to support traditional bun learning, so that the information conveyed can be absorbed more optimally. There is a need for innovation in technology development to package the current learning process more effectively, one of which is the development of learning media which is an important part of the learning process and is certainly directed at meaningful learning that encourages students to develop 21st Century skills [16]. A good media is one that is able to provide a stimulus and response that is the same both experience and the same perception between teachers and students [15]. One of the media that is currently effective and efficient in learning traditional buns in the Cosmetology Education Study Program is video media in the form of video tutorials.

Video can depict an object moving together with natural sound. Videos can present information, describe processes, explain complex concepts, teach skills, shorten or extend time and influence attitudes. The results of research conducted at SMK N 4 Semarang concerning "Effectiveness of Using Interactive Video Learning Media to Improve Learning Outcomes of Service Engine Practices and Their Components" concluded that there was a significant increase in student learning outcomes and interactive video learning media was effective in improve student learning outcomes in the basic practice of service engines [17]. Research conducted by Zhang, et al with the title "Instructional Video In E-Learning: Assessing The Impact Of Interactive On Learning Effectiveness" which was conducted at a large university located in the west of the United States with a sample of 138 students explaining that this video is interactive which is operated simply or can be accessed by anyone in which there is some content or material that causes better learning outcomes and higher learning satisfaction [18]. The purpose of this research is to find out how much the learning outcomes of traditional buns are between those who use conventional learning and those who use learning using video tutorials and to find out whether

there is a difference in the learning outcomes of traditional bun courses for students between using learning using video tutorial media and conventional learning.

2. RESEARCH METHODOLOGY

The type of research used is experimental research by comparing 2 samples given different treatments. In this study using an experimental design with a pattern of pre test - post test group design, namely the presence of pre test and post test in the experimental group and the control group. The research was carried out by using one class that took traditional bun courses using video tutorial media in the experimental class and the control class using conventional learning methods. In this experimental research, it was carried out to see any differences in the results of the treatment given.

The population in this study were Cosmetology Education Students Class of 2022 with a total of 34 students. The sample used was Cosmetology Education Students

Class of 2022 which is divided into 2 groups, namely the experimental group and the control group with a total of 17 students in each group. With the experimental class using video tutorial media and the control class using conventional learning.

Testing the hypothesis of increasing learning outcomes is done by t-test with the formula [19]:

$$t = \frac{\bar{x}_1 - \bar{x}_2}{s \sqrt{\frac{1}{n_1} + \frac{1}{n_2}}} \text{ dengan } S_{gabungan} = \sqrt{\frac{(n_1-1)S_1^2 + (n_2-1)S_2^2}{n_1 + n_2 - 2}}$$

(Sundavana, 2015: 145-147)

Test criteria for the t test (difference of two means) posttest learning outcomes using a right-sided test, with $dk = (n_1 + n_2 - 2)$ and probability $(1 - \alpha)$ which means $\alpha = 5\%$, namely accept H_a if $T_{count} > t_{table}$

3. RESULTS AND DISCUSSION

The research results were obtained from the learning outcomes after the treatment (post-test) which were compared with the learning outcomes before the treatment (pre-test). In the control group the pre-test average score was 66.35 with a completeness percentage of 5.8% because of the 17 students only 1 student achieved the specified Minimum Mastery Criteria, which was 75.00, while the post-test average score test.

The learning outcomes of students in the experimental group were obtained for a pre-test average score of 65.24 with a completeness percentage of 5.8%. between the pre-test and post-test results can be presented in the table below

The research results were obtained from the learning outcomes after the treatment (post-test) which were compared with the learning outcomes before the treatment (pre-test). In the control group the pre-test average score was 66.35 with a completeness percentage of 5.8% because of the 17 students only 1 student achieved the specified Minimum Mastery Criteria, which was 75.00, while the post-test average score test.

of 77.65 with a completeness percentage of 76% because out of 17 students there were only 13 students who achieved the Minimum Completeness Criteria (KKM) which was set at 75.00.

The learning outcomes of students in the experimental group were obtained for a pre-test average score of 65.24 with a completeness percentage of 5.8% because out of 17 students there was only 1 student who achieved the specified Minimum Mastery Criteria (KKM) which was 75 while the average score -the post-test average was 81 with a percentage score of 94.11% because out of 17 students only 16 students achieved the Minimum Completeness Criteria (KKM) which was determined at 75 while those did not reach the Minimum Completeness Criteria (KKM of 1 student. Differences in the lowest, highest, class average, and classical completeness achievement between the pre-test and post-test results can be presented in the table below

Table 1. pre-test and post-test results

	Pre Test		Post Test	
	Control	Experiment	Control	Experiment
Highest Score	75	85	75	90
Lowest Score	60	71	60	71
Average	66.35	65.24	77.65	81
Completeness	1	1	13	16
Incompleteness	16	16	4	1

The difference test of the two means or also called the t-test is used to determine whether the experimental group and the control group have the same or different final abilities.

Table 2. t-test

Group	t _{count}	t _{table}	Criteria
Control	4.48	1.69	Significant
Experiment			

The results of the two mean difference tests or the t-test of the experimental group and the control group are presented in the table 2.

The percentage increase in learning outcomes in video tutorial media learning is 24.2% and is in the weak/ineffective category, while learning outcomes

using conventional learning is 17% and is in the very weak / very ineffective category. The increase in learning outcomes when using the normalized gain test in video media learning increases by 0.45 and enters the "medium" interpretation while conventional learning increases by 0.33 and enters the "low" category.

The research was conducted on UNNES beauty study program students in achieving student traditional bun learning outcomes obtaining an average score of 77.65 from 17 control class students from the original average value of 66.35 and 81.00 from 17 students from the experimental class from which was originally 66.34.

This research begins by analyzing the initial abilities of students who will be used as experimental classes and control classes. Initial ability analysis was carried out to determine whether the initial abilities of the two classes were the same or not, so in this study a pre-test was used. Based on the initial data analysis using the t test, the value of $t_{count} = -0.745 \leq t_{table} = 1.69$ at $\alpha = 5\%$ with $dk = 32$. So from the results of this initial test, that prior to learning the two groups had the same initial abilities. So that the results of the initial test can be used as a reference to determine whether there are differences in the results of the pre-test later purely from the results of the treatment and not due to the initial conditions of different students.

Then the two classes were given different treatment, namely the experimental group was given the treatment of learning with video tutorials while the control group was given the treatment of conventional learning or lectures.

After the experimental group and the control group received different treatment, then both classes were given a post-test at the end of the study, the results of the test were carried out by the t test, before the t test was carried out, the prerequisite test was carried out, namely the normality test, homogeneity test. From the normality test and homogeneity test, it shows that the two classes are normally distributed and homogeneous. From the results of the post-test difference test results, $t_{count} = 4.48568$ and $t_{table} = 1.69$. because $t_{count} > t_{table}$ then H_0 is rejected and H_a is accepted, which means that the average post-test results in the experimental class are different from the control class. so that it can be concluded that learning using video tutorial media is different from learning using conventional learning.

This view was expressed by the results of research conducted by Riesma Cyndai Lestari in 2013 which concluded that there was an effect of the application of video media on student learning outcomes in the stage make-up sub-competence in class X skin beauty at SMKN 2 Boyolangu Tulungagung. As for the influence is

1. The average number of pre-test scores shows a value of 64.19, and the post-test value shows a value of 82.08. From this study there was an increase in student learning outcomes in the use of video media in the learning process.
2. Student response questionnaires to the use of video media are categorized as good with an average of 80.64%. then it can be stated that video media is suitable for use as video media in the learning process of the stage make-up sub-competence at SMKN 2 Boyolangu Tulungagung.

Increasing student learning outcomes in the experimental class using video learning if using the normalized gain test of 0.45 or entering the "moderate" category even if the percentage increase in learning outcomes is only by 25.4% or in the category of "weak / ineffective" higher than the percentage increase in learning outcomes of the control class of only 17% or in the category of "very weak / very ineffective". The percentage of increased learning effectiveness was low in the experimental and control classes because students were rushing the post-test assignments. This can be seen in the percentage increase in value calculated for each aspect of the assessment, only for the assessment aspect at the time of processing which had the highest increase of 13 aspects of the assessment that is 182% in the experimental group and 144% in the control group.

Different results were conveyed through research by Izzudin et al who concluded that there was a significant increase in student learning outcomes and interactive video learning media was effective in improving student learning outcomes in basic service engine practices [4]. In addition, research conducted by Zhang, et al explained with a sample of 138 students explaining that interactive videos that are operated simply or can be accessed by anyone in which there is some content or material lead to better learning outcomes and higher learning satisfaction [5].

Video media because it has its own advantages when compared to the lecture method. This can be explained according to Videos can present information, describe processes, explain complex concepts, teach skills, shorten or extend time and influence attitudes. In this case students find it easy to understand the steps of traditional bun practice which requires students to understand each function of each. Of the many benefits of using video, it is very helpful for teaching staff in achieving learning effectiveness, especially in the majority of subjects are practical because educators only need to show students the practical process demonstrated in the video because various things that are abstract can be concreted besides that it can stimulate students' interest in learning to be more independent because if students want to understand a material they can see the process practices in the video. From the advantages above, it is not surprising that

video media is effective in increasing student learning outcomes. Debates about digital change – broadly referred to as “digitization” – and its significance for education and learning tend to be highly [20].

4. CONCLUSION

Based on research that has been carried out in the UNNES cosmetology education study program, it can be concluded that the learning outcomes of Batch 2022 students in the control group using conventional learning are the highest score, namely 85 and the lowest score, 71. With an average score of 77.65 with a completeness percentage of 76%. The learning outcomes of Batch 2022 students in the experimental group using video tutorial media learning were the highest score of 90 and the lowest score of 71. With an average score of 81 with a completeness percentage of 94.11%. There are differences in student learning outcomes in the experimental group and the control group with the results of the t-test calculation in the control class and the experimental class getting a value of 4.48568 with t table 1.69 at $\alpha = 5\%$ with $dk = 32$.

ACKNOWLEDGMENTS

The author would like to thank the Head of Cosmetology Education UNNES and the traditional bun lecturer who has given the author permission to conduct research at the UNNES Cosmetology Education Study Program. The author also thanks to all parties involved in this research that cannot be mentioned one by one.

REFERENCES

- [1] Mulyadi, E. Penerapan model project based learning untuk meningkatkan kinerja dan prestasi belajar fisika siswa SMK. *Jurnal Pendidikan Teknologi dan Kejuruan*, 2015, 22(4), 385-395. DOI: [10.21831/jptk.v22i4.7836](https://doi.org/10.21831/jptk.v22i4.7836)
- [2] Anni, Catharina Tri. dan Rifa'i, Arief, Psikologi belajar. Semarang : UPT UNNES Press, 2005.
- [3] Sofi, Manzoor Ahmad. The effectiveness of audio visual aids in teaching learning process at university level. *International Journal of Academic Research and Development*, 2017, 2 (4), 271-272.
- [4] P. A.Suria, M. E. Syahputraa, A.S. H. Amania, A. Djafar, Systematic literature review: The use of virtual reality as a learning media, 7th International Conference on Computer Science and Computational Intelligence 2022, *Procedia Computer Science* 216, 2023, p 245–251. <https://doi.org/10.1016/j.procs.2022.12.133>

- [5] Widiana, I. Wayan, Jampel, I. Nyoman, Learning model and formof assesment to ward the inferensial statistical achievement controlling numeric thinking skills. *International Journal of Evaluation and Researchin Education (IJERE)*. 2016, Vol.5. No.2 <http://doi.org/10.11591/ijere.v5i2.4532>
- [6] Muhibbin, Syah, Psikologi pendidikan dengan pendekatan baru, Remaja Rosda Karya, Bandung, 2007.
- [7] Evita. Syahid, Ahmad. Nurdin, Understanding students' learning outcomes differences through the application of the market place activity type of cooperative learning model and the application of conventional learning models, *International Journal of Contemporary Islamic Education*, 2019 Vol.1.No.1. <https://doi.org/10.24239/ijecied.Voll.Iss1.5>
- [8] Kamsin, Amiruddin, Is E-Learning the Solution and Substitute for Conventional Learning? 2005, *International Journal of The Computer, the Internet and Management* Vol.13 No.3.
- [9] Bryan, Volchenkova. Blended learning: definition, models, implications for higher education. *Bulletin of the South Ural State University, Ser. Education. Educational Science*, 2016, Vol.8, No.2, pp.24-30. DOI: 10.14529/ped160204
- [10] Ananga Biney, Comparing face to face and online teaching and learning in higher education. *MIER Journal of Educational Studies, Trends & Practices*, 2017, Vol.7. No.2, pp.165-179. DOI: [10.52634/mier/2017/v7/i2/1415](https://doi.org/10.52634/mier/2017/v7/i2/1415)
- [11] M. Bustanil, Asrowi, & D.T. Ardianto, Pengembangan media pembelajaran interaktif berbasis video tutorial di sekolah menengah kejuruan. *JTP - Jurnal Teknologi Pendidikan*, 2019. DOI: <https://doi.org/10.21009/jtp.v21i2.11568>
- [12] I. P. S. Ramadinata, I. G. W. Sudatha & D. P. Parmiti, Pengaruh model pembelajaran cycle 5e berbantuan media video terhadap sikap sosial, *Jurnal Penelitian Dan Pengembangan Pendidikan*, 2020. DOI: <https://doi.org/10.23887/jppp.v4i2.27336>
- [13] M. Fadhli, Pengembangan media pembelajaran berbasis video kelas iv sekolah dasar. *Jurnal Dimensi pendidikan dan Pembelajaran*. 2015. DOI: <https://doi.org/10.24269/dpp.v3i1.157>
- [14] F. Yuanta, Pengembangan media video pembelajaran ilmu pengetahuan sosial pada siswa sekolah dasar, *Trapsila: Jurnal Pendidikan Dasar*, 2020. DOI: <http://dx.doi.org/10.30742/tpd.v1i02.816>
- [15] S. Sadiman, Arief, et al. *Media pendidikan : pengertian, pengembangan dan pemanfaatannya*, Jakarta : Raja Grafindo Persada, 2002.
- [16] F. Daryanes, D. Darmadi, K. Fikri, I. Sayuti, M. Arli Rusandi, D. D.Biondi Situmorang, The development of articulate storyline interactive learning media based on case methods to train student's problem-solving ability, *Helion* 9, 2023, DOI: <https://doi.org/10.1016/j.heliyon.2023.e15082>
- [17] Izzudin, A Maulana. Masugino. Dan Agus Suharmanto, Efektivitas Penggunaan Media Pembelajaran Video Interaktif Untuk Meningkatkan Hasil Belajar Praktik Service Engine dan Komponen – Komponennya. *Automotive Science and Education Journal*, 2013, Volume 2. No 2
- [18] Zhang, Dongsong, Lina Zhou, Robert O. Briggs and Jay F.Nunamaker Jr, Instructional video in e-learning: assesing the impact of interactive on learning effectiveness. *Information and Management*, 2006. Vol 43. Hal: 15-27. DOI: <https://doi.org/10.1016/j.im.2005.01.004>
- [19] Sundayana, Rostiana. *Statistika penelitian Pendidikan*, Bandung: Alfabeta, 2015.
- [20] T. Knaus, Emotions in media education: how media based emotions enrich classroom teaching and learning, *Social Sciences & Humanities Open*, 8, 2023, DOI: <https://doi.org/10.1016/j.ssaho.2023.100504>

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

