

VAL (Video Assisted Learning) Strategy on Learners' Engagement and Preparation on Institutional Competency Assessment in Bread and Pastry Production NCII

Shiela Mae O. Rivera

Laguna State Polytechnic University Sta. Cruz Laguna 4009 PHILIPPINES

Email address: shielamae.rivera@deped.gov.ph

Abstract—This study aimed to determine the effectiveness of VAL (video assisted learning strategy) on learners' engagement and preparation for institutional assessment of senior high school TVL HE learners' taking Bread and Pastry Production NCII. Specifically, it determined the level of acceptability of VAL (video assisted learning) strategy in terms of components and characteristic. Additionally, the significant effect of the components and characteristic of video assisted learning strategy to the learners' engagement and preparation for institutional assessment in Bread and Pastry Production NCII were tested. This study utilized both descriptive and experimental design to evaluate the experience of the 80 learners from the learners of Cuyab Integrated National High School. Self-made questionnaires including written test, and performance tasks were used in order to gather data for analysis. The findings show that the level of assessment in the video assisted learning strategy components and characteristic was very high. Also, the level of learners' engagement in using video assisted learning strategy has over all verbal interpretation as very high. Then, the level of learners' preparedness for institutional assessment in written test was verbally interpreted as mastered and outstanding in demonstration. A strong and significant relationship was found between the components and characteristic of video assisted learning to the learners' engagement. While, the video assisted learning strategy do not significantly affect learners' performance in institutional assessments, both in written tests and demonstrations. The components and characteristics of video assisted learning shows acceptance of hypotheses was evident. This concludes that video assisted learning strategy can enhance the learners' class participation and provide learners' to be well prepared on institutional competency assessment. It was recommended that video assisted learning strategy should be integrated with practical demonstrations, oral questioning, and written tests to ensure holistic evaluation of learners' cognitive, psychomotor, and affective competencies. School Administrators, technology, teachers, learners, entrepreneurs, and bakers are encouraged to integrate video assisted learning strategy to enhance their knowledge and skills in bread and pastry production.

Keywords— VAL (Video Assisted Learning), Strategy on Learners' Engagement and Preparation, Institutional Competency Assessment, Bread and Pastry Production NCII.

I. INTRODUCTION

Teaching strategies play a crucial role in shaping learner engagement and professional commitment. Teaching is teaching if learners learn. Learning is measured by its

outcome. Whatever approach to teaching is used, the intent should focus on learning rather than teaching. (Catapang & Tuiza, 2022). Across educational context, a teacher can employ a variety of teaching techniques, such as case studies, gamification, differentiated instruction, peer learning, and demonstration in sustaining learners' interest in studying. However, the use of instructional materials is also important in teaching because the success of learners achieving certain competency cannot be ensured by a single technique. An instructional material must be carefully designed to get the learners attention and sustain engagement to help them prepare for the future, realize their goals, and their full potential for lifelong learning. It plays a vital role, as it bridges theoretical knowledge with practical skill development. It is critical for technical vocational education to sustain learners' engagement.

Learners' engagement refers to the focus of attention, curiosity and active participation during the learning process. There are certain competencies in learning that require actual demonstration and allows learners to experience what is being demonstrated. To address this need, the researcher came up with an idea of using video as an instructional material as a strategy for teaching bread and pastry production to develop engagement among the learners.

This strategy was called VAL (Video Assisted Learning) strategy. The VAL was composed of different lessons that will help learners understand well the competencies in bread and pastry production that caters both theories and technical skills. Through the use of VAL strategy, learners' engagement can be developed, it is intended to be utilized by the learners to assist them in understanding the competencies for Bread and Pastry Production in preparation for the institutional competency assessment that will give them the chance to qualify and obtain National Certificate from TESDA.

The Technical Education and Skills Development Authority (TESDA) released a Joint Memorandum Circular No.45 s. 2024 wherein, they will work hand in hand with the Department of Education. The memorandum mandates competency assessment and certification of SHS TVL learners free of charge. The competency assessment of SHS TVL track in public school learners ensures the quality and integrity of a program geared towards enhancing job readiness. Within this

context, VAL offers a timely and responsive strategy to support learners in Bread and Pastry Production NCII to strengthen their engagement and readiness for institutional assessment.

Therefore, this study about Video Assisted Learning (VAL) Strategy intends to find out its relationship and effectiveness on learners' engagement and preparation for the institutional competency assessment in Bread and Pastry Production NCII.

1.1 Statement of the Problem

Problem/s which were addressed by the research

This study sought to determine the effectiveness of video assisted learning strategy in the level of engagement in preparation for institutional assessment of senior high school TVL HE students taking bread and pastry production NCII.

Specifically, the study sought answer to the following research questions:

1. What is the level of assessment in the components of video assisted learning strategy in terms of:
 - 1.1 objectives;
 - 1.2 content relevance;
 - 1.3 practical tasks; and
 - 1.4 evaluation?
2. What is the level of assessment in the characteristics of video assisted learning strategy in terms of:
 - 2.1 clear audio;
 - 2.2 visual appearance;
 - 2.3 accessibility; and
 - 2.4 usefulness?
3. What is the level of learner engagement in terms of:
 - 3.1 cognitive;
 - 3.2 behavioral; and
 - 3.3 affective?
4. What is the level of learners' performance in preparation for institutional competency assessment in terms of:
 - 4.1 written test; and
 - 4.2 demonstration?
5. Is there a significant relationship between the components and characteristic of video assisted learning to the learners' engagement?
6. Is there a significant effect between the components and characteristic of video assisted learning on the learners' performance for the preparation of institutional competency assessment?

II. METHODOLOGY

This study utilized both descriptive and experimental design to evaluate the experience of the 80 learners from the learners of Cuyab Integrated National High School. Self-made questionnaires including written test, and performance tasks were used in order to gather data for analysis.

III. RESULTS AND DISCUSSION

This part explains the findings that were achieved after treating the data that was collected in this research. The table presentations and discussions below further identify the effectiveness of video assisted learning strategy in the degree

of involvement in institutional assessment of Senior High School TVL-HE students undertaking bread and pastry production NCII. Assessment in the Components of Video Assisted Learning Strategy.

Level of Assessment in the Components of Video Assisted Learning Strategy

In this research, mean and standard deviation were used to determine the level of assessment in the video assisted learning strategy components in terms of objectives, content relevance, practical tasks, and evaluation.

The following tables tackled the respondents' assessment on the different components of video assisted learning strategy.

Shown in table 1 is the level of assessment in the components of video assisted learning strategy in terms of objectives. As presented, the respondents agreed strongly that the objectives of the video assisted learning strategy is clearly defined and easy to understand. It shows diversity in terms of a learning styles and levels of skill levels and are aligned well with the overall goals of the Bread and Pastry Production NCII program. These are also specific, measurable, attainable, realistic and time bounded that guides learning process effectively and consistently reflects its stated objectives throughout the content.

The level of assessment in the components of video assisted learning strategy in terms of objectives gained the overall weighted mean of 4.84 with a level of consensus among the respondents that the objectives are effectively communicated to the learners, well-structured, and clear. This transparency helps improve the active engagement, motivation, and concentration of learners, as students can relate the video material to the desired outcomes and the real skills needs with ease.

Table 1. Level of Assessment in the Components of Video Assisted Learning Strategy in terms of Objectives

Statements	Mean	SD	Remarks
The objectives of the video assisted learning strategy is...			
...clearly defined and easy to understand.	4.93	0.26	Strongly Agree
...aligned well with the overall goals of the Bread and Pastry Production NCII program.	4.83	0.38	Strongly Agree
...specific, measurable, attainable, realistic and time bounded that guides learning process effectively.	4.83	0.44	Strongly Agree
...consistently reflects its stated objectives throughout the content.	4.79	0.47	Strongly Agree
...diverse in terms of a learning styles and levels of skill levels.	4.84	0.40	Strongly Agree
Weighted Mean	4.84		
SD	0.40		
Verbal Interpretation	Very High		

In summary, the results indicate that with objectives that cater to varied learning styles and skill levels while maintaining SMART characteristics the video assisted learning strategy may effectively guide the teaching learning process.

Table 2. Level of Assessment in the Components of Video Assisted Learning Strategy in terms of Content Relevance

Statements	Mean	SD	Remarks
The content relevance of the video assisted learning strategy provide meaningful learning experiences that is...			
...directly connected to the skills needed for the institutional competency assessment.	4.90	0.30	Strongly Agree
...up-to-date with current industry standards and practices.	4.78	0.42	Strongly Agree
...practical and applicable for the institutional competency assessment.	4.86	0.41	Strongly Agree
...relevant and engaging for progress.	4.76	0.51	Strongly Agree
...of great help that enhances understanding in bread and pastry production.	4.86	0.34	Strongly Agree
Weighted Mean	4.83		
SD	0.41		
Verbal Interpretation		Very High	

Table 2 exhibits the level of assessment in the components of the Video Assisted Learning (VAL) strategy in terms of content relevance. As presented, the respondents strongly agreed that the content provides meaningful learning experiences directly connected to the skills needed for the institutional competency assessment. It is up-to-date with industry standards, practical and applicable to actual tasks, and engaging for learner progress connected to the skills required for the institutional competency assessment in Bread and Pastry Production NCII.

The level of assessment in the components of the Video Assisted Learning (VAL) strategy in terms of content relevance gained an overall weighted mean of 4.83 with a standard deviation of 0.41, verbally interpreted as Very High, indicates that the respondents have a high level of agreement that the VAL strategy offers very relevant content. This implies that integrating video-assisted learning does not only comply with the requirements of institutional competency, but also enhances the preparation of learners by tying classroom learning with industry-based practices.

The results suggest that the content of the VAL strategy is up-to-date with current industry standards and practices, ensuring that learners are exposed to relevant and modern techniques. It was also confirmed by the respondents that the video lessons are practical and relevant to the competency assessment, and therefore, they are quite helpful in integrating theoretical knowledge with the real performance tasks.

Overall, the video content was seen as relevant and useful by the learners to make progress, which contributes to constant improvement and motivation.

Table 3 presents the level of assessment in the components of the Video Assisted Learning (VAL) strategy in terms of practical tasks. As presented, the respondents strongly agreed that the tasks are carefully designed to enhance comprehension and engagement, directly supporting the skills needed for the institutional competency assessment. They are structured to progressively build skills, clearly demonstrated for easy following, and encourage the application of theoretical knowledge in practical settings. The videos also present a variety of techniques and skills, making them highly effective in preparing learners for bread and pastry production competency assessment.

Table 3. Level of Assessment in the Components of Video Assisted Learning Strategy in terms of Practical Tasks

Statements	Mean	SD	Remarks
The practical tasks featured in the video assisted learning strategy are carefully designed to enhance comprehension and engagement that is...			
...needed for the institutional competency assessment	4.83	0.38	Strongly Agree
...designed to progressively build skills.	4.79	0.44	Strongly Agree
...clearly demonstrated and making it easy to follow along.	4.76	0.45	Strongly Agree
...encouraging for the application of theoretical knowledge in practical settings.	4.74	0.49	Strongly Agree
...presents a variety of techniques and skills.	4.89	0.32	Strongly Agree
Weighted Mean	4.80		
SD	0.42		
Verbal Interpretation		Very High	

The level of assessment in the components of video assisted learning strategy in terms of practical tasks is highly effective having the overall weighted mean of 4.80 with a standard deviation of 0.42, verbally interpreted as Very High which has strong agreement among respondents. Practical tasks in VAL strategy serve as one of the necessary instructional components, as they are important in promoting engagement, reinforcing theoretical knowledge, and ensuring mastery of diverse techniques necessary for success in Bread and Pastry Production NCII.

The result suggests that the integration of practical demonstrations within video-assisted learning not only enhances comprehension but also strengthens learners' preparation for competency assessment by providing clear, progressive, and varied skill-building activities.

Table 4. Level of Assessment in the Components of Video Assisted Learning Strategy in terms of Evaluation

Statements	Mean	SD	Remarks
The evaluations integrated into the video assisted learning strategy are meticulously fostering a/an...			
...clear criteria for evaluating progress and performance.	4.88	0.37	Strongly Agree
...assessment strategies that are in line with the learning outcomes and activities performed.	4.91	0.28	Strongly Agree
...timely and constructive feedback on performance.	4.75	0.51	Strongly Agree
...measure for theoretical knowledge and skills.	4.81	0.48	Strongly Agree
...open and consistent feedback on the competencies performed.	4.88	0.33	Strongly Agree
Weighted Mean	4.85		
SD	0.41		
Verbal Interpretation		Very High	

The data appeared in table 4 is the level of assessment in the components of the Video Assisted Learning (VAL) strategy in terms of evaluation. As presented, the respondents strongly agreed that the evaluations provide clear criteria for measuring progress and performance, with strategies aligned to learning outcomes and activities. They also deliver timely and constructive feedback, assess both theoretical knowledge

and practical skills, and ensure open and consistent feedback on competencies performed.

The level of assessment in the components of the Video Assisted Learning (VAL) strategy in terms of evaluation got an overall weighted mean of 4.85 with a standard deviation of 0.41, verbally interpreted as Very High. The integration of well-structured evaluation mechanisms within video-assisted learning not only ensures fairness and clarity but also strengthens learners' preparation for institutional competency assessment by providing constructive, aligned, and comprehensive feedback.

The result depicts a strong agreement among respondents as highly effective. Therefore, the importance of the evaluation aspect of the VAL method because this approach creates criteria, aligns the assessment process with the desired outcomes, and gives consistent feedback to learners to help develop their theoretical and practical knowledge about Bread and Pastry Production NCII.

Level of Assessment in the Characteristics of Video Assisted Learning Strategy

In this research, mean and standard deviation were used to determine the level of assessment in the characteristic of video assisted learning strategy in terms of clear audio, visual appearance, accessibility, and usefulness.

The following tables tackled the respondent's assessment in the characteristic of video assisted learning strategy.

Table 5 shows the level of assessment in the components of the video assisted learning strategy in terms of clear audio. As presented, the respondents strongly agreed that the audio is of high quality with no distracting background volume throughout the videos, increases understanding and memorization of the product, and complements the visual elements to provide a unified learning experience.

Table 5. Level of Assessment Characteristics of Video Assisted Learning Strategy in terms of Clear Audio

Statements	Mean	SD	Remarks
The audio of the video assisted learning strategy is/has...			
...high-quality audio with no distracting background noise.	4.93	0.26	Strongly Agree
...ensures clear sound without stuttering or static interference.	4.84	0.37	Strongly Agree
...consistent in volume throughout the videos.	4.74	0.44	Strongly Agree
...increase understanding and memorization of the product.	4.83	0.38	Strongly Agree
...complement the visual elements, providing a unified learning experience.	4.86	0.34	Strongly Agree
Weighted Mean	4.84		
SD	0.37		
Verbal Interpretation			Very High

The level of assessment in the components of the video assisted learning strategy in terms of clear audio got an overall weighted mean of 4.84 with a standard deviation of 0.37, verbally interpreted as Very High, reflects strong agreement among respondents that the audio quality of the VAL strategy is highly effective.

This implies that clear and consistent audio is a determining factor in making sure that learners completely

master what is being taught because distraction is removed, understanding is solidified thereby facilitating both engagement and preparation for institutional competency assessment in Bread and Pastry Production NCII.

Table 6. Level of Assessment Characteristics of Video Assisted Learning Strategy in terms of Visual Appearance

Statements	Mean	SD	Remarks
The visual appearance of the video assisted learning strategy is carefully crafted to ensure an engaging and immersive learning experience that has...			
...high-quality images and clear demonstrations.	4.88	0.33	Strongly Agree
...graphics and animations effectively highlight important concepts.	4.84	0.40	Strongly Agree
...visual and aesthetic design that is consistent and pleasing.	4.81	0.39	Strongly Agree
...demonstrations that are filmed from multiple angles to provide comprehensive views.	4.75	0.46	Strongly Agree
...visual elements that are aligned with the audio to reinforce learning objectives.	4.81	0.42	Strongly Agree
Weighted Mean	4.82		
SD	0.41		
Verbal Interpretation			Very High

Table 6 shows the level of assessment in the characteristics of the video assisted learning strategy in terms of visual appearance. As presented, the respondents strongly agreed that the videos are carefully crafted with high-quality images and clear demonstrations. Graphics and animations effectively highlight important concepts, while the overall design is consistent and visually pleasing. Demonstrations filmed from multiple angles provide comprehensive views, and visual elements are aligned with audio to reinforce learning objectives.

The level of assessment in the characteristics of the video assisted learning strategy in terms of visual appearance got an overall weighted mean of 4.82 with a standard deviation of 0.41, verbally interpreted as Very High. The visual appearance component was rated very high, showing its strong role in creating an engaging and immersive learning experience for bread and pastry production.

The result emphasize that the visual appearance of video assisted learning strategy plays a vital role in motivating learners, as it combines clarity, aesthetics, and alignment with audio to deliver an immersive and effective learning experience in Bread and Pastry Production NCII.

Table 7 shows the level of assessment in the characteristics of the video assisted learning strategy in terms of accessibility. As presented, the respondents strongly agreed that the videos are easily available from different locations, applications, and devices, and can be accessed on-demand for convenient study. They support various formats to ensure compatibility, include subtitles and transcripts to enhance accessibility, and feature a user interface that is intuitive and easy to navigate.

The table gains an overall weighted mean of 4.84 with a standard deviation of 0.37, verbally interpreted as very high, reflects strong agreement among respondents that the accessibility of the video assisted learning strategy is highly effective, showing its effectiveness in providing flexible, inclusive, and user-friendly

learning opportunities for bread and pastry production.

Table 7. Level of Assessment Characteristics of Video Assisted Learning Strategy in terms of Accessibility

Statements	Mean	SD	Remarks
The accessibility of the video assisted learning strategy encompasses various aspects that is/has...			
...easily available from different locations, application and devices.	4.89	0.32	Strongly Agree
...available on-demand, allowing to study with convenience.	4.74	0.44	Strongly Agree
...support platforms various formats, ensuring compatibility with device.	4.90	0.30	Strongly Agree
...with subtitles and transcripts to enhance accessibility for all learners.	4.85	0.36	Strongly Agree
...with user interface that is intuitive and easy to navigate.	4.83	0.38	Strongly Agree
Weighted Mean	4.84		
SD	0.37		
Verbal Interpretation	Very High		

This implies that the incorporation of the available features in the video assisted learning does not only contribute to inclusivity but also the interest and validate the result that the accessibility of VAL through its availability across devices, on-demand access, and inclusive features ensures both equity and effectiveness in preparing learners for bread and pastry competency assessment.

Table 8 shows the level of assessment in the components of the video assisted learning strategy in terms of usefulness. As presented, the respondents strongly agreed that the strategy is highly useful in preparing them for the pastry training, provides valuable insights that enhance skills, and helps learners feel more confident and competent in using the VAL resources. The usefulness is also reflected in improved learning outcomes.

Table 8. Level of Assessment Characteristics of Video Assisted Learning Strategy in terms of Usefulness

Statements	Mean	SD	Remarks
The usefulness of the video assisted learning strategy is evaluated through various dimensions which was/were...			
...highly useful in preparing me for the Institutional Competency Assessment.	4.91	0.28	Strongly Agree
...practical and applicable to my bread and pastry training.	4.88	0.33	Strongly Agree
...providing valuable insights that enhance skills.	4.84	0.37	Strongly Agree
...making feel more confident and competent as a result of using the VAL resources.	4.86	0.34	Strongly Agree
...reflected in improved learning outcomes.	4.91	0.28	Strongly Agree
Weighted Mean	4.88		
SD	0.32		
Verbal Interpretation	Very High		

The level of assessment in the characteristics of the Video Assisted Learning strategy in terms of usefulness gained an overall weighted mean in of 4.88 with a standard deviation of 0.32, verbally interpreted as very high confirming its strong role in supporting effective preparation and skill development.

The findings emphasize that the usefulness of video assisted learning strategy is a key contributor to learner

engagement and preparation, as it provides practical applications, valuable insights, and improved outcomes that directly support success in Bread and Pastry Production NCII.

Level of Learner Engagement

In this research, mean and standard deviation were used to determine the level of learners' engagement in using video assisted learning strategy for bread and pastry production NCII in terms of cognitive, behavioral, and affective.

Table 9. Level of Learner Engagement in terms of Cognitive

Statements	Mean	SD	Remarks
The cognitive domain of video assisted learning strategy is examined through various lenses to the learners engagement that...			
...encourages them to think critically about the processes involved in bread and pastry production.	4.88	0.33	Strongly Agree
...helps them to become active and able to understand the lesson easily.	4.86	0.34	Strongly Agree
...prompts to ask questions and seek deeper understanding of the techniques demonstrated.	4.80	0.40	Strongly Agree
...motivates them to explore additional resources and information related to what was learned in the videos.	4.81	0.39	Strongly Agree
...helps to connect theoretical knowledge to practical applications effectively.	4.83	0.38	Strongly Agree
Weighted Mean	4.84		
SD	0.37		
Verbal Interpretation	Very High		

Table 9 shows the level of assessment in the components of the video assisted learning strategy in terms of cognitive engagement. As presented, the respondents strongly agreed that the strategy encourages learners to think critically about bread and pastry processes, helps them become active and understand lessons easily, and prompts them to ask questions for deeper understanding. It also motivates learners to explore additional resources and effectively connects theoretical knowledge to practical applications.

The level of learner engagement in terms of the cognitive domain of the video assisted learning strategy gained overall weighted mean of 4.84 with a standard deviation of 0.37, was verbally interpreted as very high. The interpretation implies that the strategy is not only increasing understanding but also stimulating critical thinking and application of the knowledge in real life situations that is necessary in preparing the learner to the Institutional Competency Assessment in Bread and Pastry Production NCII.

Table 10 indicates the level of learner engagement in terms of the behavioral domain of the video assisted learning strategy. As presented, the respondents strongly agreed that learners consistently complete activities and assignments on time, actively participate in the learning process, and regularly practice skills demonstrated in the videos beyond scheduled sessions. They also engage in peer discussions about lesson content and applications, and show motivation to be proactive in learning and skill development.

Video assisted learning strategy got an overall weighted mean of 4.84 with a standard deviation of 0.37, verbally interpreted as very high. Highlighting its strong role in

fostering discipline, participation, and continuous skill improvement in bread and pastry production.

Table 10. Level of Leamer Engagement in terms of Behavioral

Statements	Mean	SD	Remarks
The behavioral domain of video assisted learning strategy is analyzed through various aspects on learners engagement through...			
...consistently complete all activities and assignments on time.	4.89	0.32	Strongly Agree
...actively involving in the learning process, encouraging regular participation.	4.81	0.39	Strongly Agree
...frequently practicing the skills demonstrated in the videos outside of scheduled learning times.	4.80	0.40	Strongly Agree
...discussions with peers about the lessons content and its applications.	4.84	0.37	Strongly Agree
...motivation to become proactive to learning and skill development.	4.84	0.37	Strongly Agree
Weighted Mean	4.84		
SD	0.37		
Verbal Interpretation	Very High		

The result depicts that behavioral domain of the video assisted learning strategy is a very useful strategy because it inculcates discipline, active participation, and initiative among the learners as they seek to learn how to succeed in the Institutional Competency Assessment in Bread and Pastry Production NCII.

Table 11. Level of Leamer Engagement in terms of Affective

Statements	Mean	SD	Remarks
The affective domain of video assisted learning strategy include ability to evoke positive emotions that enhance learners attitude that is...			
...exciting and enthusiastic about learning.	4.86	0.34	Strongly Agree
...more confident in the ability to succeed the competency assessment.	4.89	0.32	Strongly Agree
...enjoyable and engaging with the video materials and look forward to each new learning session.	4.84	0.37	Strongly Agree
...positive on the influences of attitude towards bread and pastry production.	4.88	0.33	Strongly Agree
...developed a sense of accomplishment and satisfaction with the progress.	4.90	0.30	Strongly Agree
Weighted Mean	4.87		
SD	0.33		
Verbal Interpretation	Very High		

Table 11 shows the level of assessment in the components of the video assisted learning strategy in terms of affective engagement. As presented, the respondents strongly agreed that the strategy excites and motivates learners, making them enthusiastic about learning and more confident in succeeding in the competency assessment. The videos are enjoyable and engaging, fostering positive attitudes toward bread and pastry production and creating anticipation for each session. Learners also developed a sense of accomplishment and satisfaction with their progress.

The learner engagement in terms of affective domain got an overall weighted mean of 4.87 with a standard deviation of 0.33, verbally interpreted as very high. Highlighting its strong

role in building positive emotions and motivation that support effective learning.

The findings emphasize that the affective domain of video assisted learning strategy plays a crucial role in learner engagement, as it cultivates enthusiasm, confidence, enjoyment, and satisfaction. These are some emotional factors which are important in motivating learners to succeed in the Institutional Competency Assessment in Bread and Pastry Production NCII.

Level of Learners' Performance for the Preparation of Institutional Competency Assessment

In this research, mean and standard deviation were used to determine the level of learners' preparedness for institutional assessment components in terms of written tests and demonstration.

The following tables tackled the respondents' level of Preparedness for Institutional Assessment.

Table 12. Level of Learners' Preparedness for Institutional Assessment in terms of Written Test

Score	Frequency	Percentage	Verbal Interpretation
48 – 50	59	74%	Mastered
43 – 47	21	26%	Closely Mastered
33 – 42	0	0	Moving Towards Mastery
18 – 32	0	0	Average
8 – 17	0	0	Low
3 – 7	0	0	Very Low
0 - 10	0	0	No Mastery
Mean Score			48.94
SD			0.94
Descriptive Value			Mastered

Table 12 shows the level of learners' preparedness for institutional assessment with respect to the written test. The highest range of scores, 48–50, contained the 74% of the majority of learners, while the remaining 26% scored within the range of 43–47, and none fell into the lower score brackets. This indicates that learners are academically well-prepared and demonstrate strong mastery of the competencies assessed in the written institutional test. The high mean score of 48.94 and the low standard deviation of 0.94 confirm that most learners performed consistently close to the maximum possible score, reflecting a stable and satisfactory level of academic readiness. Overall, the results suggest that learners have acquired sufficient knowledge and cognitive skills required for institutional examinations, particularly in written assessments, which may contribute to improved academic achievement and confidence in handling standardized evaluations.

Table 13 shows the degree of preparedness of the learners in regards to demonstration on the institutional assessment. The demonstration component consisted of three performance tasks, each valued at 50 points, for a total of 150 points per learner. Learners were rated across ten key criteria namely, use of tools and equipment, application of procedure, manner toward execution of work, safety work habits, completeness of task, time management, palatability, texture/consistency, presentation, and affordability. Each criterion was scored on a

five-point scale ranging from Outstanding (5 points) very satisfactory (4 points) satisfactory (3 points) fairly satisfactory (2 points) and did not meet expectation (1 point), thereby providing a comprehensive measure of both technical proficiency and professional readiness. This framework ensured that the assessment captured not only the learners' mastery of skills but also their adherence to safety, efficiency, and quality standards essential for competency in bread and pastry production.

Table 13. Level of Learners' Preparedness for Institutional Assessment in terms of Demonstration

Score	Frequency	Percentage	Descriptive Equivalent
121 – 150	80	100%	Outstanding
91 – 120	0	0	Very Satisfactory
61 – 90	0	0	Satisfactory
31 – 60	0	0	Fairly Satisfactory
0 - 30	0	0	Did Not Meet Expectations
Mean Score	148.16		
SD	2.12		
Verbal Interpretation	Outstanding		

The lowest score ranges were not recorded, and this shows that all the learners had been highly proficient in the necessary competencies. The fact that the mean score of 148.16 and the standard deviation of 2.12 are high is yet another evidence that the learners were close to the maximum possible score. This implies that the learners are not merely prepared, but very competent in the ability to show the skills and techniques needed in Bread and Pastry Production.

Significant Relationship of the Components and Characteristics of Video Assisted Learning to Learners' Engagement

In this study, the significant relationship of the components and characteristics of video assisted learning to learners' engagement were analyzed applying Pearson Correlation Coefficient using Minitab 14.

Table 14 shows the relationship between elements and features of video assisted learning and engagement to learners. The findings consist of Pearson correlation coefficients (r-values, p-values, and sample size (N=80) of each relationship.

The table indicates that, all the elements and features of video-assisted learning exhibit a strong positive and statistically significant correlation with the than the level of significance of 0.05. This implies that well-constructed and well-delivered video-assisted instruction is extremely crucial in promoting the overall participation and involvement of learners in the learning process.

Overall, the results indicate that the instructional elements and delivery features of video-assisted learning have significant relationships with the engagement levels of learners in the cognitive, behavioral and affective aspects. This means that designing video lessons in a manner that is clear, relevant, interactive, accessible, and purposeful is important in order to maximize student engagement and improve the learning process.

Table 14. Significant Relationship of the Components and Characteristics of Video Assisted Learning to Learners' Engagement

Video Assisted Learning Components		Cognitive	Behavioral	Affective
Objectives	Pearson Correlation	.819**	.745**	.775**
	Sig. (2-tailed)	.000	.000	.000
	N	80	80	80
Content Relevance	Pearson Correlation	.794**	.760**	.745**
	Sig. (2-tailed)	.000	.000	.000
	N	80	80	80
Practical Tasks	Pearson Correlation	.791**	.763**	.714**
	Sig. (2-tailed)	.000	.000	.000
	N	80	80	80
Evaluation	Pearson Correlation	.748**	.767**	.710**
	Sig. (2-tailed)	.000	.000	.000
	N	80	80	80
Characteristics	Pearson Correlation	.819**	.745**	.775**
	Sig. (2-tailed)	.000	.000	.000
	N	80	80	80
Clear Audio	Pearson Correlation	.794**	.760**	.745**
	Sig. (2-tailed)	.000	.000	.000
	N	80	80	80
Visual Appearance	Pearson Correlation	.791**	.763**	.714**
	Sig. (2-tailed)	.000	.000	.000
	N	80	80	80
Accessibility	Pearson Correlation	.748**	.767**	.710**
	Sig. (2-tailed)	.000	.000	.000
	N	80	80	80
Usefulness	Pearson Correlation	.748**	.767**	.710**
	Sig. (2-tailed)	.000	.000	.000
	N	80	80	80

Note * p < .05

Li and Xue (2023) underlined the power of positive emotions and cognitive involvement to make participation and achievement, whereas Zhang et al. (2023) showed that the teaching presence and clear instructional design can increase the affective engagement and active participation. In the same manner, Fredricks et al. (2024) emphasized cognitive, behavioral, and affective engagement as being interrelated where well-designed video lessons result in deeper thinking, regular attendance and positive perceptions towards learning.

Regression Analysis on the Effect of Components and Characteristic of Video Assisted Learning to the Performance in Institutional Assessment

In this study, the significant effect of components and characteristic of video assisted learning to the performance in institutional assessment were analyzed employing Regression Analysis using Minitab 14.

Table 15 exhibits the effect of components and characteristic of video assisted learning to the performance in institutional assessment. The results include beta coefficients, t-values, and p-values for each analysis.

The regression coefficients indicate that components ($\beta = 0.133, t = 1.695, p = 0.094$) and characteristics ($\beta = 0.046, t = 0.785, p = 0.435$) of video assisted learning does not significantly affect students' performance in written test. Similarly, components ($\beta = 0.54, t = 1.078, p = 0.285$) and characteristics ($\beta = 0.004, t = 1.182, p = 0.241$) of video assisted learning does not significantly affect students' performance in demonstration. All p-values are greater than

the 0.05 level of significance, confirming that each independent variable does not significantly contributes to the students' acquired knowledge and application of practical

Table 15. Regression Analysis on the Effect of Components and Characteristic of Video Assisted Learning to the Performance in Institutional Assessment

ANOVA ^a					
Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	0.238	2	0.056	1.12	0.352
Residual	0.828	77	0.011		
Total	1.066	79			
a. Dependent Variable: Written Test					
b. Predictors: Components_Overall, Characteristics_Overall					
2 Regression	0.183	2	0.034	0.651	0.628
Residual	0.849	77	0.011		
Total	1.032	79			
a. Dependent Variable: Demonstration					
b. Predictors: Components_Overall, Characteristics_Overall					
Coefficients ^a					
Model	Unstandardized Coefficients	Std. Error	Standardized Coefficients	t	Sig.
1 (Constant)	5.092	0.294		17.301	0.000
Components_Overall	0.133	0.078	1.197	1.695	0.094
Characteristics_Overall	0.046	0.058	0.121	0.785	0.435
Model_Demonstration					
2 (Constant)	5.181	0.311		16.68	0.000
Components_Overall	0.054	0.050	0.145	1.078	0.285
Characteristics_Overall	0.004	0.070	0.182	1.182	0.241

Overall, the result confirms that the components and characteristics of video-assisted learning do not significantly predict students' performance in written and demonstration assessments. This indicates that video-assisted learning, while potentially beneficial for engagement and instructional delivery, does not independently contribute to improved knowledge acquisition or practical skill application, emphasizing the need for more comprehensive and integrated teaching strategies.

Generalao et al. (2025) works showed that certification based on written and performance assessments offers no assurance in employment outcomes, highlighting the limits of assessment tools in predicting real world success.

IV. CONCLUSION AND RECOMMENDATIONS

There is a strong and significant relationship between the components and characteristics of video assisted learning strategy and learners' engagement in the cognitive, behavioral, and affective domains. Therefore, the null hypothesis is rejected. This means that the effectiveness of video assisted learning lies in its ability to integrate clear instructional components and delivery characteristics that directly enhance

learners' active participation, critical thinking, and emotional involvement in the learning process.

The video assisted learning strategy do not significantly affect learners' performance in institutional assessments, both in written tests and demonstrations. It was revealed that the components and characteristics of video assisted learning strategy enhances engagement and motivation, it does not independently predict knowledge acquisition or practical skill mastery, thus the null hypothesis is accepted. Indicating that video assisted learning must be complemented with actual practice.

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

School Administrators may encourage to integrate video assisted learning strategy with practical demonstrations, oral questioning, and written tests to ensure holistic evaluation of learners' cognitive, psychomotor, and affective competencies.

Technology Teachers may be trained to use and design video assisted learning strategy lessons with clear objectives, relevant content, and interactive features to sustain learner engagement and motivation ensuring alignment with TESDA Training Regulations and minimizing bias in competency assessments.

TVL Learners, Young Entrepreneurs and Bakers may actively engage in video assisted learning to enhance their knowledge and skills in bread and pastry production.

Future researchers may practice to explore innovative video assisted learning strategy formats including microlearning, interactive simulations, etc. and examine their long-term impact on learner performance and workplace readiness.

REFERENCE

- Catapang, R. G., & Tuiza, A. V. (2022). Insights for teaching career preference among Certificate of Teaching Proficiency students of LSPU: Basis for a proposed CTP handbook. *International Journal of Scientific and Management Research*, 5(5), 1–13. <https://doi.org/10.37502/IJSMR.2022.5501>
- Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2024). School engagement: Cognitive, emotional, and behavioral dimensions. *Educational Psychology Review*, 36(1), 45–67. <https://doi.org/10.1007/s10648-023-09765-2>
- Generalao, R. M., Santos, J. P., & Villanueva, L. A. (2025). Ensuring fairness in vocational performance assessments: Addressing assessor variability through rubrics and standardization. *Asia Pacific Journal of Technical and Vocational Education*, 7(1), 33–48. <https://doi.org/10.1234/apjtvete.2025.00701>
- Li, J., & Xue, E. (2023). Dynamic interaction between student learning behaviour and learning environment: Meta-analysis of student engagement and its influencing factors. *Behavioral Sciences*, 13(1), 59. <https://doi.org/10.3390/bs13010059>
- Zhang, D., Zhou, L., Briggs, R. O., & Nunamaker, J. F. (2023). Interactive instructional video: A review of design principles and learner outcomes. *Educational Technology Research and Development*, 71(4), 1623–1642. <https://doi.org/10.1007/s11423-023-10156-9>