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THE INFLUENCE OF APPLICATION OF VIDEO BASED LEARNING MEDIA ON STUDENT LEARNING OUTCOMES

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Abstrak: *Tujuan dari penelitian ini adalah untuk menggunakan media pendidikan berbasis video selama pembelajaran di kelas untuk meningkatkan prestasi akademik siswa. Peneliti menggunakan desain kuasi eksperimen dengan pendekatan eksperimen klasik. Menurut analisis data statistik, siswa pada kelompok eksperimen (kelas C) menunjukkan peningkatan yang signifikan pada nilai pretest-posttest dibandingkan dengan kelompok kontrol (kelas B). Nilai rata-rata pretest kelompok eksperimen adalah 51, sedangkan nilai posttest mereka adalah 83. Selain itu, tes n-gain menunjukkan peningkatan rata-rata 0,7, dengan lebih dari 10 siswa memenuhi kriteria n-gain tinggi, menghasilkan 89,5% siswa mencapai KKM. dalam posttest. Di sisi lain, hanya satu siswa yang memenuhi kriteria n-gain tinggi pada kelompok kontrol, dan lebih dari 70% siswa mencapai KKM pada posttest. Hasil uji-t yang dilakukan dengan SPSS menunjukkan bahwa thitung > ttabel, yang berarti Ha diterima dan Ho ditolak.*
Kata kunci: media pembelajaran berbasis video, siswa, eksperimen,

Abstract: The aim of this research is to use video-based educational media during classroom instruction to enhance student academic achievements. The researchers employed a quasi-experimental design with a classical experimental approach. According to the statistical data analysis, students in the experimental group (class C) demonstrated a significant improvement in pretest-posttest scores compared to the control group (class B). The experimental group's average pretest score was 51, while their posttest score was 83. Additionally, the n-gain test indicated an average increase of 0.7, with over 10 students meeting the high n-gain criteria, resulting in 89.5% of students achieving KKM in the posttest. On the other hand, only one student met the high n-gain criteria in the control group, and more than 70% of students achieved KKM in the posttest. The results of the t-test conducted using SPSS showed that t-count > t-table, which implies that Ha was accepted and Ho was rejected.
Keywords: video-based learning media, students, experiment

Introduction

The world of education is currently required to give birth to a generation of people who have creative and competitive advantages. A number of adjustments have been implemented, beginning with the annual updating of the curriculum, supporting infrastructure and educational facilities, and enhancements to the educational process. The modern era is characterized by very rapid technological developments. Technological developments affect every field and aspect of life, including education (Ahmadi, 2013). Since ancient times, technology has been applied in education, but it still uses simple technology such as chalk, blackboards, pens, and so on. In contrast to today, the technology used in education is in accordance with its development, namely advanced technology, such as audio-video cassettes, overhead projectors, slide films, computers, and so on. Education is an important foundation for every individual and even the state. In today's competitive world, a person whose position and abilities are considered in society is someone who has good education and abilities. As per the RI Law No. 20 of 2003 on the National Education System, in Article 1, Paragraph (1), it is said that education is a deliberate and organized endeavour to establish a conducive learning environment and process that enables students to actively develop their potential in terms of religious

and spiritual strength, self-discipline, personality, intellect, ethics, and virtuous character, in addition to acquiring the necessary skills for personal, societal, national, and state development. Presently, quality education has become an essential prerequisite for human survival. A country's advancement is contingent upon its educational system. If a nation's education system can produce individuals who possess exemplary physical and spiritual qualities, then that country will inevitably make progress, experience peace, and achieve security (Arioseno et al., 2023).

On the other hand, a country that fails to foster education will remain underdeveloped in all fields. Education and learning are closely intertwined. Learning is a formal and intentional process designed by educators to impart knowledge to students based on the curriculum and objectives (Hamalik, 2006). It is a process that takes place through the interaction between an individual and their surroundings, and can occur at anytime and anywhere. The issue of education and instruction is a multifaceted one, with one of the key factors being the teacher (Haryoko, 2009). Teachers play a pivotal and crucial role in the success of the learning process, as they are responsible for communicating subject matter to students through interactive teaching and learning methods. Teachers should be able to use equipment that is more economical, efficient, and capable of being owned by schools and not refuse to use modern technological equipment that is relevant to society's demands and the times. Nowadays, there are still many teachers who do not understand the use of modern technology such as overhead projectors, projectors, and so on. There are still many teachers who teach without media and only with conventional methods, for example, lectures. Because of that, many students feel bored during the learning process, so their enthusiasm for learning becomes less (Munadi, 2008).

With the progression of technology in the realm of education, it is imperative that the field maximizes its potential to enhance the learning process in schools. Furthermore, educators must exhibit creativity by employing alternative teaching methods, fostering a conducive classroom environment, and utilizing appropriate and adequate media and learning resources to enable students to effectively absorb the material being taught (Nugroho et al., 2023). To ensure that education remains on par with the advancements in science and technology (IPTEK), it is necessary to make adjustments, particularly in regards to the factors that impact the learning process. It is widely known that the learning process is influenced by two factors: internal and external. Internal factors pertain to the students' internal conditions in terms of their ability to learn, while external factors encompass elements outside of the student's control, such as the curriculum, teaching models, and educational resources. These resources, including learning media, serve to simplify the comprehension of lessons. The presence of technology in the student community can be harnessed as a tool to facilitate the learning process. As a fundamental component of the education sector, it is essential to match and even surpass the advancements in science and technology in society (Siregar, 2013).

Learning tools or mediums are essential for facilitating the learning process and improving the interaction between educators and learners. These mediums greatly assist teachers in their teaching and simplify the comprehension of lessons for students. It is crucial for educators to match the learning medium with the appropriate learning method (Tannady & Budi, 2023). The significance of learning tools is also notable in the sociology of the learning process as they aid teachers in conveying learning material to students. With the advancement of technology, learning activities are progressing and positively impacting the learning process and delivery of subject matter. While traditional lectures were the norm, learning tools are now the preferred method. The main purpose of learning tools is to serve as a learning resource. Other functions are determined by their general characteristics, the language used to convey messages, and their impact or effects (Sugiyono, 2013).

Audio-visual media is one of the learning tools that is thought to be able to better pique students' interest in the learning process. The learning process can be carried out using audio-visual media as an alternative method since, among other things, it can be packaged simply, mistakes can be made at any moment, and it is more engaging (Tannady, 2023). By utilizing computer technology, it is expected that audio-visual media can be used to convey more interesting subject matter to students. Audio-visual learning can be more interactive and more likely to result in two-way traffic in the learning process. In addition, audio-visual media can function as a solution to eliminate student boredom in learning, especially during the last hours of school, which are vulnerable hours in teaching where students feel tired and bored after studying all day (Thoifah, 2015).

Method

The approach utilized by researchers in this investigation is the experimental method. The research design employed in this study is a classical experimental design. The initial steps taken in this research were to identify the study population and then select a sample from the predetermined population. The experimental group received a stimulus, while the control or comparison group did not receive the same

stimulus. The research population in this study was comprised of students in a particular class. A non-probability sampling technique was employed in this study, with class C serving as the experimental group, and class B serving as the control group. Various data collection techniques were employed in this study, including tests, observations, interviews, questionnaires, and documentation. The formulated hypothesis will be subjected to parametric statistics to determine its validity. Prior to conducting the hypothesis test, a normality test will be performed to ensure the data meets the necessary requirements. The normality test includes several techniques, such as the Lilliefors test. Once the normality test is completed, the next step is to test for homogeneity. The t-test will be used as the parametric research hypothesis test in this study, with the assumption that the data is normally distributed and that the sample variances are equal.

Findings and Discussion

The observed aspects include the implementation of learning and learning scenarios, students' interest and motivation in the learning process, as well as the abilities and skills of the teacher, which refers to the research variables and indicators in the lesson plan (RPP). From the initial to third sessions, it can be inferred that the integration of video-based educational tools in class C is executed proficiently as per the lesson plan (RPP). The assessed elements comprise the application of educational and learning scenarios, students' engagement and enthusiasm in the learning process, as well as the competencies and proficiencies of the teacher, which correspond to the research variables and indicators in the lesson plan (RPP). From the initial to third meetings, it can be deduced that the utilization of traditional learning (the lecture technique) in class B is carried out effectively in accordance with the lesson plan (RPP). Based on the outcomes of the interviews, it can be deduced that, fundamentally, the utilization of video-based educational tools is fitting and considerably potent for sociology classes in class X. Because it attracts students' interest in learning sociology, this can be seen from the statements of sociology subject teachers who have observed the learning process using media and video-based learning in class C.

The positive response of students in classes C and B is different. This is because students in class C as an experimental class that uses video-based learning media are then given the task of making videos that can provide more student interest compared to class B as the control class that only applies conventional learning in the classroom. The number of students in the experimental class with pre-test scores below the KKM was 37, or 97.3% of the overall student body, whereas the number of students with pre-test scores above the KKM was 1, or 2.7% of the whole student body. While only 4 students, or 10.5% of all students, received post-test results below the KKM, 34 students, or 89.5% of all students, received post-test results above the KKM. The control class pre-test scores of students who scored below the KKM were 36 students, or 94.7% of the total students, while students who scored above the KKM were 2 students, or 5.3% of the total students. While the post-test results of students who scored below the KKM were 11 students, or 28.9% of the total students, students who scored above the KKM were 27 students, or 71.1% of the total students. The outcomes of the assessment on the enhancement of students' learning in the test group were assessed using the N-Gain calculation. Which students belong to the low, medium, or high N-Gain categories? The high category consists of 15 students, the medium category has 23 students, and there are no students in the low category. The outcomes of the assessment on the enhancement of students' learning in the control group were assessed using the N-Gain calculation. Which students belong to the low, medium, or high N-Gain categories? The high category consists of only one student, the medium category has a maximum of 36 students, and the low category has a maximum of one student.

Based on our calculations, we have determined that the t-count is 5.898. Comparatively, the t-table is 1.66 at a significance level of 0.05 and with the degrees of freedom being calculated as 38 + 38 - 2 = 74. Therefore, if the t-count is greater than the t-table (5.898 > 1.66), the null hypothesis (Ho) is rejected, and the alternative hypothesis (Ha) is accepted. It can be concluded that the utilization of video-based learning media has a significant impact on student learning outcomes. In a study investigating the influence of video-based learning media (video-based learning) on student learning outcomes in sociology, class C was designated as the experimental group, utilizing video-based learning and field assignments, while class B was the control group, only using conventional learning (lecturing method) in the classroom. The findings of this analysis indicate that the use of video media, along with field assignments in the experimental class (class C), has a substantial and positive effect on student learning outcomes. This is evident through the post-test results and the significant difference in the N-Gain scores between the experimental and control groups. The N-Gain score in the experimental class (class C) is greater than that of the control class (class B), with an average N-Gain of 0.63 in the experimental group with 15 students meeting the high criterion, while the average N-Gain in the control group is 0.54, with only one student meeting the high criteria.

By utilizing SPSS 20 and conducting a t-test on the N-Gain values of both the experimental class (class C) and the control class (class B), it was found that the t-count was 5.898 and the t-table was 1.66 at a significance level of 0.05. Based on this data and by testing the hypothesis with t-count > t-table (5.898 > 1.66), it can be inferred that Ha is accepted and Ho is rejected. This indicates that the learning outcomes of the experimental class were superior to those of the control class, and that the use of video media with practice or field assignments in sociology subjects had an influence on student learning outcomes. This is supported by the fact that students in the experimental class responded more positively to the use of video media with 88.84% compared to the control class with 78.79%. Therefore, it can be concluded that utilizing video media with practice or field assignments is a more effective approach to teaching sociology compared to conventional learning (the lecture method).

Conclusion

Drawing on the findings of the data analysis and discussion, it can be deduced that utilizing video-based learning tools in conjunction with video-making tasks or practical assignments has an impact on the academic achievements of students in experimental classes. The pupils in class C, which served as the experimental group, exhibited a significant improvement in their pre-test-post-test scores compared to those in class B, the control group. The pre-test score for class C was 50.88, while the post-test score was 83.33, with a noteworthy increase in the average N-Gain score of 0.68, signifying high quality criteria, with 15 students and 89.5% of the class achieving the minimum completion standard (KKM) in the post-test of 38 students. Conversely, the pre-test average for class B was 51.49, and the post-test score was 77.63, with an average increase in the N-Gain score of 0.54. Only one student satisfied the high N-Gain standard, and 71.1% of the class achieved the minimum completion standard (KKM) in the post-test of 38 students in class B. The t-test analysis using SPSS 20 yielded a t-count of 5.898 and a t-table of 1.66 at a significance level of 0.05, demonstrating that the t-count was greater than the t-table (5.898 > 1.66), indicating that Ha was accepted and Ho was rejected. As a result, it may be inferred that using video-based learning tools in conjunction with video-making tasks or practical assignments has a positive effect on students' academic performance.

Based on the outcomes of observations, interviews, and surveys, the experimental class (class C) achieved an average observation result of 87.50%, whereas the control class (class B) attained 87.92%. This indicates that the lesson plan (RPP) was executed appropriately, resulting in successful learning. As per the teacher interviews conducted for both classes, it can be inferred that implementing video-based learning media with assignments or field practice in class C can enhance student motivation and enthusiasm, and it is also a highly effective method of increasing student interest in learning. The summary of the student questionnaire aimed at obtaining feedback on ongoing learning shows that the experimental class (class C) received positive feedback with an average of 88.84%, whereas the control class (class B) received 78.79%. This implies that the impact of learning that utilizes video-based learning media is more prominent in the experimental class (class C) as compared to the control class (class B). The utilization of video media for learning, coupled with assignments or practical exercises, should be more effectively employed as a means of enhancing student learning. The subject matter studied can then be put into practice by creating videos, among other things. The implementation of media as a learning tool ought to be adopted to make learning more engaging, pleasurable, improve student learning outcomes, and promote the attainment of the minimum level of competence (KKM). The technological advancements of the 21st century should be more widely utilized, and innovative and imaginative learning media applications should be developed for the future of education. Innovation and creativity are essential in the realm of education, and those who use video media in the learning process should foster imaginative and innovative learning. Schools and other stakeholders should prioritize learning that employs video media and modern technology.

References

Ahmadi. (2013). *Curriculum Management: Life Skills Education*. Yogyayokarta: Pustaka Ifada.

Hamalik, O. (2006). *Teaching and Learning Process*. Bandung: Bumi Aksara.

Arioseno, R. M., Tannady, H., & Lestari, E. D. (2023). The Effect of Entrepreneurship Education on Entrepreneurial Intention With Human Capital As A Mediating Variable For Students in Tangerang. *Indonesian Journal of Business Analytics*, *3*(2), 149-160.

Haryoko, S. (2009). The Effectiveness of Utilizing Audio Visual Media as an Alternative to Optimizing Learning Models. *Jurnal Edukasi@Elektro*, 1(5).

Munadi, Y. (2008). *Learning Media (A New Approach)*. Jakarta: Gaung Persada Press.

Nugroho, B. S., Tannady, H., Fuadi, T. M., Aina, M., & Anggreni, M. A. (2023). Role of Work Experience, Work Motivation and Educational Background on Teacher Performance at Vocational School. *Jurnal Pendidikan dan Kewirausahaan*, *11*(2), 476-487.

Siregar, S. (2013). *Parametric Statistics for Quantitative Research*. Jakarta: Bumi Aksara.

Tannady, H., & Budi, I. S. K. (2023). The Influence of Organization Culture, Work Environment and Leadership On Performance of Fulltime Lecturer (Case Study of Private Higher Education Institution which Supported by Corporate). *Journal on Education*, *5*(4), 13020-13025.

Sugiyono. (2013). *Educational Research Methods (Quantitative, Qualitative and R&D Research Methods)*. Bandung: Alfabeta.

Tannady, H. (2023). Role of Entrepreneurial Education and Self-Efficacy on Entrepreneurial Intention Among Students in Higher Education Institution. *Jurnal Pendidikan dan Kewirausahaan*, *11*(3), 877-887.

Thoifah, I. (2015). *Educational Statistics and Quantitative Research Methods*. Malang: Madani.