Assessing the Proficiency and Factors Influencing Public High School Science Teachers' Video Editing and Production Skills for Enhanced Instructional Presentations

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ABSTRACT

In the rapidly evolving landscape of twenty-first-century education, the integration of contemporary digital technologies is pivotal for effective teaching. This research investigates the proficiency of public high school science teachers in video editing and production skills, particularly amidst the challenges posed by the ongoing pandemic. The study assesses attitudes, perceptions, and actual skills in video editing, identifying challenges and contributing insights for professional development. Aligned with the Cognitive Theory of Multimedia Learning and Generative Learning Theory, the research explores the advantages of multimedia in meaningful learning. While positive attitudes are evident, a significant gap in actual skills is revealed, varying with factors such as age, educational attainment, and length of service. Recommendations include targeted interventions, training programs, and equipping schools with digital tools to enhance science education through effective multimedia integration. Addressing these challenges is crucial for fostering a conducive learning environment,

Keywords: video editing skills, multimedia integration, educational technology, digital learning, pandemic challenges

INTRODUCTION AND RATIONALE

In the dynamic landscape of twenty-first-century education, the global information revolution has spurred a transformative shift, profoundly impacting teaching methodologies worldwide. Central to this evolution is the integration and convergence of contemporary digital technologies, aimed at addressing human needs with unprecedented efficiency (Newhouse, 2002). Technology, as defined by Burrous (2008), encompasses the physical medium, procedures, and resources employed to impart instructional information effectively.

In the educational sphere, technology emerges as a potent tool, demanding a paradigm shift in the skills and understanding required by both educators and learners. This shift gains added significance in the context of global crises, such as the ongoing pandemic, which has compelled educators to explore innovative approaches to engage students at all levels of education.

Multimedia, particularly digital video, stands out as a pivotal digital technology crucial for effective

teaching, particularly during challenging times like a pandemic when traditional methods may be disrupted. As teaching and learning transition to the digital realm, digital video emerges as a vital instrument for presenting audio-visual information to students. Notably, the use of digital video clips offers the advantage of storage and reuse, facilitating a dynamic and adaptable learning environment.

The incorporation of multimedia, especially digital video, demands students to leverage their multiple intelligences, skills, and capabilities (Schmitz, Prescott, and Hunt, as cited in Nwangwu, 2013). Newhouse, Lane, and Brown (2007) underline the significance of digital video in capturing the intricacies of classroom discourse, enabling students to revisit and explore critical details. Research consistently highlights the pivotal role of digital video in promoting students' acquisition of information and skills, with its efficacy in efficiently teaching various subjects through visual presentations.

In the Philippines, the Department of Education (DepEd) has introduced the Results-Based Performance Management System-Philippines Professional Standards for Teachers (RPMS-PPST) for the academic year 2021-2022, alongside the Basic Education Learning Continuity Plan (BE-LCP). This framework provides guidelines for assessing and evaluating teachers' performance, necessitating the adaptation of new tools, forms, and protocols to align with the challenges posed by the abrupt shift to online instruction amidst the pandemic.

The RPMS introduces three observation options: online observation (Option 1), observation via video lesson (Option 2), and observation through a demonstration teaching over Learning Action Cells (LAC) (Option 3). The selection of the observation mode is contingent on the school's modality, whether synchronous or asynchronous online learning. Notably, Option 2 requires teachers to create instructional video lessons, thus highlighting the critical need for educators to possess skills in video editing and production.

However, the proficiency of teachers, particularly high school science teachers, in video editing and production remains a critical concern. Despite the potential benefits of using localized and contextualized educational videos, teachers often face barriers due to insufficient skills in video editing. This research aims to delve into the extent of knowledge and proficiency among high school science teachers, specifically those from district learning IV of the school's division of Tacloban City, Philippines, in the editing and production of instructional videos to enhance the delivery of effective educational presentations. Through this investigation, we aim to identify potential challenges, inform professional development initiatives, and contribute to the broader discourse on leveraging digital technologies in education.

The findings of this study are expected to contribute valuable insights into the capabilities of science educators in utilizing multimedia tools for effective distance learning, paving the way for informed strategies and professional development initiatives. Ultimately, this research strives to foster a conducive learning environment that maximizes the potential of multimedia tools to facilitate engaging and effective science education in high schools.

LITERATURE REVIEW

The usage of digital video in the classroom aids in the delivery of effective instruction. teachers who used visual aids, such as digital video, in their classrooms were more effective in teaching and that students learned more from them (Waseem & Irshad 2020). Teachers can create instructional video clips to highlight actual practices necessary to complete assignments efficiently. Teachers might utilize the created film to educate in the classroom or laboratory, or it could be put to the internet (YouTube or school intranet) for students to browse and download.

According to a BECTA in 2003 research on the use of video file in teaching process, teachers feel that utilizing digital video in the classroom has various benefits. Teachers indicated that preparing and editing a

video may help students gain a better knowledge of storytelling, and that working in collaboration or teams allows students to apply and improve problem-solving abilities. In the classroom, digital video can be used to explain a practical action or concept, such as the technique or step-by-step approach to be followed in accomplishing something. Students gain both the information and abilities required to execute such tasks using this strategy. In the study of Koehler, Mishra, and Shulman in 2018, they emphasize the potential of video to enhance student engagement and learning outcomes. The study recommends using videos that are short, engaging, and relevant to the material being taught. This aligns with the idea of utilizing video to demonstrate practical actions and concepts.

A 2011 study by Aziz, Nor, and Rahmat found that video teaching strategies significantly improved Year Five pupils' understanding of basic science concepts in primary school. This research highlighted a positive shift in students' attitudes and interests towards science, suggesting that video-based learning can enhance engagement and enjoyment. Additionally, several other studies support the benefits of video in science education including Al-Azzam 2018 found that educational videos increased student participation and engagement in classroom discussions, particularly when students were involved in selecting the videos. This reinforces the importance of student agency and choice in video-based learning.

According to an overview of recent research and educator surveys, educational television and video strengthens reading and lecture material; assistance in the development of a common base of knowledge among schoolchildren; improves student comprehension and discussion; accommodates diverse learning styles more effectively; increases student motivation and enthusiasm; and stimulates teacher effectiveness (Corporation for Public Broadcasting, 2004). Salomon on 2022 states that educational television and video can expose students to diverse perspectives and experiences, fostering a shared understanding of key concepts and knowledge across the classroom.

The technology for creating digital videos is becoming increasingly accessible and user-friendly, making it easier for educators to incorporate this powerful tool into their teaching practices (Toyn, 2008). A wealth of software options is available, catering to varying levels of expertise and budgets. Examples include Adobe Premiere Pro, DaVinci Resolve, Final Cut Pro, Camtasia, Hitfilm Express, and OpenShot. These intuitive platforms empower users to edit and create engaging digital video clips that can enhance understanding, boost student engagement, and promote deeper learning. The increasing ease of use and affordability of video editing software removes barriers to entry for educators, making it easier than ever to leverage the power of digital video in the classroom. Shah, Ahmed, and Khan in 2020 examines the impact of multimedia tools in education, including video, and finds that they can significantly improve student engagement, motivation, and learning outcomes.

Several factors influence teachers' video editing and production capabilities, including their age, experience, gender, and educational background. While the editing goals and desired output ultimately determine the chosen editing method, research indicates a complex interplay between these factors and teachers' digital technology skills. Buntat et al. (2010) found that older teachers had greater expertise with computer technology due to their accumulated teaching and learning experience. This suggests that older teachers may have developed stronger foundational skills relevant to video editing, such as file management, software navigation, and basic editing techniques. Kotrlik and Smith (2010), conversely, observed that younger teachers displayed greater comfort with computers, higher levels of computer literacy, and less anxiety towards technology compared to their older counterparts. This implies that younger teachers may be more adaptable to new technology and quicker to learn new editing tools and techniques. Chang et al. (2018) reported that gender differences in digital technology confidence and self-efficacy may also affect video editing skills. Their findings suggest that male teachers may demonstrate higher levels of confidence and self-efficacy when using digital technology, potentially leading them to engage more readily with video editing tasks. Akhmetova et al. (2020), however, cautioned against overgeneralizing gender differences,

highlighting the importance of considering individual experiences and contextual factors that can influence technology use and skill development. While individual differences and contextual factors play a crucial role, these studies offer valuable insights into the complex interplay between various factors and the development of teachers' video editing skills. Recognizing these influences can inform the design of effective professional development programs and support initiatives that empower teachers to leverage video as a powerful tool for enhancing teaching and learning.

Research over many decades has demonstrated that using video in education has various advantages. In order to effectively teach practical concepts, instructional video packages, particularly multimedia interactive videos, must be used. Interactive video is regarded as a key technology in the field of scientific learning because it enables the in-depth examination of fascinating laboratory or real-world events. According to Bijnens, who was quoted in a University of Queensland Online Article from 2014, using video training helps students develop their research, collaborative working, problem-solving, technological, and organizational skills.

This study is anchored on Richard Mayer's Cognitive Theory of Multimedia Learning and somehow connected to the Generative Learning Theory that was introduced by Merlin C. Wittrock an American educational psychologist. According to Mayer's theory of generative multimedia learning, a learner can be viewed as a "knowledge constructor who actively selects and constructs pieces of verbal and visual knowledge" in novel ways. Further, the words and images we choose for instruction are significant and impactful and that profound learning can happen when information is presented in both text and graphics rather than just text. The theory of Multimedia Learning is based on the assumption that there are two channels for learning. Auditory and visual learning. While, Wittrock's Generative Theory, states that "meaningful learning occurs when learners select relevant information from what is presented, organize the pieces of information into a coherent mental representation, and integrate the newly constructed representation with others." The researchers believe that teachers can edit and reflect on video clips of their teaching in a way that will help them make connections between what they need to learn and their prior knowledge of teaching.

The use of digital video in teaching and learning is crucial, according to the literature reviewed in this study, and the development of skills is necessary to operate digital technology. As a result, the researchers are attempting to ascertain the extent to which teachers possess video editing and production abilities for successful instructional delivery.

RESEARCH OBJECTIVES

The main objective of this study is to know the extent of proficiency and the factors influencing public high school science teachers' video editing and production skills.

Specifically, it aims to do following objectives:

1. To assess the attitudes and perceptions of high school science teachers towards video editing and production.
2. To measure the extent of video editing and production skills possessed by high school science teachers at DLC IV.
3. To investigate whether there is a statistically significant difference in the mean ratings of teachers' perceived video editing and production skills based on the following demographic variables:
    a. Age
    b. Gender
    c. Educational Attainment

d. Length of Work Experience

RESEARCH HYPOTHESIS

There is no significant difference in the mean ratings of teachers in the perceived video editing and production skills they possess based on age, gender, educational attainment, and years of working experience.

SCOPE AND LIMITATION

This study focuses on assessing the capabilities of high school science teachers in video editing and production within the specific context of DLC IV. The scope of the research encompasses the attitudes, perceptions, and actual skills of teachers in utilizing video editing tools for instructional presentations. The investigation will include teachers from DLC IV, ensuring relevance and applicability to the digital learning environment. While the study aims for a representative sample, it acknowledges that the findings may not be entirely generalizable to all high school science teachers or different educational settings.

The research is delimited to exploring variations in video editing skills based on demographic factors such as age, gender, educational attainment, and length of work experience. This allows for a nuanced understanding of the potential influences on teachers' capabilities in video editing. However, the study does not delve into the specific video editing software or tools used by teachers, as the focus is on the broader proficiency level rather than a detailed examination of specific technological platforms.

Limitations include the reliance on self-reported data through surveys, which may be subject to response bias. Additionally, the study's cross-sectional design limits the ability to establish causation or observe changes in video editing skills over time. Furthermore, external factors such as access to technology and prior training in video editing, which may influence teachers' skills, are not extensively explored due to constraints on the scope of the study.

Despite these limitations, the research aims to provide valuable insights into the current landscape of high school science teachers' video editing capabilities, offering a foundation for targeted interventions and contributing to the ongoing discourse on effective multimedia integration in education.

RESEARCH METHODOLOGY

Research Design

This study is quantitative in nature, particularly descriptive correlational, and employed a survey research design. This is due to the fact that survey design is suited for research dealing with people's opinions, views, and so on. As a result, the survey method is most applicable for this study since it wanted to elicit information on teachers' perceived possession of video editing and production abilities.

Sampling

The population of the study consisted of the 46 secondary school science teachers currently employed in schools at DLC IV of Tacloban City, Philippines. The entire population was analyzed because the population is too small to sample. The study received responses from 18 male and 28 female.

Data Collection

A survey questionnaire on teachers' perceived video editing and production skills was administered to the

research respondents. The self-administered survey questionnaire served as the main source of data in this study.

To gather information for the study, a structured questionnaire on teachers' perceived competency in video editing and production was designed. A five-point rating system, from Highly Possessed (5) to Not Possessed (1), was used for the assessment. The instrument was divided into Sections A and B. Section A of the survey included respondents' demographic questions, whereas Section B focused on their skills of video production and editing. With the assistance of master teachers, the instrument was face validated. The MTs evaluated the tool to check its clarity and the suitability of the questionnaire items. The instrument was reorganized based on their opinions and was pilot tested to a group of teachers not part of the research respondents. A reliability test was performed on the face validated instrument. The instrument's reliability was assessed using the Cronbach alpha reliability coefficient. The reliability coefficient was found to be 0.91. The researcher administered the questionnaire personally.

Ethical Issues

This research study was conducted with a strong commitment to ethical standards throughout its design, implementation, and reporting phases. Informed consent was obtained from participating high school science teachers, who were assured of their voluntary participation rights. To safeguard confidentiality, personal identifiers were removed, and data was securely stored. Participants were debriefed post-data collection, and efforts were made to minimize potential harm through sensitively designed survey questions and practical assessments. Transparent and accurate reporting, including disclosure of any conflicts of interest or biases, was prioritized in publications and presentations. These ethical considerations aimed to uphold integrity, respect for participants, and responsible conduct in the research process.

Plan for Data Analysis

The mean was used to answer the research question, while frequency counting, and measures of central tendency was utilized to evaluate how the respondents disagreed or agreed in their ratings. In this study, to measure the respondent's extent of possession of the skill any item with a mean score of 3.50 or above was classified as Possessed (P), whereas any item with a mean score of less than 3.50 was classified as Not Possessed (NP). The null hypotheses were tested using Analysis of Variance (ANOVA) at the 0.05 level of significance while t-tests were used to determine whether there were differences based on gender. A null hypothesis was not rejected for an item with a calculated value more than the level of significance of 0.05, however items with a computed value less than the level of significance of 0.05 was rejected.

To be able to interpret the Likert type data gathered from the statements about attitude towards video editing and production skills, the weighted means were computed where:

WM = TWM/N

Where:

WM = The total sum of the products divided by the total number of respondents.

TWM = the sum of the products (weighted multiple by the corresponding frequency)

N = the total number of respondents

To summarize the level of agreement of the respondents on the statements about their attitude towards video editing and production skills in terms of weighted means from their responses, the following numerical ratings and their descriptive interpretation were used:

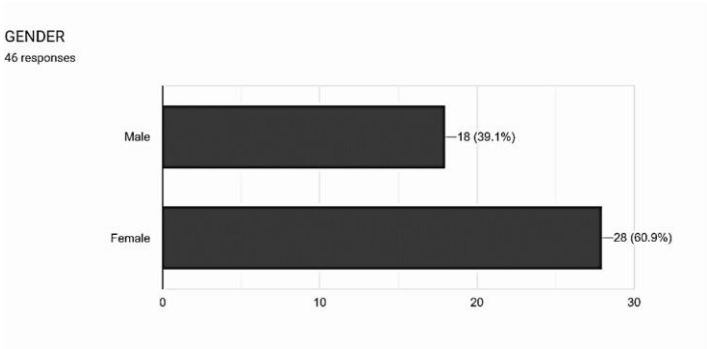
Numerical rating	Descriptive Interpretation
4.21 – 5.00	Very Favorable
3.41 – 4.20	Favorable
2.61 – 3.40	Slightly Favorable
1.81 – 2.60	Unfavorable
1.00 – 1.80	Very Unfavorable

DISCUSSION OF RESULTS AND RECOMMENDATION

Respondent's profile

The major categories of the respondent profile for this study were as follows: gender, age, highest level of education attained, and length of service. The following successive figure displays the demographic information for the profile of respondents included in this study.

Figure 1



As shown in Figure 1, of respondents from surveys conducted, 28 (61%) of the 46 participants self-reported their gender as female while 18 (39%) were male. In general, there are more females than male science teacher currently deployed in the secondary schools both in the JHS and SHS within District Learning center IV of the Division of Tacloban City.

Figure 2

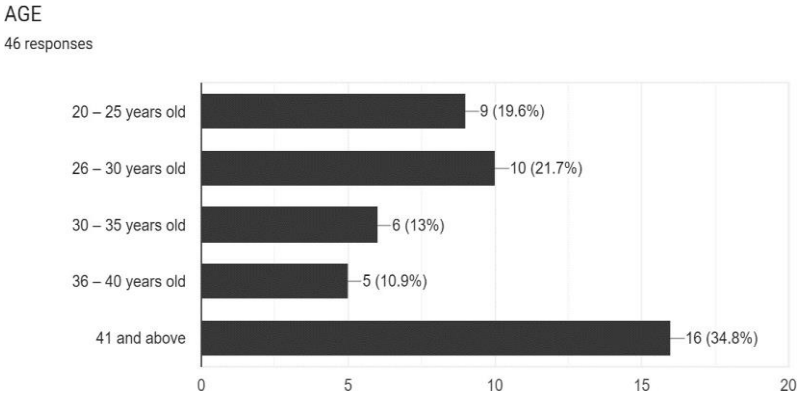


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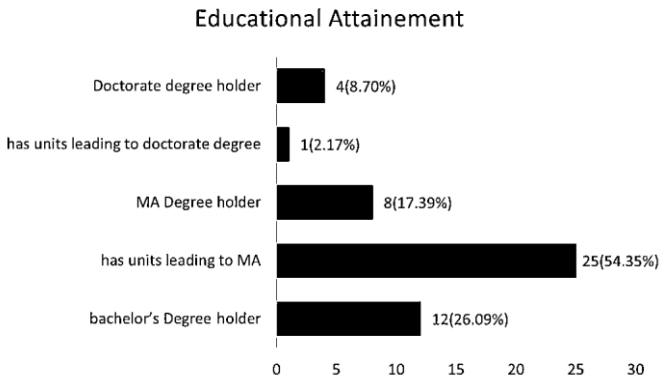
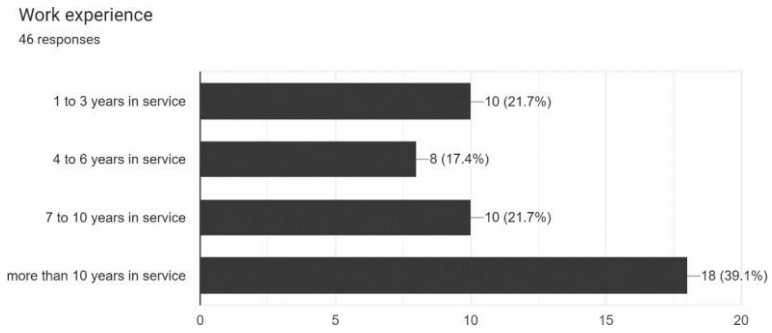
Figure 2 above depicts the demographics of the respondents in terms of their ages. Of the 46 participants in the surveys, 16 (35%) are 41 years of age or older, and 9 (20%) are in the 20–25 age range. In terms of age groups, there did not appear to be an equal distribution of respondents.

Figure 3



Additional descriptive statistics divided demographic information by respondents' highest level of education. Figure 3 above, which depicts these data, shows the information disaggregated by respondents. At least 8 (17%) teacher respondents reported having a master's degree, and 25 (54%) had at least earned units leading to obtaining a master's degree. Data indicates that the majority of respondents are continuing their education, even though only 4 (8% of the respondents) have completed a doctorate and 12 (26%) only have bachelor's degrees without any units leading to an MA.

Figure 4



The respondent's length of teaching experience was examined using discreptive statistics, as indicated in Figure 4 above. According to the data, 10 (22%) of the teacher respondents are new teachers with one to three years of experience. The data revealed that the majority of teacher respondents are seasoned science teachers with a teaching experience of more than 10 years in the service, and 39 percent of the respondents had experience between 4 and 10 years.

Teachers' attitude towards video editing and production

The survey questionnaire had participants rate their level of agreement with each statement related to their attitudes and perspective towards video editing and production for the purpose of formative evaluation. Respondents rated their level of agreement on a five-point Likert scale with 1 = strongly disagree, 2 = disagree, 3 = neither agree or disagree, 4 = agree, and 5 = strongly agree. Disaggregated data for the respondent's attitude and perception towards video editing and production are shown in the table 1 below.

Table 1. Distribution of Respondent's attitude towards video editing and production

Level of Agreement	Percentage of agreement					Total	Total Weighted Mean	Descriptive Interpretation
	1	2	3	4	5			
[I know concept and strategies that enables me to create and/or edit digital videos to be used in teaching.]	1	6	11	19	9	46	3.6304348	Favorable
	2%	13%	24%	41%	20%	100%		
[I have the skills to plan and/or create and edit digital videos to be used in teaching.]	1	7	15	16	7	46	3.4565217	Favorable
	2%	15%	33%	35%	15%	100%		
[I can advise other teachers in how to plan and/or create and edit digital videos to be used in teaching.]	1	8	16	15	6	46	3.3695652	Slightly Favorable
	2%	17%	35%	33%	13%	100%		
[I am motivated to plan and/or create and edit digital videos to be used in teaching.]	1	4	12	18	11	46	3.7391304	Favorable
	2%	9%	26%	39%	24%	100%		
[I believe it is meaningful to plan and/or create and edit digital videos to be used in teaching.]	0	3	4	21	18	46	4.173913	Favorable
	0%	7%	9%	46%	39%	100%		
Over-all Weighted Mean							**3.673913**	**Favorable**

The table above depicts that every response-related question on the respondent's attitude toward creating and editing videos falls within a weighted mean that is within the range of classification as favorable. With the highest weighted mean of 4.17 for item number five, teachers are aware of the value of using videos to support their teaching, especially in science education. Additionally, the overall weighted mean of all the teachers' responses is 3.67, which indicates that the high school science teachers in DLC IV had positive attitudes toward making and editing videos. It implies that they are aware of the significance of being able to create and edit videos, particularly when doing so to create contextualized and localized videos that will be utilized to deliver lessons.

Extent of possession of video editing and production skill

In this study the researchers also delve into the extent of which video editing and production was possessed by the teacher respondents. A five-point rating system, from Highly Possessed (5) to Not Possessed (1), was used for the assessment. Any item with a weighted mean score of 3.50 or above was classified as Possessed (P), whereas any item with a weighted mean score of less than 3.50 were classified as Not Possessed (NP). Data for the respondent's extent of which video editing and production was possessed are shown in the table 2 below.

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Table 2. Extent of possession of video editing and production skill

Level of Agreement	Percentage of agreement					Total	Total Weighted Mean	Descriptive Interpretation
	1	2	3	4	5			
[Downloading video from Youtube]	0	16	6	1	23	46	3.67	Possessed
	0%	35%	13%	2%	50%	100%		
[Searching for relevant videos on the web]	0	16	7	0	23	46	3.65	Possessed
	0%	35%	15%	0%	50%	100%		
[Working with movie maker or any other video editing application/software]	3	13	12	8	10	46	3.20	Not Possessed
	7%	28%	26%	17%	22%	100%		
[Adding effects to a video]	3	10	13	9	11	46	3.33	Not Possessed
	7%	22%	28%	20%	24%	100%		
[Adding music to a video]	3	12	12	8	11	46	3.26	Not Possessed
	7%	26%	26%	17%	24%	100%		
[Adding subscript to a video]	3	7	14	11	11	46	3.43	Not Possessed
	7%	15%	30%	24%	24%	100%		
[Adding pictures to a video]	3	11	11	8	13	46	3.37	Not Possessed
	7%	24%	24%	17%	28%	100%		
[Connecting/merging two or more videos]	5	10	8	11	12	46	3.33	Not Possessed
	11%	22%	17%	24%	26%	100%		
[Cutting/splitting a video]	6	8	7	11	14	46	3.41	Not Possessed
	13%	17%	15%	24%	30%	100%		
[Converting files from one video format to another]	6	11	10	7	12	46	3.17	Not Possessed
	13%	24%	22%	15%	26%	100%		
Over-all Weighted Mean							**3.42**	**Not Possessed**

The data in Table 2 shows that 8 of the 10 items—items 3 through 10—were all scored below the threshold of 3.50, indicating that they were not possessed. The 3.42 ovel-all mean scores show that teacher respondents have limited understanding of video production and editing and lack the necessary skills to edit and produce instructional videos on their own utilizing video production and editing software.

In order to corroborate the aforementioned findings, the respondents were additionally questioned about their prior exposure to or familiarity with video editing software. Most of the respondents—31 out of 46—stated that they are aware of and have attempted to use at least one video editing program, particularly ones that are easily downloaded via a smartphone. However, some respondents—11 out of 46—stated that they have never used or opened any software. Even though they were introduced to it, almost all of them claimed that their limited knowledge was solely obtained from watching videos and tutorials online; theyhad not received any formal instruction.

The teachers' lack of skill in video editing and production could be attributed to their limited exposure to these tools as well as their failure to keep up with technological advances in the field because of their workload and lack of time. Additionally, producing and editing videos takes a lot of time, which may account for their lack of ability with video editing and production.

Analysis on the mean ratings of teachers in their perceived video editing and production skills they possess in terms of age, gender, educational attainment, and length of work experience.

The data was further examined using inferential statistics to identify descriptive research to know whether this is a significant difference between variables identified and their perceived video editing and production skill. Summary of the assessment of the data gathered is shown in table 3 below.

Table 3 Summary of Analysis on teachers' Video Editing and Production Skills they Possess based on their gender, age, educational attainment, and length of service.

Sources of variation	*p-value*	*Interpretation*
Gender	0.168077994	Not Significant
Age	0.002899084	Significant
Educational Attainment	0.008484499	Significant
Length of service	0.000789667	Significant

Analysis of Variance (ANOVA) was used to determine whether there were differences in respondents' video editing and production skills based on age, educational level, and length of teaching experience, while t-tests were used to determine whether there were differences based on gender (see appendix B). The findings in Table 3 above show that the calculated significant values for age, educational achievement, and length of service are less than 0.05 threshold of significance. This result shows that the mean ratings of teacher respondents' video editing and production skills are significantly different from one another, with age, educational attainment, and length of service. While the gender data showed a significant value of 0.17 that is greater than the 0.05 level of significance. This result shows that there was no significant difference in the mean ratings of teachers' production and editing skills for videos based solely on the respondents' gender.

Therefore, the null hypothesis was rejected for the variables age, educational attainment, and length of service but not for gender or the respondents' gender.

The statistical deference in age confirms Huang and Padron's findings in Buntat et al. (2010) suggesting younger teachers felt more at ease using computers, had greater levels of computer literacy, and had less computer anxiety than older teachers.

CONCLUSION

The study determined the video editing and production skills that high school science teachers of both junior and senior high schools possessed for effective instructional delivery in DLC IV. The study's findings show that high school science teachers in DLC IV have positive attitudes toward creating and editing videos and recognize their value, particularly in producing contextualized and localized videos to be used in lesson delivery, however the study reveals that respondents have lack the necessary skills to edit and produce instructional videos on their own. Also, it revealed that teachers' mean assessments on their ability to produce and edit videos varied significantly depending on their age, educational background, and years of work experience. Therefore, it is necessary for both school administration and the government at all levels to address the issues causing teachers' lack of skill in video editing and production.

Given the field's technological progress, the inability to create and edit videos might be linked to a lack of exposure to video editing and production software. The inadequacy of the government and school

administration to provide sufficient tools, resources, and workspace for this particular purpose could also be cited as a reason why teachers lack the ability to edit and produce video on their own. The lack of training in video production and editing among teachers is another reason. Teachers' unfamiliarity with technology in general and the use of digital resources in particular, together with their need for training and professional development, may be a contributing factor to the limited knowhow on this matter. Another reason why teachers might not possess video editing and production skills is because of the demanding procedures involved in these tasks as well as the time required to complete them.

Therefore, it is vital for the government in its entirety and school administration to address the issues behind teacher's lack of proficiency in video editing and production skills.

RECOMMENDATION

On the basis of the study's findings, the following recommendations are suggested:

1. Because of the rapid advancement of technology, high school science teachers in DLC IV must receive training in video production and editing in order to produce and deliver instructional videos effectively.
2. The government should provide schools with digital video equipment and multimedia tools, such as free subscriptions to various video editing programs, to meet the needs of the modern educational system.
3. Teachers should sign up for free online courses on creating and editing multimedia and video instructional materials. The internet provides free resources that can also be downloaded for free.

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