

Utilization of Video Blogs (Vlogs) Versus Video Presentations: A Comparison of Learning Gains in Home Economics among Senior High School Learners

Joy G. Galicha¹, and Catherine Bhel Aguila²

ABSTRACT

This study aimed to determine the effectiveness of video blogs compared to video presentations as a teaching method for senior high school students in the Technical-Vocational-Livelihood (TVL) Track, specifically in the Home Economics Strand. Specifically, it assessed the performance of students taught through video presentations (voiceover with animated PowerPoint) and video blogs (educational vlogs or actual demonstration videos), and explored the potential of video blogs as an effective instructional tool, particularly for subjects focused on developing practical skills and knowledge. This study employed a quantitative research design using a quasi-experimental approach. An independent samples t-test was conducted to determine whether there was a significant difference in the performance levels of Grade 12 students between the two teaching methods. Based on the findings, the researcher obtained a p-value of less than 0.001, indicating strong evidence against the null hypothesis and supporting the conclusion that there is a statistically significant difference in post-test scores between the groups studied. The results of the independent samples t-test revealed a computed t-value of -4.914. These findings validate the positive effect of the experimental intervention, which used video blogs, compared to the control group that used video presentations. The experimental group demonstrated significantly higher performance than the control group, suggesting that integrating video blogs into instruction provides students with more realistic and practically relevant learning experiences. This approach fosters enhanced understanding and promotes the application of knowledge in real-life contexts, offering instructional advantages that go beyond those provided by traditional voiceover PowerPoint presentations with animated images.

Keywords: *video blog (vlog), video presentation, teaching method, technical vocational livelihood track, home economics*

INTRODUCTION

Technology has become an essential component of modern education, transforming how students access information, develop skills, and engage with learning materials. The integration of digital tools in teaching fosters interactive, flexible, and innovative learning environments that cater to diverse learning preferences and needs. When thoughtfully applied, technology enhances not only the delivery of instruction but also

students' motivation, comprehension, and retention of knowledge. It supports educators in designing learning experiences that are more engaging and responsive to the demands of 21st-century education, ensuring learners are better prepared for future academic, professional, and personal challenges.

One of the most impactful applications of technology in education is video-based learning. Video provides a multisensory learning experience by combining both visual and auditory elements, making it easier for students to grasp complex concepts and retain information more effectively. Videos can demonstrate processes, present real-life scenarios, and provide clear examples that facilitate comprehension beyond what static images or text alone can achieve. Yousef et al. (2014) emphasized that video-based learning enhances

✉ : joygalicha@gmail.com

¹Sta. Fe National High School, Sta. Fe, Romblon;

²Romblon State University, Odiongan, Romblon

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traditional classroom instruction by fostering engagement and improving learning outcomes. Similarly, Farooq and Al-Jandan (2015) and Radianti et al. (2020) highlighted the evolution of integrating audiovisual materials in education, particularly in the post-pandemic context, which has contributed significantly to educational innovations that support both in-person and remote learning environments. Supporting this, Mayer (2009) explained through the Cognitive Theory of Multimedia Learning that students learn more effectively when words and visuals are meaningfully integrated, as this reduces cognitive overload and promotes deeper understanding. Additionally, Guo, Kim, and Rubin (2014) found that shorter, well-structured instructional videos significantly improve learner engagement, emphasizing the importance of video design in maximizing educational impact.

Within this broader use of video, video blogs (vlogs) have emerged as a unique and highly engaging educational tool. Vlogs provide authentic, real-world demonstrations and narratives, making learning experiences more relatable and meaningful for students. Unlike conventional video lectures or animated presentations, vlogs typically showcase practical applications, real-life scenarios, or step-by-step demonstrations in everyday contexts. This authenticity enables learners to observe how theoretical knowledge is applied, particularly in subjects that emphasize the development of practical skills. Kay (2012) further emphasized that video podcasts and vlogs promote learner autonomy and self-paced learning, enabling students to repeatedly access content and reflect on demonstrations, which is especially beneficial for skill-based learning.

In Technical-Vocational-Livelihood (TVL) education, where hands-on training is crucial, vlogs serve as an effective medium to supplement or simulate face-to-face practice. For students in the Home Economics Strand, vlogs can replicate hands-on experiences digitally, providing detailed visual demonstrations of processes such as bread and pastry production, baking, caregiving, cookery, handicraft making, tourism, housekeeping, and dressmaking, along with other practical skills related to home management. These resources enable students to observe and review skills at their own pace, supporting deeper understanding and mastery. The dynamic nature of vlogs, combining real-life demonstrations, authentic scenarios, and relatable content, makes them particularly suited to learners who benefit from visual and practical examples.

Given these considerations, this study specifically aims to examine the effectiveness of video blogs compared to traditional video presentations (voiceover with animated PowerPoint) as teaching methodologies

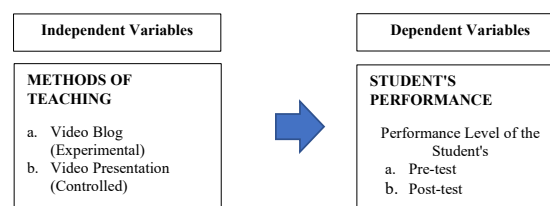


Figure 1. The Conceptual Framework of Independent and Dependent Variables

for Senior High School students in the TVL Track, Home Economics Strand. By analyzing student performance through these two instructional approaches, this research seeks to determine which method more effectively enhances students' engagement, comprehension, and acquisition of practical skills.

Figure 1 illustrates the effects of various teaching methods, including video blogs and video presentations. It also shows the relationship between the teaching method and the students' performance.

The framework shows independent variables and dependent variables. The independent variables are the methods of teaching, which are grouped into two categories: the use of video blogs, which is experimental, and the use of video presentations, which is controlled. The dependent variable is the respondents' performance level.

The general objective of this study is to determine the significant difference between the two teaching methods, which will specifically aim to answer the following:

(1) to measure the performance level of the respondents taught by the video blog and video presentation, and

(2) to consider the video blog and video presentation as effective means to teach as new teaching methods, especially for those subjects that are designed to equip the students with the skills and knowledge they need.

Based on the stated problems, the researcher formulated the following null hypotheses:

HO1: There is no significant difference between the pre-test mean score of the control and experimental groups.

HO2: There is no significant difference between the post-test mean score of the control and experimental groups.

HO3: There is no significant difference between the pre-test and post-test mean scores of the experimental group.

This study will benefit future researchers by providing insights into the processes and methodologies involved, serving as a valuable reference for future studies related to this topic. It can also enhance their

analytical skills and understanding of using digital tools, such as video blogs, in educational research.

Furthermore, this study addresses a practical issue faced by teachers, particularly in delivering hands-on training in Home Economics subjects, where students' time is often constrained by other academic commitments. Educational vlogs provide an accessible and flexible supplement to classroom instruction, enabling students to review complex topics, revisit demonstrations of practical skills, and reinforce their understanding of concepts at their own pace.

Administrators may also benefit from the findings of this study by gaining insights into innovative teaching strategies, such as integrating video blogs and video presentations, which can enhance student learning experiences. Moreover, the results contribute to the development of new approaches for curriculum delivery, improving student engagement, and addressing time-related challenges within the learning environment. These findings may further inform administrative decisions related to resource allocation and the integration of modern educational tools into school programs.

MATERIALS AND METHODOLOGY

Research Design and Approach

This study determines the effectiveness of video blogs and video presentations as a teaching methodology for senior high school learners in the Technical Vocational Livelihood Track for the Home Economics Strand. The study employed quantitative research methods and a quasi-experimental design. The researcher conducted tests for lessons 2 and 3, which will be used as the primary instrument. The respondents of the study are one group of 32 students from Grade 12 TVL HE senior high school. These students are chosen as they are relevant to the study and already enrolled in the specific strand being investigated. Data are collected through assessments administered before and after the intervention to measure students' knowledge and skills. The intervention consisted of two teaching methods: a voiceover PowerPoint presentation and an educational vlog. The pre-test and post-test results were analyzed using quantitative methods, specifically statistical analysis, to determine whether the video blog intervention improves student performance compared to traditional methods. The study was completed at the end of the fourth quarter of the school year. The tests and video interventions were administered over the course of two lessons, with a structured schedule to maintain consistency.

Participant Selection and Sampling

This study was conducted at Senior High School (SHS). The school offers two tracks: academic and technical vocational. The TVL track is composed of two strands: the home economics and computer servicing systems. The home economics strand comprises three specialized subjects: bread and pastry (G11), cookery (G11 and G12), and food and beverage services (G12 only).

Data Collection Procedures

This study was completed in the fourth quarter of the school year, when the researcher assigned a pre-test activity covering the topic of lesson 2. After that, the students watched the video presentation (voiceover with animated PowerPoint) for 30 minutes, and afterwards, the researcher administered the post-test to determine the study's results. Following the day, to maintain consistency between the two teaching methods, another pre-test and post-test were administered, and a video blog (educational vlog or actual video) covering the topic in Lesson 3 was watched. It was given to the previous group, which conducted the same procedure.

The researcher used two lessons that cover the topic: setting up trays and trolleys, using pre-tests and post-tests, and covering the topic through video presentations (video with voiceover and animated PowerPoint).

On the other hand, the researcher presents another lesson, which is Lesson 3: Presenting food and beverage service orders using pre- and post-tests that cover a topic through a video vlog (an educational vlog and an actual video).

The researcher drafted a 20-item test, composed of multiple-choice questions, for lessons 2 and 3 that covered a specific topic. This topic encompasses the competencies outlined in the TESDA Training Regulation for Food and Beverage Services NC II and the Curriculum Guide of DepEd. The Training Regulations (TR) of TESDA (Technical Education and Skills Development Authority) are standards or guidelines that define the competency requirements for various qualifications in technical and vocational education and training (TVET) programs in the Philippines. These regulations serve as the basis for developing curricula, assessing learners, and certifying individuals who have acquired specific competencies. A curriculum guides the instructional lessons that teachers use. A curriculum defines what the learner will learn and can possibly guide when the learner learns the information from the lesson. A curriculum offers teachers ideas and strategies for assessing student progress. A student must meet specific academic requirements to advance to the next level.

Before finalizing the assessment instruments, the researcher sent them to three experts in the field of

educational technology and instructional design for review. These experts reviewed the test for clarity, relevance to the research questions, and alignment with the learning objectives. They provided valuable feedback on certain questions that could be made clearer, and suggested adding a few more questions related to student engagement with video-based learning.

To ensure the instrument worked effectively, the researcher conducted a pilot test with a small group of 10 students from a grade 11 class in the same strand and at the same school. The students completed the pre-test and post-test while watching a sample video, similar to the lesson in the main study. During the pilot test, the researcher observed students' responses to the questions and gathered feedback on their understanding of the test instructions and the video format.

Based on feedback from experts and the results of the pilot testing, several revisions were made to the instrument. These included adjusting the brightness of the pictures used in the video presentations for both the pre-test and post-test assessments. Additionally, the researcher added frames to each picture in both the video presentations and video blogs to enhance emphasis during the assessments.

Analysis Methods

For this study, the researcher used the Shapiro-Wilk test to check the normality of the data before conducting further statistical analysis. The Shapiro-Wilk test is a parametric test that assesses whether the data follow a normal distribution. A non-significant p-value (greater than 0.05) indicated that the data were normally distributed, allowing me to proceed with parametric tests for reliability.

To assess the reliability of the instrument used in this study, the researcher calculated Cronbach's Alpha to determine the internal consistency of the test items. The Cronbach's Alpha value was obtained using SPSS software. A value above 0.7 was considered acceptable for demonstrating internal consistency, ensuring that the test items were measuring the same construct.

Data were collected and recorded on a sheet of paper, listing student names along with their demographic profiles. These forms of data collection were used with one group of students, who were provided with two different lessons covering the topic, using pre-tests and post-tests to determine which of the two teaching methods was more effective.

RESULTS

Table 1 presents the pre-test mean scores of students in the control group (who used video presentations) and the experimental group (who used video blogs). In the control group, none of the students

Table 1. Pre-Test mean scores of the Controlled and Experimental group

Level of Performance	Score	Video Presentation (Control Group)		Video Vlog (Experimental Group)	
		Pre-Test		Pre-Test	
		F	%	F	%
Excellent	17 – 20	-	-	-	-
Above Average	13 – 16	-	-	-	-
Average	9 – 12	3	9%	-	-
Below Average	5 – 8	13	41%	14	44%
Poor	1 – 4	16	50%	18	56%
Total		32	100%	32	100%

Table 2. Post-Test mean scores of the Controlled and Experimental group

Level of Performance	Score	Video Presentation (Control Group)		Video Blog (Experimental Group)	
		Post Test		Post Test	
		F	%	F	%
Excellent	17 – 20	2	6%	2	6%
Above Average	13 – 16	3	9%	8	25%
Average	9 – 12	13	41%	18	56%
Below Average	5 – 8	14	44%	4	13%
Poor	1 – 4	-	-	-	-
Total		32	100%	32	100.00

scored within the "Excellent" (17-20) or "Above Average" (13-16) categories. Instead, 50% of the students fell into the "Poor" (1-4) category, 41% were in the "Below Average" (5-8) category, and only 9% achieved an "Average" (9-12) score.

Similarly, in the experimental group, none of the students reached the "Excellent" or "Above Average" categories. Instead, 56% were classified as "Poor" and 44% as "Below Average." Both groups consisted of 32 students each.

These results indicate that prior to the intervention, both the control and experimental groups exhibited similarly low performance levels, with the majority of students falling within the "Poor" and "Below Average" categories. This suggests that the students across both groups began the study with comparable academic abilities, establishing a fair baseline for evaluating the impact of the interventions.

Table 3. Significant difference between the mean scores of the Control and Experimental group

Paired Sample Test		Mean	Standard Deviation	t-value	Sig. (2-tailed)	Result
Pair 1	Video Presentation (Pre-test)	.406	2.030	1.132	.266	Not Significant
	Video Blog (Pre-test)					
Paired Sample Test		Mean	Standard Deviation	t-value	Sig. (2-tailed)	Result
Pair 1	Video Presentation (Posttest)	-2.125	2.446	-4.914	.000	Significant
	Video Blog (Posttest)					
Paired Sample Test		Mean	Standard Deviation	t-value	Sig. (2-tailed)	Result
Pair 1	Video Blog (Pre-test)	-7.094	3.335	-12.034	.000	Significant
	Video Blog (Posttest)					

Table 2 shows the post-test mean scores of students in both the control group (using video presentations) and the experimental group (using video blogs). In the control group, 6% of students achieved an "Excellent" (17-20) score, 9% were categorized as "Above Average" (13-16), 41% scored "Average" (9-12), and 44% fell within the "Below Average" (5-8) range. Notably, no students remained in the "Poor" (1-4) category.

In the experimental group, 6% of students scored "Excellent," 25% achieved "Above Average," 56% were "Average," and only 13% were "Below Average." Similar to the control group, none of the students scored in the "Poor" category. Both groups had a total of 32 students each.

These findings suggest that both interventions, video presentations and video blogs, had a positive impact on student performance, as evidenced by the reduction in the number of students in the lower categories. However, the experimental group, which used video blogs, showed a greater shift towards higher performance categories, with a notably larger percentage of students achieving "Above Average" and "Average" scores compared to the control group. This suggests that video blogs may provide a more effective approach to enhancing students' learning outcomes, likely due to their more authentic, engaging, and relatable content, which aligns with existing research on multimedia learning and student engagement.

Table 3 presents the comparison of the pre-test mean scores between the control and experimental groups. The computed t-value of 1.132 yields a p-value of 0.266, which is greater than the 0.05 level of significance. Therefore, the result is not statistically significant. As a result, the null hypothesis is not

rejected. This indicates that there is no significant difference between the pre-test mean scores of the control and experimental groups. This finding implies that, prior to the intervention, both groups had comparable levels of performance.

Table 3 also presents the comparison of the post-test mean scores between the control and experimental groups. The results of the independent samples t-test indicate a computed t-value of -4.914 with a p-value less than 0.001, which is below the 0.05 significance level. This provides strong evidence to reject the null hypothesis, confirming a statistically significant difference in post-test mean scores between the two groups. This finding suggests that the experimental group, which was taught using video blogs, performed significantly better than the control group. These results support the effectiveness of the intervention and validate the positive impact of using video blogs as an instructional strategy compared to traditional video presentations.

Table 3 also presents the significant difference between the pre-test and post-test mean scores of the experimental group. Based on the results of the paired t-test ($t = -12.034$), with a mean difference of -7.094 and a standard deviation of 3.335, the p-value was found to be .0000, which is less than the 5% level of significance. This extremely low p-value indicates strong evidence against the null hypothesis, leading to its rejection. Therefore, there is a statistically significant difference between the pre-test and post-test mean scores of the experimental group.

This result suggests that the students' post-test scores improved significantly after the intervention, providing strong support for the effectiveness of the

video blog intervention when compared to their pre-test performance.

DISCUSSIONS

The findings of this study reveal that both teaching methodologies, video presentations with animated PowerPoint and video blogs featuring real-life demonstrations, had a positive impact on student performance. However, the experimental group, which utilized video blogs, demonstrated significantly greater improvement compared to the control group. Specifically, 25% of students in the experimental group achieved "Above Average" scores, while only 9% of students in the control group reached this category. Moreover, the proportion of students in the "Below Average" category was notably lower in the experimental group (13%) compared to the control group (44%). These results suggest that the use of video blogs offers a more effective instructional approach for enhancing student learning outcomes.

A key factor contributing to this outcome is the level of student engagement. Students in the experimental group responded more positively to video blogs because these materials presented authentic, real-life scenarios directly related to the lesson content. This aligns with the Cognitive Theory of Multimedia Learning (Mayer, 2005), which emphasizes that learning is more effective when learners can integrate verbal and visual information within meaningful contexts. The dynamic and relevant nature of video blogs likely increased students' motivation and attention, resulting in deeper comprehension and improved retention of knowledge.

In contrast, while animated PowerPoint presentations can convey information effectively, they may not sustain student attention to the same degree. Some students in the control group reportedly lost focus during the presentations, which may explain the higher proportion of lower scores. The multisensory experience offered by video blogs, combining audio and practical demonstrations, better supports various learning preferences and creates a richer, more immersive learning environment compared to narrated, slide-based presentations.

Furthermore, video blogs often simulate real-world applications, providing students with clearer examples of how concepts can be applied in practical settings outside the classroom. This strengthens knowledge transfer, a key goal in vocational education, as students are better able to see the relevance of their learning to future professional contexts.

Beyond cognitive engagement, video blogs also appeal to students' emotional and social interests by featuring engaging scenarios or personalities. This

connection fosters a sense of familiarity and trust, which can increase willingness to learn and apply new information. In vocational subjects such as bread and pastry production, caregiving, cookery, and housekeeping, where procedures must often be observed in detail, video blogs offer students the opportunity to revisit demonstrations multiple times, thereby enhancing their mastery.

However, it is important to consider potential confounding variables that may have influenced the results. These include students' prior familiarity with vlog-style content, differences in individual learning styles, and varying levels of interest or motivation unrelated to the instructional method. Additionally, the delivery style and personality of the individuals featured in the video blogs may have contributed to increased engagement, which could not be fully controlled in this study.

This study also has certain limitations. The sample size was relatively small, consisting of only 32 students per group, and the participants were drawn from a single strand within the TVL track (Home Economics). Therefore, the findings may not be generalizable to other strands, schools, or educational contexts. Moreover, the duration of the intervention was limited, and long-term retention of knowledge was not assessed.

Despite these limitations, the study provides valuable insights into the potential of video blogs as an effective instructional tool. The results suggest that integrating real-world, accessible content through video blogs can enhance student performance by fostering greater engagement, deeper comprehension, and improved knowledge transfer compared to more traditional animated PowerPoint presentations.

CONCLUSION

This study aimed to determine the effectiveness of video blogs compared to video presentations as a teaching method for senior high school students in the Technical-Vocational-Livelihood (TVL) Track, specifically in the Home Economics Strand. Specifically, it aimed to evaluate the performance of students taught through animated PowerPoint presentations and video blogs, and to explore the potential of video blogs as an effective instructional tool for subjects emphasizing practical skills and knowledge. The findings confirmed that both teaching methods had a positive impact on student learning outcomes. However, the experimental group, which was taught using video blogs, demonstrated significantly higher post-test performance compared to the control group. This result confirms the initial objectives of the study, which is to determine whether video blogs could improve student performance more effectively than traditional video presentations. The statistically

significant differences between the groups confirm the advantage of using video blogs in instruction, particularly in enhancing the comprehension and retention of practical skills in Home Economics.

Furthermore, the study highlights the importance of using modern, context-rich, and accessible digital tools to engage students and support vocational education. Integrating video blogs into teaching practices provides students with opportunities to revisit complex topics and observe real-life demonstrations, which are crucial in skill-based learning.

The study concludes that video blogs serve as a valuable addition to instructional strategies in the TVL context, complementing traditional methods and addressing challenges related to time constraints and varied learning preferences. Future research is recommended to investigate the long-term retention of knowledge gained through video blogs and to assess their effectiveness across other strands of the TVL track or in different educational settings.

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AUTHOR'S CONTRIBUTIONS

The authors declare equal contributions.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

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