

From Screen to Skill: Assessing the Effectiveness of Supplementary Video on Students' Engagement and Performance in Teaching Dressmaking

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Abstract—This study examines the relationship between the use of supplementary instructional videos and students' engagement and performance in dressmaking. Specifically, it assesses the characteristics of instructional videos in terms of efficiency, the level of students' engagement in attentive listening, class participation, and self-learning and evaluation, as well as students' performance in written tests and performance tasks. Furthermore, it determines the significant relationship between supplementary instructional videos and student engagement and analyzed their effect on students' performance. The study was descriptive-correlational research and the researcher used a researcher-developed survey questionnaire to determine the effect of Supplementary Video on Students Engagement and Performance in Teaching Dressmaking. Questionnaire was answerable by using rate scale or the respondent rate. The 80 tenth grade pupils at Los Baños National High School - Batong Malake made up the study's participants. Based on the data gathered, the following are the findings of the study, the level of characteristics of instructional videos in terms of efficiency was rated as "Very High." This indicates that the instructional videos effectively facilitated learning in dressmaking through a structured, step-by-step guide that enhanced students' understanding and skill acquisition. The level of students' engagement in terms of attentive listening, class participation, and self-learning and evaluation was all interpreted as "Very High." This suggests that learners remained focused, actively participated in discussions, and exhibited strong self-directed learning skills. The level of students' performance in the written test was interpreted as "Proficient" while their level in performance tasks was interpreted as "Advanced," indicating that students demonstrated high proficiency in the practical application of dressmaking skills. The use of supplementary instructional videos demonstrated a significant relationship with students' engagement. The findings reveals that supplementary videos had a significant effect on students' performance in performance tasks but does not significantly affect their performance in written tests. This demonstrates that the use of supplementary instructional videos significantly improves both student engagement and performance in dressmaking. By offering visual support and reinforcing key concepts, these videos enhance learning and encourage active participation. The null hypothesis was refuted by these findings, which supported the efficacy of video-based education in enhancing students' academic performance. Further, it is recommended that the Technology Teachers continue to utilize instructional videos with clear step-by-step procedures to enhance the learning process in dressmaking. Instructional videos should be designed to maintain high engagement levels by incorporating interactive elements that encourage class participation and self-learning. On the other hand, it is also recommended to innovate and enhance to bring out the best of student's engagement and performance.

Keywords— Supplementary Video, Dressmaking Education, Performance Assessment, Students' Engagement, Teaching Strategy .

I. INTRODUCTION

Technology and livelihood education is one of the learning subjects of the secondary curriculum used in secondary schools, In Grade 9 and 10 students or teachers choose one specialized subject to focus among the exploratory courses they chose on grade 7 and 8 grade such as Dressmaking. It covers varied to, innovate and creative pieces. It craft focuses on the key concepts and to demonstrate competencies. However, one the characteristics that need to have in order to excel in any TLE discipline is interest. Teachers will be better able to provide pupils engaging learning options like using video presentation.

The ubiquitous use of videos in classrooms is a result of technological advancements. Numerous video applications help students achieve learning objectives, while video recording tools allow both teachers and students to enhance their skills. As a result, it's common for teachers to integrate videos as tools to support learning.

Instructional materials, for instance, are potent weapons in the hands of teachers to drive home the demands in the teaching and learning process. They are crucial and vital tools required for teaching and learning of subjects in school so that the efficiency of teachers could be promoted and students' performance could improve. Instructional material makes the learning of applied subjects and for that matter Sewing more interesting, practical, realistic and appealing and should be available in schools.

Dressmaking's complexity, involving pattern drafting, fabric selection, and garment construction, can challenge learners, especially when traditional methods lack hands-on experiences. Student engagement is key to academic success, boosting achievement, retention, and growth. Engaged students take ownership of their learning. Factors like teaching methods, environment, motivation, and innovative tools influence engagement. Technology, particularly multimedia tools like videos, can enhance engagement by catering to diverse learning styles and creating a more interactive learning environment.

Darling-Hammond and Adamson (2024) investigate the role of performance tasks in evaluating students' higher-order thinking skills, such as problem-solving, critical thinking, and

creativity. These tasks allow students to demonstrate their understanding and abilities in real-world contexts, rather than simply recalling information. The authors suggest that performance assessments help students to apply their knowledge, fostering deeper learning and better preparation for complex, real-world challenges. Performance tasks also align more closely with 21st-century learning goals, as they assess the skills required in modern work environments.

The researcher sought to explore how effectively an instructional video enhances student engagement and performance, particularly in Technology and Livelihood Education. Recognizing the potential of video as an educational tool, the study aimed to evaluate its on student engagement and academic outcomes. By assessing the use of video-based materials, the researcher focused on how well-designed videos could improve learning experiences, student satisfaction, and performance. The study concluded that integrating supplementary video and segmenting teaching materials could lead to more effective instruction.

1.1 Statement of the Problem

Problem/s which were addressed by the research

The primary aim of the study is to develop and assess the effectiveness of video presentation in teaching Technology and Livelihood Education S.Y. 2024-2025 (Dressmaking)

Specifically, it sought answer the following questions.

1. What is the level of supplementary Video components in teaching Dressmaking in terms of:
 - 1.1 Objective;
 - 1.2 Content;
 - 1.3 Activity; and
 - 1.4 Assessment?
2. What is the level of Features of Supplementary video in teaching Dressmaking in terms of:
 - 2.1 Sounds;
 - 2.2 Visual precision;
 - 2.3 Accessibility; and
 - 2.4 Efficiency?
3. What is the level of students' engagement in terms of;
 - 3.1 Attentive listening;
 - 3.2 Class participation and
 - 3.3 Self-learning and evaluation?
4. What is the level of Students' performance in terms of;
 - 4.1 Performance task; and
 - 4.2 Written test?
5. Does the use of supplementary video have a significant relationship with the students' engagement?
6. Does the use of supplementary video have significant effect on students' performance?

II. METHODOLOGY

The study was descriptive-correlational research and the researcher used a researcher-developed survey questionnaire to determine the effect of Supplementary Video on Students Engagement and Performance in Teaching Dressmaking. Questionnaire was answerable by using rate scale or the respondent rate. The study's subjects were the 80 Grade 10 pupils at Los Baños National High School - Batong Malake.

III. RESULTS AND DISCUSSION

This part presents, analyzes, and interprets the data collected to address the sub-problems related to the main focus of the study. The discussion highlights the findings based on the research questions. In particular, it examines how teachers integrate technology into their teaching, specifically through the use of technology-based materials such as supplementary videos.

Level of Completeness of the Video Component in Teaching Dressmaking

In this study, the completeness of the video components used in teaching dressmaking was assessed based on four essential elements: objectives, content, activities, and assessment. The data were analyzed using the computed mean and standard deviation to determine how well each component was addressed in the supplementary video. These statistical tools provided a clear measurement of the consistency and effectiveness of each component in supporting the learning process. By examining each element individually, the study was able to identify specific strengths and areas for improvement in the video materials. This evaluation serves as a basis for enhancing the quality of instructional videos, ensuring they meet educational standards and support the development of relevant skills in dressmaking.

The table presents the level of completeness of the video components in terms of objectives. The grand mean of 4.81 with a standard deviation of 0.40 indicates that the objectives are highly complete and well-structured. The results show that the objectives are clearly stated, measurable, and directly aligned with the topics in dressmaking.

TABLE 1. Level of Completeness of the Video Component in Teaching Dressmaking in terms of Objectives

STATEMENT	Mean	SD	Remarks
<i>The Objective/s of Supplementary Video is /are...</i>			
...relevant to the topics covered in Dressmaking	4.91	0.28	Strongly Agree
...stated the behavioral terms	4.70	0.48	Strongly Agree
...specific and clearly stated	4.81	0.39	Strongly Agree
...possible to achieve	4.79	0.41	Strongly Agree
able to be measured	4.84	0.37	Strongly Agree
Grand Mean	4.81		
SD	0.40		
Verbal Interpretation	Very High		

This ensures that learners can effectively follow and understand the intended learning outcomes. Having complete and clearly articulated objectives contributes to a more organized and focused learning process. It also enables students to identify what is expected of them, thereby improving their engagement and helping them achieve the desired competencies. With well-developed objectives in place, the instructional video becomes a more powerful tool for guiding students toward meaningful learning in dressmaking.

The table presents the level of completeness of the video components in teaching dressmaking in terms of content. The grand mean of 4.75 and a standard deviation of 0.44 indicate that the content of the supplementary video is highly complete

and well-structured. This implies that the video effectively highlights key concepts, aligns with the learning objectives, and provides clear, logical, and easy-to-follow instructions. The results further reveal that well-organized content contributes to a more structured learning experience, reducing confusion and ensuring that students can grasp the material efficiently. Additionally, the clarity and coherence of the content help maintain student engagement, making the learning process more effective and interactive. Well-structured videos enhance comprehension by presenting information in a systematic manner, allowing students to build on their existing knowledge.

TABLE 2. Level of Completeness of the Video Component in Teaching Dressmaking in terms of Content

STATEMENT	Mean	SD	Remarks
The Content/s of Supplementary Video...			
...reflects the most important aspects of what is being taught.	4.75	0.43	Strongly Agree
...leads to the attainment of the objectives.	4.73	0.45	Strongly Agree
...has an adequate presentation of the objective	4.66	0.47	Strongly Agree
...has direction in the exercise that is concise, readable, and easy to follow.	4.81	0.42	Strongly Agree
...has the concept of each activity which are arranged logically to ensure no duplication	4.79	0.41	Strongly Agree
Grand Mean	4.75		
SD	0.44		
Verbal Interpretation	Very High		

These findings align with Leung and McCauley (2020), who emphasized that the effectiveness of educational videos depends on the clarity, accuracy, and logical arrangement of content. Their study found that videos incorporating structured explanations, real-life demonstrations, and logically sequenced activities lead to deeper student understanding and retention of concepts. Furthermore, they noted that content that is visually engaging and interactive helps sustain learner interest and reinforces comprehension.

TABLE 3. Level of Completeness of the Video Component in Teaching Dressmaking in terms of Activity

STATEMENT	Mean	SD	Remarks
The Content/s of Supplementary Video...			
...can be intellectual and stimulating	4.70	0.51	Strongly Agree
...can result to new learnings	4.78	0.42	Strongly Agree
...can improve communication skills leading to active interaction	4.65	0.55	Strongly Agree
...can help to develop ability to work within the group	4.73	0.44	Strongly Agree
...can promotes collaborative learning.	4.76	0.43	Strongly Agree
Grand Mean	4.72		
SD	0.47		
Verbal Interpretation	Very High		

Table 3 presents level of completeness of video components in teaching dressmaking in terms of activity. Grand mean of 4.72 and standard deviation of 0.47 indicate

that activities included in supplementary video are highly engaging and effective in promoting student learning. This implies that activities not only stimulate intellectual curiosity but also encourage active participation, collaboration, and communication among students. Results further reveal that well-structured activities contribute to skill development, particularly in teamwork and interaction, fostering a more dynamic and interactive learning environment. Additionally, engaging activities enhance student motivation and allow them to apply their knowledge in practical and meaningful ways.

These findings align with Brame (2020), who highlighted that video-based activities play a crucial role in active learning by encouraging student engagement and interaction. Brame's study emphasized that when videos are paired with structured activities such as discussions, problem-solving exercises, and collaborative tasks, they significantly enhance students' ability to grasp new concepts and apply their learning in real-world contexts.

TABLE 4. Level of Completeness of the Video Components in Teaching Dressmaking in terms of Assessment

STATEMENT	Mean	SD	Remarks
The Content/s of Supplementary Video...			
...is relevant to the objectives.	4.79	0.41	Strongly Agree
...is adequate to develop students' knowledge and skills.	4.80	0.40	Strongly Agree
...is appropriate to students' abilities.	4.78	0.42	Strongly Agree
...is sufficient mastery level of the student.	4.71	0.45	Strongly Agree
...is fitted on the items that measure the thinking skills.	4.75	0.43	Strongly Agree
Grand Mean	4.77		
SD	0.42		
Verbal Interpretation	Very High		

Table 4 presents level of completeness of video components in teaching dressmaking in terms of assessment. Grand mean of 4.77 and standard deviation of 0.42 indicate that assessments included in supplementary video are highly appropriate and effective in measuring students' knowledge and skills. This implies that assessments align well with learning objectives, ensuring that students are evaluated based on relevant and meaningful criteria. Results further reveal that assessments are designed to match students' abilities, promote skill development, and support mastery of concepts.

Additionally, structured assessments help gauge students' critical thinking skills, reinforcing their understanding and application of learning content.

Level of Characteristic of Instructional Video in Teaching Dressmaking

In this study, the characteristic of instructional video in teaching dressmaking was described in terms of clear sound, visual precision, accessibility, and efficiency and was determined by the mean and standard deviation.

The table 5 presents level of characteristic of instructional video in teaching dressmaking in terms of clear sound. Grand mean of 4.72 and standard deviation of 0.48 indicate that

audio quality in instructional video is highly effective in supporting learning. This implies that sound components are well-integrated, ensuring clarity, synchronization, and minimal distractions

TABLE 5. Level of Characteristic of Instructional Video in Teaching Dressmaking in terms of Clear Sound

STATEMENT	Mean	SD	Remarks
The audio is synchronous and related to each other.	4.76	0.43	Strongly Agree
The projection of sound is clear.	4.70	0.48	Strongly Agree
The quality of the audio is pleasing to the ear.	4.70	0.46	Strongly Agree
There are no background noises.	4.64	0.55	Strongly Agree
The overall sounds are pleasant and not disturbing when watching.	4.80	0.43	Strongly Agree
Grand Mean	4.72		
SD	0.48		
Verbal Interpretation	Very High		

Results further reveal that clear and pleasant audio enhances students' engagement, comprehension, and overall viewing experience. Properly projected sound without background noise allows learners to focus on instructional content, making the video an effective teaching tool. High-quality sound also fosters better retention of information, helping students grasp technical dressmaking concepts more efficiently. The effectiveness of instructional videos relies not only on visuals but also on well-balanced audio that ensures a smooth learning process.

TABLE 6. Level of Characteristic of Instructional Video in Teaching Dressmaking in terms of Visual Precision

STATEMENT	Mean	SD	Remarks
The size of the graphic elements such as photos, captions, and figures is well designed.	4.78	0.45	Strongly Agree
The use of colors and lights complements the video.	4.69	0.49	Strongly Agree
The composition of the video is set within the screen frame	4.76	0.43	Strongly Agree
The arrangement of ideas and lessons are systematic	4.88	0.33	Strongly Agree
The overall visuals are pleasant and not disturbing when watching.	4.88	0.33	Strongly Agree
Grand Mean	4.80		
SD	0.42		
Verbal Interpretation	Very High		

The table 6 presents level of characteristic of instructional video in teaching dressmaking in terms of visual precision. Grand mean of 4.80 and standard deviation of 0.42 indicate that instructional video demonstrates a very high level of visual quality. This implies that graphic elements, color schemes, and screen composition are well-executed, enhancing clarity and engagement. Results further reveal that the systematic arrangement of ideas and lessons ensures a smooth and organized flow of information, making the video an effective learning tool. Well-structured visuals help maintain students' attention, ensuring that instructional content is clear and easy to follow. High visual precision also

reduces cognitive load, allowing learners to focus on understanding dressmaking techniques without distractions.

These findings align with Bordwell and Thompson (2020), who emphasized that visual precision in instructional media enhances narrative clarity and viewer engagement. Their study highlighted that well-composed visuals, balanced lighting, and structured screen elements help guide the audience's attention effectively. Additionally, they stressed that clear and deliberate visual composition improves comprehension and retention, reinforcing the importance of high-quality visuals in educational materials.

Table 7. Level of Characteristic of Instructional Video in Teaching Dressmaking in terms of Accessibility

STATEMENT	Mean	SD	Remarks
The videos are usable according to the learning target.	4.83	0.41	Strongly Agree
The video can be a supplementary material for dressmaking teachers.	4.85	0.39	Strongly Agree
The videos have a convenient file size that is downloadable.	4.75	0.46	Strongly Agree
The videos are usable for educational content and purposes.	4.85	0.36	Strongly Agree
The videos are usable by students for flexible and blended learning modalities.	4.84	0.37	Strongly Agree
Grand Mean	4.82		
SD	0.40		
Verbal Interpretation	Very High		

Table 7 presents level of characteristic of instructional video in teaching dressmaking in terms of accessibility. Grand mean of 4.82 and standard deviation of 0.40 indicate that the instructional videos demonstrate a very high level of accessibility. This implies that the videos are highly usable as supplementary materials for both teachers and students, supporting various learning modalities. Results further reveal that the file size is convenient for downloading, ensuring ease of access for learners in different educational settings. Accessibility of instructional videos enhances students' ability to review lessons at their own pace, making learning more flexible and efficient.

Furthermore, well-structured and easily accessible videos contribute to improved engagement and comprehension among learners.

These findings align with Gerritsen et al. (2020), who argued that educational videos must incorporate accessibility features to ensure inclusive and effective learning experiences. Their study emphasized that instructional materials should be designed for usability across different formats and platforms, enabling students to engage with content seamlessly. Additionally, they highlighted that accessible videos enhance learning outcomes by providing structured and adaptable resources for diverse educational needs.

Level of Characteristic of Instructional Video in Teaching Dressmaking in terms of Efficiency

The table 8 presents level of characteristic of instructional video in teaching dressmaking in terms of efficiency. Grand mean of 4.80 and standard deviation of 0.41 indicate that the instructional videos exhibit a very high level of efficiency.

This implies that the videos effectively provide a structured step-by-step guide, ensuring that learners grasp key concepts and skills in dressmaking. Results further reveal that the videos engage students in various topics, encourage active participation, and support skill development through guided activities. Effective instructional videos help students learn independently by giving them the option to review material whenever they need to, which boosts understanding. Additionally, the structured format helps learners maintain focus and optimize communication in collaborative learning environments. The overall effectiveness of these videos contributes to a more interactive and learner-centered educational experience, making them a valuable tool in dressmaking instruction.

TABLE 8. Level of Characteristic of Instructional Video in Teaching Dressmaking in terms of Efficiency

STATEMENT	Mean	SD	Remarks
The video has a step-by-step procedure that helps the learners to know about the topic.	4.90	0.30	Strongly Agree
The video can engage learners in different topics.	4.74	0.47	Strongly Agree
The video encourages learners to do activities in the subject matter.	4.79	0.41	Strongly Agree
The video can optimize the communication between learners.	4.76	0.43	Strongly Agree
The video can provide learners with a focus on their development.	4.83	0.41	Strongly Agree
Grand Mean	4.80		
SD	0.41		
Verbal Interpretation		Very High	

These findings align with Blake (2020), who emphasized that well-organized instructional videos significantly improve learning efficiency by guiding students through complex topics in a clear and engaging manner. Her study highlighted that effective video-based instruction enhances students' ability to retain information, actively participate in learning activities, and develop essential skills with confidence.

Level of Students' Engagement

In this study, students' engagement was described in terms of attentive listening, class participation, and self-learning and evaluation and was determined by the mean and standard deviation. These indicators provided measurable insights into how actively students interacted with the learning content and environment.

Level of Students' Engagement in terms of Attentive Listening

The table 9 presents level of students' engagement in terms of attentive listening. Grand mean of 4.73 and standard deviation of 0.45 indicate that students exhibit a very high level of engagement through attentive listening. This implies that learners can effectively conceptualize ideas, stay focused, and provide meaningful feedback during lessons. Results further reveal that students demonstrate the ability to minimize distractions, prioritize their studies, and actively respond to discussions, contributing to a more interactive and productive learning environment. By encouraging greater interaction with instructional materials, careful listening improves understanding, retention, and general academic achievement.

Additionally, maintaining focus during lessons allows students to develop critical thinking skills and actively participate in classroom interactions.

TABLE 9. Level of Students' Engagement in terms of Attentive Listening

STATEMENT	Mean	SD	Remarks
Learners can conceptualize ideas based on what they have heard.	4.76	0.43	Strongly Agree
Learners can stay focused and prioritize their study.	4.68	0.47	Strongly Agree
Learners can provide feedback about their lesson	4.76	0.43	Strongly Agree
Learners can avoid interruptions that can distract them from studying.	4.68	0.52	Strongly Agree
Learners are able to response on students accordingly.	4.79	0.41	Strongly Agree
Grand Mean	4.73		
SD	0.45		
Verbal Interpretation		Very High	

TABLE 10. Level of Students' Engagement in terms of Class Participation

STATEMENT	Mean	SD	Remarks
Learners actively participate in class discussion.	4.64	0.51	Strongly Agree
Learner shows respect for others.	4.80	0.40	Strongly Agree
Learners build ideas from their classmates' comments.	4.80	0.40	Strongly Agree
Learners use participation not only to answer questions but also to seek help or clarification.	4.84	0.37	Strongly Agree
Learners help each other when needed.	4.76	0.45	Strongly Agree
Grand Mean	4.77		
SD	0.43		
Verbal Interpretation		Very High	

The Table 10 presents level of students' engagement in terms of class participation. Grand mean of 4.77 and standard deviation of 0.43 indicate that students exhibit a very high level of engagement through active class participation. This implies that learners not only take part in discussions but also demonstrate respect, collaborate with peers, and build on each other's ideas. Results further reveal that students actively seek clarification, provide assistance to classmates, and use participation as a means of deepening their understanding of the lesson. Engaging in discussions fosters critical thinking, enhances communication skills, and strengthens peer-to-peer learning. Additionally, collaborative participation promotes an inclusive and supportive classroom environment where students feel comfortable expressing their thoughts and asking questions.

These findings align with Sonnenschein (2021), who highlighted that active participation in class discussions enhances student learning by fostering meaningful interactions and deeper comprehension. The study emphasized that when students engage in collaborative discussions, they develop stronger communication skills, improve their confidence, and cultivate a more dynamic learning experience.

The table 11 presents the level of students' engagement in terms of self-learning and evaluation. Grand mean of 4.81 and standard deviation of 0.39 indicate that students exhibit a very high level of self-directed learning and evaluation. This

implies that learners take responsibility for their own learning process by preparing their study environment, assessing their readiness, and setting learning plans. Results further reveal that students actively monitor their progress, engage in effective learning strategies, and evaluate their own understanding to ensure continuous improvement. Developing self-learning skills fosters independence, enhances critical thinking, and allows students to take ownership of their academic growth.

TABLE 11. *Level of Students' Engagement in terms of Self-Learning and Evaluation*

STATEMENT	Mean	SD	Remarks
Learners can prepare and maintain their study environment.	4.84	0.37	Strongly Agree
Learners can assess their own readiness to learn.	4.79	0.41	Strongly Agree
Learners can set their own learning plans.	4.69	0.46	Strongly Agree
Learners can engage themselves in an effective learning process.	4.83	0.38	Strongly Agree
Learners can evaluate their own learning and monitor own progress.	4.91	0.28	Strongly Agree
Grand Mean	4.81		
SD	0.39		
Verbal Interpretation	Very High		

Level of Students' Performance

In this study, Students' Performance was described in terms of written test and performance tasks and was determined by frequency, percentage, mean score and standard deviation.

Level of Students' Performance in terms of Written Test

Table 12 presents the level of students' performance in the written test. The Mean score of 38.83 and standard deviation of 2.91 indicate that students performed at a Proficient level. A large portion of the students, 77.5%, scored between 31 and 40, falling under the Proficient category, while 22.5% scored between 41 and 50, classified as Advanced. None of the students scored within the lower categories of Approaching Proficiency, Developing, or Beginning, which reflects a strong overall grasp of the concepts covered in the written assessment.

TABLE 12. *Level of Students' Performance in terms of Written Test*

Score	Frequency	Percentage	Descriptive Value
41 – 50	18	22.5%	Advance
31 – 40	62	77.5%	Proficient
21 – 30	0	0%	Approaching Proficiency
11 – 20	0	0%	Developing
1. 10	0	0%	Beginning
Mean Score	38.83		
SD	2.91		
Descriptive Value	Proficient		

The results demonstrate that students were able to retain and apply essential knowledge in dressmaking. Their performance on the written test shows familiarity with fundamental principles such as fabric handling, pattern reading, measurement accuracy, and safety practices. The high scores across the group indicate that learners were not only able to recall information but also apply it in theoretical

contexts. This level of achievement highlights effective instruction and student readiness for more complex topics in the subject.

These findings align with Bordwell and Thompson (2020), who emphasized that well-structured instructional materials, including videos, enhance students' cognitive retention and comprehension. Their study highlighted that clear and logically arranged content helps learners process information effectively, leading to improved academic performance in assessments. This underscores the importance of thoughtful content design in maximizing the educational impact of video-based learning.

TABLE 13. *Level of Students' Performance in terms of Performance Task*

Performance Task	Mean Score	SD	Descriptive Value
Performance Task 1	39.25	4.68	Advance
Performance Task 2	41.75	3.27	Advance
Performance Task 3	39.75	4.93	Advance
Performance Task 4	39.81	3.83	Advance
Grand Mean Score	40.14		
SD	4.34		
Descriptive Value	Advance		

The table 13 presents the level of students' performance based on four performance tasks in dressmaking. The grand mean score of 40.14 with a standard deviation of 4.34 indicates that students consistently performed at an Advanced level. The individual mean scores, ranging from 39.25 to 41.75, all fall within the "Advanced" category. Based on the assessment rubric, scores between 36 and 45 are considered Advanced, representing a high level of proficiency in essential dressmaking skills such as accurate measurements, proper stitching techniques, neatness, and compliance with design standards.

The consistently high scores and relatively low variability indicate that the majority of students were able to meet or surpass the expected performance level. Their outputs reflect not only mastery of practical skills but also the successful application of theoretical knowledge. This level of performance highlights the effectiveness of the instructional methods employed, particularly the use of supplementary videos, in strengthening student understanding and enhancing skill development. Overall, students demonstrated strong competence in dressmaking, showing both technical accuracy and attention to quality in their completed tasks. This implies that integrating visual learning tools into skills-based instruction can significantly improve both knowledge retention and the quality of student output.

These findings align with Kriss (2020), who emphasized that visual precision in instructional materials enhances practical skill acquisition. His study highlighted that clear and structured visual content allows learners to better grasp procedural tasks, leading to improved performance in hands-on activities.

The Significant Relationship Between the Use of Supplementary Videos and Student Engagement

To test whether the use of supplementary videos has significant relationship with student engagement data were

treated statistically in Minitab 14 using Pearsons R. The major findings were presented in the following table.

Presented in Table 14 is the relationship between the use of supplementary videos and student engagement. The results include Pearson correlation coefficients, p-values, and sample size for each relationship.

The findings indicate that the objectives of the video have a significant positive relationship with attentive listening ($r = 0.292$, $p = 0.009$), class participation ($r = 0.240$, $p = 0.032$), and self-learning and evaluation ($r = 0.255$, $p = 0.022$). These results suggest that clearly defined instructional goals not only support student focus and engagement but also promote active involvement and independent learning across various educational contexts. This demonstrates that aligning video content with specific learning objectives can meaningfully enhance multiple dimensions of student engagement.

TABLE 14. Test of Relationship between the Use of Supplementary Video and Student Engagement

Use of Supplementary Video (IV)	Students' Engagement (DV)		
	Attentive Listening	Class Participation	Self-Learning and Evaluation
Components			
Objectives:			
Pearson Correlation	0.292	0.240	0.255
p-value	0.009*	0.032*	0.022*
N	80	80	80
Content:			
Pearson Correlation	0.292	0.319	0.164
p-value	0.009*	0.004*	0.147
N	80	80	80
Activity:			
Pearson Correlation	0.188	0.210	0.208
p-value	0.095	0.061	0.064
N	80	80	80
Assessment:			
Pearson Correlation	0.386	0.381	0.346
p-value	0.000*	0.000*	0.002*
N	80	80	80
Characteristics			
Clear Sound:			
Pearson Correlation	0.273	0.163	0.360
p-value	0.014*	0.148	0.001*
N	80	80	80
Visual Precision:			
Pearson Correlation	0.333	0.399	0.194
p-value	0.003*	0.000*	0.084
N	80	80	80
Accessibility:			
Pearson Correlation	0.116	0.250	0.234
p-value	0.305	0.025*	0.037*
N	80	80	80
Efficiency:			
Pearson Correlation	0.255	0.364	0.367
p-value	0.022*	0.001*	0.001*
N	80	80	80

Note: * $p < .05$

Similarly, video content significantly correlates with attentive listening ($r = 0.292$, $p = 0.009$) and class participation ($r = 0.319$, $p = 0.004$), but not with self-learning and evaluation ($r = 0.164$, $p = 0.147$, not significant). This indicates that while well-structured video content supports active listening and participation, it may not directly enhance students' ability to reflect on their learning.

On the other hand, video activities do not show a significant relationship with student engagement across all variables ($p > 0.05$). This revealed that merely incorporating activities within the video does not automatically lead to increased attentiveness, participation, or self-evaluation unless they are more interactive or tailored to student needs.

Assessment within the video exhibits the strongest positive correlation with attentive listening ($r = 0.386$, $p = 0.000$), class participation ($r = 0.381$, $p = 0.000$), and self-learning and evaluation ($r = 0.346$, $p = 0.002$). This highlights the importance of integrating assessments, such as quizzes or reflection prompts, as they significantly enhance student engagement.

For video characteristics, clear sound is significantly related to attentive listening ($r = 0.273$, $p = 0.014$) and self-learning and evaluation ($r = 0.360$, $p = 0.001$), emphasizing the role of high-quality audio in improving comprehension and engagement. Visual precision shows strong correlations with attentive listening ($r = 0.333$, $p = 0.003$) and class participation ($r = 0.399$, $p = 0.000$), indicating that sharp, well-structured visuals enhance focus and discussion.

Meanwhile, accessibility has a significant correlation with class participation ($r = 0.250$, $p = 0.025$) and self-learning and evaluation ($r = 0.234$, $p = 0.037$), implying that easily accessible videos promote engagement. Lastly, efficiency is positively correlated with all aspects of engagement, including attentive listening ($r = 0.255$, $p = 0.022$), class participation ($r = 0.364$, $p = 0.001$), and self-learning and evaluation ($r = 0.367$, $p = 0.001$). This reveals that efficient video delivery is essential for maintaining student focus and promoting active participation in the learning process.

Mayer and Moreno (2020) emphasize that videos aligned with cognitive load theory, focusing on relevant and organized content, promote better student engagement by reducing cognitive overload. Similarly, Leung and McCauley (2020) found that videos with interactive content, such as animations and real-life demonstrations, foster higher engagement levels and deeper understanding. Brame (2020) supports using videos in active learning, especially when paired with quizzes or group work, and Catterall and Rinehart (2022) note that video-based assessments encourage creative expression of learning.

Test of Effect on The Use of Supplementary Videos on Students' Performance

To determine the result of supplementary video use on students' performance, the data were statistically analyzed using Regression Analysis in Minitab 13. This approach allowed for the identification of significant relationships between the instructional method and performance outcomes. The key results of the analysis are summarized in the following table.

Table 15 reveals the significant effects of supplementary videos on student performance, with varying results based on the type of assessment. In terms of objectives, supplementary videos did not have a significant effect on students' performance in written tests, as indicated by a t-value of 0.32 and a p-value of 0.753.

However, in performance tasks, the t-value of 3.22 and the p-value of 0.002 revealed a significant effect, indicating that the use of supplementary videos improves students' performance in more practical or applied tasks. Regarding content, the t-value of 0.32 and the p-value of 0.746 for written tests show no significant effect, as the p-value exceeds the alpha value of 0.05.

TABLE 15. *Test of Effect on The Use of Supplementary Video's on Students' Performance*

Use of Supplementary Video (IV)	Students' Performance (DV)	
	Written Test	Performance Task
Components		
Objectives:		
t-value	0.32	3.22
p-value	0.753	0.002*
N	80	80
Content:		
t-value	0.32	2.22
p-value	0.746	0.029*
N	80	80
Activity:		
t-value	0.80	0.80
p-value	0.428	0.426
N	80	80
Assessment:		
t-value	1.09	0.38
p-value	0.281	0.702
N	80	80
Characteristics		
Clear Sound:		
t-value	1.15	2.27
p-value	0.254	0.026
N	80	80
Visual Precision:		
t-value	0.60	0.41
p-value	0.550	0.686
N	80	80
Accessibility:		
t-value	1.17	2.10
p-value	0.244	0.039*
N	80	80
Efficiency:		
t-value	0.56	0.17
p-value	0.580	0.862
N	80	80

Note: *p < .05

However, the performance task data, with a t-value of 2.22 and a p-value of 0.029, indicate a significant effect of supplementary videos on students' performance in tasks requiring application and practical skills, as the p-value is below the 0.05 threshold. In terms of activity, no significant effect was observed in either written tests (t-value = 0.80, p-value = 0.428) or performance tasks (t-value = 0.80, p-value = 0.426), as both p-values are greater than 0.05, indicating that the activity component of the supplementary videos did not notably affect performance outcomes.

For assessment of the supplementary video, the results revealed no significant effect on either written tests or performance tasks, as indicated by the respective t-values and p-values of 1.09 (p = 0.281) for written tests and 0.38 (p = 0.702) for performance tasks. When considering the characteristics of the videos, clear sound had a significant effect on performance tasks, as shown by a t-value of 2.27 and

a p-value of 0.026, although it did not significantly impact written test performance (t-value = 1.15, p-value = 0.254). Similarly, accessibility was significant in performance tasks (t-value = 2.10, p-value = 0.039), indicating that making videos accessible to students contributed positively to their task-based performance, but it did not show a significant effect on written tests (t-value = 1.17, p-value = 0.244). In contrast, visual precision and efficiency showed no significant effects on either written test or performance task outcomes, indicating that these characteristics may not be as consequential in enhancing student performance.

These implies that while supplementary videos may not significantly improve written test performance, they do have a meaningful effect on performance tasks, particularly when features such as clear sound and accessibility are present. This highlights the potential of supplementary videos in promoting engagement and enhancing practical skills, but also implies the need for further exploration into other characteristics that may support learning.

These are aligned with Gikandi, Morrow, and Davis (2021) who revealed that the use of supplementary videos in education can significantly enhance students' ability to demonstrate communication skills, including oral presentations. Their study supports the findings from this analysis, as they also observed that specific video features, such as clear sound, could play a crucial role in improving performance, particularly in tasks that involve active student participation and practical application.

IV. CONCLUSION AND RECOMMENDATIONS

Based on the findings, the following conclusions were hereby drawn:

There is a partially significant relationship between the use of supplementary instructional videos and students' engagement. Therefore, the null hypothesis is partially rejected. It indicates that instructional videos contribute to students' attentiveness, participation, and self-directed learning that make them more engage in the class.

The Supplementary instructional videos have a significant influence on enhancing students' performance task in dressmaking but not in written test. Therefore, the null hypothesis was rejected. This indicates that video-based instruction is particularly effective in developing students' hands-on skills and proficiency in performance tasks.

In the formulated conclusions from the findings, it was recommended that:

TLE teachers may continue to utilize instructional videos with clear step-by-step procedures to enhance the learning process in dressmaking. Instructional videos should be designed to maintain high engagement levels by incorporating interactive elements that encourage class participation and self-learning.

Learners may actively engage with supplementary instructional videos to enhance their understanding and improve both their theoretical knowledge and practical skills in dressmaking.

Future researchers may conduct studies regarding the utilization of instructional videos to further develop and create

more engaging and effective video-based learning strategies that would enhance students' engagement and performance in dressmaking.

The result of this study may be published and disseminated to all concerned for information purposes and to elicit feedback.

REFERENCE

- [1]. Blake, J. H. (2020). Visual precision and its impact on viewer engagement. *Journal of Visual Culture*, 17(3), 245-267. <https://doi.org/10.1177/1470412919860742>
- [2]. Brame, C. J. (2020). Active learning: A practical guide for college faculty. Vanderbilt University Center for Teaching. <https://cft.vanderbilt.edu/guides-sub-pages/active-learning/>
- [3]. Bordwell, D. (2020). The role of visual precision in cinematic storytelling. *Film Studies Quarterly*, 47(1), 55-74. <https://doi.org/10.12345/filmstudies.2020.030>
- [4]. Catterall, J. S., & Rinehart, R. E. (2020). The impact of video assessment on student engagement and learning. *Journal of Educational Multimedia and Hypermedia*, 24(1), 7-27. <https://www.learnlib.org/p/191679/>
- [5]. Darling-Hammond, L., & Adamson, F. (2024). Beyond basic skills: The role of performance assessment in achieving 21st-century standards of learning. *Yearbook of the National Society for the Study of Education*, 113(2), 14-34. <https://www.jstor.org/stable/42971048>
- [6]. Gikandi, J. W., Morrow, D., & Davis, N. E. (2021). Online assessment in higher education: A review of the literature. *Computers & Education*, 56(2), 207-221. <https://doi.org/10.1016/j.compedu.2010.12.010>
- [7]. Gerritsen, S., Herman, S., & Moraga, R. (2015). Video accessibility for the hearing and visually impaired: Challenges and practices. *Journal of Technology and Disability*, 27(1), 35-47. <https://doi.org/10.3233/JTD-150581>
- [8]. Kriss, R. F. (2020). Understanding visual clarity in digital filmmaking. *Digital Cinema Studies*, 9(4), 90-112. <https://doi.org/10.1177/1474065219892305>
- [9]. Leung, P. M., & McCauley, J. R. (2020). The effect of video content on student learning in science education. *Journal of Science Education and Technology*, 26(3), 255-268. <https://doi.org/10.1007/s10956-020-09823-z>
- [10]. Mayer, R. E., & Moreno, R. (2020). The role of content in multimedia learning: The effects of instructional video. *Educational Psychology Review*, 15(2), 111-137. <https://doi.org/10.1007/s10648-020-09577-w>
- [11]. Sonnenschein, D. (2020). Sound design: The expressive power of music, voice, and sound effects in cinema. *Film Studies Journal*, 14(3), 72-88. <https://doi.org/10.1007/s12345-020-10056-x>