

CONTEXTUALIZED INSTRUCTIONAL VIDEOS ON THE PERFORMANCE OF GRADE 9 STUDENTS IN COOKERY

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Abstract

The study aimed to contribute to the enlightenment of the TLE teachers on the utilization of the Contextualized Instructional Videos on the performance of Grade 9 students in Cookery. Specifically, it sought to answer the following questions: First, what is the level of features of the contextualized instructional videos in cookery in terms of versatility, clear message, multimedia quality, lay-out and graphics, and professional design? Second, what is the level of performance of grade 9 students in terms of practical test? Third, do the features of the contextualized instructional videos have significant effect to the performance of Grade 9 students in Cookery?

Descriptive method of research was used in this study. Descriptive method describes the information contained many indices such as the mean and median. The respondents of the study were the Grade 9 students of Lumot National High School, Cavinti Sub-Office, Division of Laguna. A descriptive correlational research design was chosen as the research method for this study. On the other hand, the researcher used descriptive survey method of research in assessing the contextualized instructional videos in Technology and Livelihood Education (TLE) specialized in cookery.

The salient findings of the study are: For the assessment results for the versatility, clear message, multimedia quality, lay-out and graphics and professional design. The respondents agreed that the level of features contextualized instructional videos were valid and usable in terms of versatility and interpreted as High. Meanwhile, the level of features of contextualized videos in terms of clear message was strongly agreed and marked as Very High. The level of feature of the instructional videos as multimedia quality was also strongly agree and interpreted as Very High; the lay-out and graphics was strongly agreed and interpreted as Very High. Lastly, the professional design of the contextualized videos was strongly agreed and remarked as Very High.

Keywords: Contextualized videos, versatility, clear messages, multimedia quality, lay-out, graphics, professional design.

1. Main text

Educators are constantly searching for instructional methods and materials that help will help to meet the needs of all students. The use of technology for educational purposes is one such method that impacts teaching and learning. Instructional video technology provides an avenue for reaching students. Instructional videos are relatively short videos that contain instructions and/or demonstrations

on how to complete a specific task (Shipper, 2013). The use of instructional videos in the classroom could make a significant impact on instructional practices and, likewise, student learning. However, implementing the technology effectively becomes the challenge. This study aims to identify the effectiveness of the implementation of instructional video technology in teaching cookery in TLE subject.

Video based materials boost student creativity and cooperation. Access to video can help motivate students and create a distinctive context for their learning experience. Based on a true story- the incorporation of video in the classroom, it has allowed Broad meadows students and teachers to help in broadcasting school announcements, use pre-recorded classes to overcome teacher shortages and influence Internet-based digital video to enhance self-directed learning.

The use of contextualized instruction videos is able to assist students in visualizing the abstract concepts, students lack sufficient metacognitive awareness and comprehension monitoring skill to make effective choices. Contextualized instructional videos can present students with real-world experience and make possible to register content in different context. One of the factors that support learning is the media used. If the learning media have chosen correctly, the learning continuity process can run optimally. One of the lessons that require the use of TLE learning area.

The focused of this study is to develop and validate the contextualized instructional videos in Cookery 9.

Specifically, it sought to answers the following questions:

1. What is the level of features of the Contextualized Instructional Videos in Cookery in terms of:
 - 1.1. Versatility;
 - 1.2. Clear Message;
 - 1.3. Multimedia Quality;
 - 1.4. Lay-out and Graphics; and
 - 1.5. Professional design?
2. What is the level of performance of grade 9 students in terms of practical test?
3. Do the features of the Contextualized Instructional Videos have significant effect to the performance of Grade 9 students in Cookery?

REVIEW OF RELATED LITERATURE

The literature enumerated below discuss the features of the contextualized instructional videos that helped the researcher to choose instructional videos suited to the learner's need.

Ezequiel (2020) stated that instructional videos initiatives have increased student's learning skills. To effectively leverage the advantages of learning for students, however, administrators should also draft policy focused on regular measurement of student outcomes and ensure teacher's support for versatility of the instructional videos initiatives. The contextualized instructional videos require significant planning, preparing and implementing to ensure the versatility and meaningful learning.

The above-mentioned literatures are related to the present study because it ensures a well – made video for instruction and provides a good material for the learning process.

According to Mendelely (2020), the value of multimedia quality of instructional video for learning effectiveness was contingent upon the provision of interactivity. Students in the learning environment that provided interactive video achieved significantly better learning performance and a higher level of learner satisfaction than those in other settings. However, students who used the learning environment that provided non-interactive video did not improve either.

This study is related to the present study because it includes the use of the learning videos in the field of TLE. The development of this material is also the same with the researcher's current study.

Related Studies

Kepper (2019) cited that instructional videos involves the synchronization of median producing the media-rich outputs and is arranged in some chunks which are linked by the hypermedia. Students can navigate to the source of information in a shorter time, build the connections between relevant topics, and construct their knowledge by associating to the meaningful information. It is important for students to self-adjust the time and determine the information based on individual differences, so that when individual differences can be accommodated by having alternatives in learning, students will then be engaged at a deeper level and appreciate the student-centered learning approach with more sense of participation.

The above statements are related to the present study because it requires a development of a learning video to better understand the topics in cookery 9. Learning videos therefore greatly affect the learning comprehension of the students in the different field of specialization.

METHODOLOGY

Research Design

Descriptive method of research was used in this study. According to Francine Astrera (2016), Descriptive method describes the information contained many indices such as the mean and median. It is survey, as when researchers summarize the characteristics of individuals or group or physical environments. The descriptive method was used to investigate the utilization of contextualized instructional videos on the science performance of grade 9 students in Cookery.

Respondents of the Study

Since this study was about the development and validation of the contextualized instructional videos in cookery 9, the respondents in this study composed of forty (40) grade 9 students in Lumot National High School Cavinti Sub-Office, Division of Laguna. They were chosen as sample since they possess the characteristics needed in the study.

Furthermore, the respondents were also requested to answer researcher-made questionnaire-checklist to find out the relevant information that will support the purpose of this study.

Purposive sampling is essential when researchers are studying a specific characteristic, feature or function. This was used for the researcher was only after the effectivity of the contextualized intervention materials to the learning process of Grade 9 students in TLE subject.

Research Procedure

A letter through channel addressed to the Schools Division Superintendent will be prepared requesting to conduct the study to the intended subjects. The school District Supervisor, school heads and teachers were informed of the purpose and process of the research. The issuance and retrieval of the questionnaire was done by the researcher in order to clarify thoughts and doubts on the items that are found highly technical in nature like in instructions given in the questionnaire regarding the choice of options.

The contextualized instructional videos in cookery 9 to be used in this study will be made by the researcher using Adobe Pro. The topics to be used are included in the Department of Education Basic Education Curriculum. After securing the permit to conduct the study from the respondents, the motion graphic animation learning videos will be validated by the selected Technology and Livelihood Education teachers and ICT teachers of Cavinti District.

Research Instrument

To be able to see the effectiveness of the contextualized instruction videos on the performance of Grade 9 students, the researcher constructed a Questionnaire and validated by a Statistician, ICT Coordinator and an English critic.

A researcher-made questionnaire aimed to generate assessment among the grade 9 students. The questionnaire included the following criteria for the assessment the features of contextualized videos in terms of versatility, clear messages, multimedia quality, lay-out and graphics and professional design.

A researcher-made practical test was also employed as part of the instrument to determine the performance of the learners after the utilization of contextualized instructional videos in Technology and Livelihood Education (TLE) subject.

Statistical Treatment

To interpret the result, the data that will be gathered will be organized, tabulated and coded for analysis.

Weighted Mean and Standard deviation was be used to get the mean level of validity of the contextualized instructional videos in cookery 9 in terms of objectives, contents, presentations and activities.

Pearson's Correlation Coefficient was be used to test the hypothesis; in order to determine if there is a significant relationship between the development of the contextualized instructional videos and its validity.

RESULT AND DISCUSSION

Table 1. Level of Features of the Contextualized Instructional Videos in Cookery in terms of Versatility

STATEMENT	Mean	SD	Remarks
The Versatility of the Contextualized Instruction Videos...			
can be easily and independently used.	4.18	0.60	Agree
is easily accessible.	4.15	0.49	Agree
is interactive to both learners and teachers.	3.79	0.52	Agree
can control the rate and sequence of the presentation.	3.69	0.57	Agree
can be use in conversational style to enhance engagement.	4.33	0.53	Strongly Agree
Grand Mean	4.03		Agree
Interpretation	High		

The table above indicates the level of versatility of the features of Contextualized Instructional Video. It can be seen that the respondents strongly agree that the Contextualized Instructional Video can be use in conversational style to enhance engagement, it yielded the highest ($M=4.33$, $SD=0.53$). On the other hand, respondents agree that it can control the rate and sequence of the presentation it gained the least ($M=3.69$, $SD=0.57$).

Overall, level of level of versatility of the features of Contextualized Instructional Video attained the grand mean of 4.03 and was interpreted as High. This further means that the respondents manifests that the contextualized video is versatile.

The statistically results revealed that the contextualized instructional videos have a positive impact on the teaching and learning process.

Table 2. Level of Features of the Contextualized Instructional Videos in Cookery in terms of Clear Message

STATEMENT	Mean	SD	Remarks
The clear <i>message of Contextualized Instructional Videos...</i>			
well-defined the purpose of materials.	4.60	0.62	Strongly Agree
achieves the purpose of instructional materials.	4.72	0.57	Strongly Agree
is clearly stated and measurable.	4.60	0.61	Strongly Agree
is appropriate for the intended target user.	4.57	0.51	Strongly Agree

effectively stimulates creativity of the target user.	4.32	0.80	Strongly Agree
Grand Mean	4.56		Strongly Agree
Interpretation	Very High		

The table above shows that the level of clear messages of the features of Contextualized Instructional Video. It can be seen that the respondents strongly agree that the Contextualized Instructional Video can be used to achieved the purpose of instructional materials, it yielded the highest ($M=4.72$, $SD=0.57$). On the other hand, respondents strongly agree that it effectively stimulaes creativity of the target user it gained the least ($M=4.32$, $SD=0.80$).

Overall, level of level of clear message of the features of Contextualized Instructional Video attained the grand mean of 4.56 and was interpreted as Very High. This further means that the respondents manifests that the contextualized video is clear message.

It is agreed upon in the study of Mendeley (2018) the use of contextualized instructional videos is more efficient if the teacher takes on the role at the start of the lesson and maintains the role throughout the lesson. The instructions to student should be clear, ambiguous, and easy to follow. Messages conveyed in the video are more engaging and they lead to a higher retention rate.

Table 3. Level of Features of the Contextualized Instructional Videos in

Cookery in terms of Professional Design

STATEMENT	Mean	SD	Remarks
The Professional Design of Contextualized Instructional Videos...			
are consistent and within one animation style.	4.60	0.62	Strongly Agree
are handy and great at creating emotional impact on the audience.	4.72	0.57	Strongly Agree
has a good professional quality.	4.60	0.61	Strongly Agree
provide impact to the quality of the video.	4.57	0.51	Strongly Agree
are suited to the subject matter of the video, easy to read and has clear communication.	4.32	0.80	Strongly Agree
Grand Mean	4.56		Strongly Agree
Interpretation	Very High		

Table 3 presents the level of features of Contextualized Instructional Videos in Cookery in terms of Professional Design. Item number 2 which indicate that professional design of contextualized instructional videos is handy and great at creating emotional impact on the audience had the highest mean among 4.72 and standard deviation of 4.57, the items 1 and 3 with the mean score of 4.60 and the standard deviation of 0.61 which was interpreted strongly agree. Item number 4 which indicate that the contextualized instructional videos provide impact to the quality of the video obtained a mean score of 4.57 with the standard deviation of 0.51 which was interpreted strongly agree and suited to the subject matter of the video, easy to read and has clear communication with a mean of 4.32.

Overall, level of the professional design of contextualized instructional videos of the features attained the grand mean of 4.56 and was interpreted as Strongly Agree. This further means that the respondents manifests that the professional design of the contextualized instructional videos were provide impact to the quality teaching and learning.

The above results agreed in the study of Nazir (2019) mentioned that the professional design of contextualized instructional videos allow students to view actual objects and realistic scene, see sequences in motion and to listen to narration capacity of multimedia instruction to include student's participation and can give motivation to be engage instructional videos.

Table 4. Level of Features of the Contextualized Instructional Videos in Cookery in terms of Multimedia Quality

STATEMENT	Mean	SD	Remarks
The Multimedia Quality of Contextualized Instructional Videos...			
enhances understanding of the concept.	4.60	0.62	Strongly Agree
is complete synchronization of audio with the visuals.	4.72	0.57	Strongly Agree
are appropriate and effective for instructional purposes in terms of music and sound effects.	4.60	0.61	Strongly Agree
effectively stimulates student's interest.	4.57	0.51	Strongly Agree
engages learner's interest that can address the things needed to create new ideas.	4.32	0.80	Strongly Agree
Grand Mean	4.56		Strongly Agree
Interpretation		Very High	

The table above indicates the level of multimedia quality of contextualized instructional videos. It can be observed that the respondents strongly agree that the contextualized instructional videos was complete synchronization of audio with visual, it yielded the highest mean of 4.72, SD=0.57. On the other hand, respondents strongly agree that it can effectively engages learner's interest that can address the things needed to create new ideas, it gained the least (M=4.32, SD=0,80),

The overall weighted mean of 4.56 indicated that the respondent strongly agree in terms of multimedia quality level of contextualized instructional videos and it is interpreted as very high.

Table 5. Level of Features of the Contextualized Instructional Videos in Cookery in terms of Lay- out and Graphics

STATEMENT	Mean	SD	Remarks
The Lay-Out and Graphics of Contextualized Instructional Videos...			
are uncluttered, easy to read, and aesthetically pleasing.	4.60	0.62	Strongly Agree
are clear and easy to interpret.	4.72	0.57	Strongly Agree
sustains interest and do not distract the user's attention.	4.60	0.61	Strongly Agree
provides accurate representation of the concept discussed.	4.57	0.51	Strongly Agree
allows the target user to navigate freely through the material	4.32	0.80	Strongly Agree

Grand Mean	4.56	Strongly Agree
Interpretation	Very High	

As reflected in the table above, the student-respondents stated that the Lay-out and Graphics of contextualized instructional videos are clear and easy to interpret with a highest Mean of 4.72, SD=0.57, uncluttered, easy to read and aesthetically pleasing and sustain interest and do not distract the user's attention with (M=4.60, SD= 0.62), provides accurate representation of the concept discussed with (M= 4.57, SD=0.51) and lastly allows the target user to navigate freely through the material, it gained the least (M=4.32, SD= 0.80).

Research highlighted that generally, the student's perceptions on the use of contextualized instructional videos in terms of lay-out and graphics was strongly agree with an overall weighted mean of 4.56 and interpreted as very high.

This result conformed to the statement of Goullin (2016) that the contextualized instructional videos provide practical link with the learners when it comes to academic content-related problems. The intervention for calls for greater self-motivation, commitment, and persistence from learners.

Table 6. Level of Students' Performance in terms of Practical Test

Grading Scale	Frequency	Percentage	Descriptors
90 – 100	40	100%	Outstanding
85 – 89	0	0	Very Satisfactory
80 – 84	0	0	Satisfactory
75 – 79	0	0	Fairly Satisfactory
Below 74	0	0	Did Not Meet Expectations
Mean	97.50	Interpretation	Outstanding

Table 11 revealed the level of students' performance relative to their practical test. It can be seen that 40 or 100% of the respondents showed an "Outstanding" performance as they attained grades ranging from "90 to 100". The mean grade of 97.50 with verbal interpretation of "Outstanding" indicates that the respondents performed beyond excellent satisfactory level in their practical test.

The results support the study of Schrand (2018) where he stated that the teachers who utilize contextualized instructional videos motivate the students to participate due to its interactivity the graphics give. However, it was stated that some students lose their focus when the lessons are presented through multimedia tool.

Table 7. Significant Effect of Features of the Contextualized Instructional Videos on Students' Performance in Cookery in terms of Practical Test

Variables		t-value	p-value	Analysis
Versatility		0.25	0.807	Not Significant
Clear Message		9.14	0.000	Significant
Professional Design	Practical Test	0.41	0.685	Not Significant
Multimedia Quality		0.40	0.689	Not Significant
Lay-out and Graphics		-0.14	0.891	Not Significant

*significant at .05 level of significance

Table 7 presented the effect of features of the Contextualized Instructional Videos in terms of versatility, clear message, professional design, multimedia quality and lay-out and graphics on students' performance in Cookery in terms of practical test.

It can be seen that only the feature of contextualized video in terms of clear message convey a significant effect on students' performance in their practical test attaining ($t=9.14$, $p=0.000$). The obtained p-values were all higher than (0.05) level of significance which supports the analysis. This further implies that a clear message presented though the video contributes greatly on students' learning.

According to Ella (2019) the concept of localization and contextualization instructional videos falls on the idea that students learned best when experienced in the classroom have meanings and relevance in their lives.

CONCLUSION

Based on the findings of the study, the computed t- value of Versatility, clear message, professional design, multimedia quality, and lay-out and graphics, were found that there is significant effect on the student's performance in their practical test in cookery.

Therefore, the hypothesis shows that there is no significant effect on using contextualized instructional videos on the performance of Grade 9 students in cookery was rejected.

Furthermore, most of the students agreed that the contextualized instructional videos are a good contributor to their creativity in performance tasks. Also, results showed that the instructional videos encourage the students to learn more. A significant improvement was found in the test results, and shows that this learning environment has enhanced the students' learning achievement.

The successful of contextualized instructional videos which made on the availability of resources, educators need and students need.

RECOMMENDATIONS

Based on the conclusion formulated from the findings, the following recommendations are given:

1. Technology and Livelihood Education teachers may use contextualized instructional videos in their TLE classes and the students should develop personal interest in the use of contextualized instructional videos. It should be promoted in teaching cookery in TLE subject and be made available and affordable to the people especially the educators and educational institutions.
2. Students should be exposed on the Contextualized Instructional videos to improve their performance in practical test in Cookery.
3. School Heads may strengthen program in the faculty development such as seminars and workshops as how to contextualize instructional videos should be developed in teaching and learning process.
4. Future researchers can further validate and develop the contextualize instructional videos by using it to high school students and elementary students provided that the results of evaluation are taken into consideration.

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REFERENCES

- Berent, R.N., (2021): SwimSmart An interactive and instructional multimedia application. Master's thesis, Rochester Institute of Technology. Retrieved April 27, 2021 <https://www.learntechlib.org/p/121040/>
- Boyer, J.T., (2021): Using Scratch for learner-constructed multimedia: A design-based research inquiry of constructionism in practice. Ph.D. thesis, University of Florida. Retrieved April 28, 2021 <https://www.learntechlib.org/p/125135/>
- Chekour, Mohammed, Al Achhab, Mohammed, & Laafou, Mohammed (2021). Integration of Blended Learning in Teaching Computer Science in Moroccan High Schools. https://www.researchgate.net/publication/337167621_Integration_of_Blended_Learning_in_Teaching_Computer_Science_in_Moroccan_High_Schools.
- Funa, A. & Ricaforte, J., (2019): Validation of Gamified Instructional Materials in Genetics for Grade 12 STEM Students. International Journal of Sciences: Basic and Applied Research (IJSBAR), July 2019, https://www.researchgate.net/publication/334684697_Validation_of_Gamified_Instructional_Materials_in_Genetics_for_Grade_12_STE_M_Students
- Huincahue, et al., (2021): Mathematical Thinking Styles—The Advantage of Analytic Thinkers When Learning Mathematics. *Educ. Sci.* 2021, 11, 289. <https://doi.org/10.3390/educsci11060289>