

VALIDATION OF RECORDED VIDEO AS INSTRUCTIONAL MATERIAL IN ARLING PANLIPUNAN

Divina Gracia Estrabo Terciano, MAT

divinagracia.terciano@deped.gov.ph

Social Science Teacher, Caigdal National High School – Junior High School 4305, Unisan, Philippines

Abstract

This study aimed to develop and to validate recorded video as instructional material in Araling Panlipunan. Specifically, this sought to answer the following questions: determine the validation level of the recorded video as instructional material in terms of objective; content; assessment and outcome; visual quality; and audio quality; determine the mean percentages performance of the students in pre-test and post-test scores; and determine the significant difference between the performance of the students before and after utilizing the recorded video as instructional material.

In view with this, this study employed a descriptive survey type of research and quasi-experimental method of research. It was aided with twenty-five (25) Likert-type checklist in determination of the validation level of developed instructional material, more so, a 20-item pre-test and post-test were also employed.

Moreover, this study involved grade ten junior high school students at the Caigdal National High School (CNHS), Unisan, Quezon where sixty-seven (67) students were purposively chosen and fourteen (14) Araling Panlipunan teachers from different schools in Unisan, Quezon.

Based on the findings, the following conclusions was drawn from the study.

The validation level of the recorded video as instructional materials in terms of objective, content, assessment and outcome, visual quality, and audio quality is highly acceptable. The student performance was observed as did not meet expectation in the pre-test while very satisfactory performance was achieved on the post-test after utilizing the recorded video.

There is a significant difference between the pre-test and the post-test scores before and after utilizing the material. And this entails that the material is valid, thus it can be utilized in teaching Araling Panlipunan therefore the hypothesis was rejected.

In light of the findings and conclusions, the following were recommended: The administrator may encourage the implementation of varied learning activities and instructional materials that suit the learning preference of the students. This may also be included to their Basic Education Learning Continuity Plan (BE-LCP).

Keywords: validation, recorded video, instructional material, Araling Panlipunan

1. Main Text

Introduction

The majority of teaching and learning takes place within the confines of the school. However, given the current scenario in the Philippines, when the country is declared a State of National Emergency and a State of Calamity (Gotinga, 2020), several towns and provinces have enacted a general quarantine, rendering people unable to work and support their families. A total lockdown of all schools was apparently imposed, which drastically affected the lives of teachers, students, and parents.

To ensure that students continue to learn despite the disruptions caused by the COVID – 19 scenarios in the country, public and private schools, under the Department of Education (DepEd), use a variety of flexible learning options (FLOs) (Hernando-Malipot, 2020). Joan (2013) explained, "Flexible learning is a combination of education philosophies and systems that gives learners more choice, conveniences, and personalization to suit their individual learning preferences (p 3)." This leads to the Basic Education Learning Continuity Plan (BE-LCP) which strives to guarantee the health, safety, and well-being of students, instructors, and staff during COVID-19, while also ensuring that education continues despite the crisis.

The BE-LCP in particular, has been built with a legislative framework that responds to the "new normal," while also upholding the constitutional responsibility to ensure that all people have access to high-quality education at all times.

However, this new trend of the educational system met various obstacles. In the study of Sequira (2012), they revealed some of the challenges confronted by the learners on using the self-learning module (SLM). According to them, the great number of activities in each module is one of the main problems that emerged in the implementation of SLM. In light of this problem, the Most Essential Learning Competencies (MELCs) was established.

According to Pineda (2020), MELCs allow teachers to focus instruction on the most important competencies that all students must learn, allowing them to develop into life-long learners. Pabella (2010) cited in De Chavez (2020) stated that in the sphere of education, the students of today should be supplied with learning materials that will assist them in the utmost importance.

Similarly, Awolaju (2016) described instructional materials as tools for improving teaching and learning processes and so contributing to better learning. Instead of using traditional approaches, 21st-century students desire to maximize the usage of new

methods to include in the lesson. Similarly, students will be encouraged to acquire self-sufficiency and autonomy, as well as an interest in the subject matter. As a result, a teacher should be well-versed in the new school paradigm and practices in order to ensure that student's learning outcomes are met.

Nollen (2015, p.1) avowed that "it is more effective to teach Araling Panlipunan when there are available and sufficient instructional materials, as pupils yearn for novel learning activities and are no longer content by simply sitting and listening to the teacher's lecture." With this, Arshavisky (2018) accentuated that the use of varied technology in schools has a useful integration within the curriculum. Likely, Calingacion (2018) accentuated that video technology has a significant potential for boosting educational quality and stimulating interest and involvement in academic success. Using technology, students are provided with various avenues to learn.

The researcher focused on the use of recorded video as instructional material in teaching and learning Araling Panlipunan, keeping in mind the value of past studies connected to the development of instructional materials with the use of technology. Despite certain limitations, Kay (2012) affirmed that students had generally good affective and cognitive attitudes toward the use of video to promote learning. In the same manner, when compared to the traditional method, using YouTube videos and materials resulted in greater academic performance Wawuda (2019).). Lastly, with the current situation of "new normal," the researcher believed that utilizing the teacher-made instructional materials would be appealing to the students and could be well motivating material. Thus, these would greatly help in attaining the goal of teaching and learning process specially in increasing the students' mastery level.

Background of the Study

In the Philippines, education transformed from a traditional Face-to-Face to distance learning. The Department of Education ensures the continuity of learning through Modular Distance Learning (MDL). Currently, all public schools are using this learning approach because 8.8 million children prefer MDL, according to a poll by DepEd. The study of parents with children registered this academic year asserted that the most popular method of remote learning is through printed modules. The students in remote locations where the internet cannot be accessed for online learning are also considered.

Learners use self-learning modules based on the Most Essential Learning Competencies provided by the DepEd. SLM comprises the learning competencies that learners should require. According to the Division of Dasmariñas Learner's Pocket, the module is a comprehensive teaching and learning tool that logically depicts certain activities. This is done in response to the students' demands, particularly during the pandemic. It encompasses activities based on MELC (Most Essential Learning Competencies), which serve as the foundation for what students must learn. It is self-paced, so students may devote time to their studies or return to the exercises or tasks once they have learned the material.

Teachers are responsible for monitoring the development of the students in modular distance learning. Students can contact the teacher through email, phone, text message/instant messaging, or text message/instant messaging. The teacher will provide remedial tasks for students who are struggling.

Parents have an important role as facilitators since education takes place at home. Their crucial role in modular learning is to develop a relationship with their child and act as a guide (Flip Science, 2020).

In line with this, the Department of Education, Division of Dasmariñas, and Pag-asa National High School launched several online training and seminar for teachers to be equipped with the new normal of education. Nevertheless, the training and forum are not enough to find out the role of teachers in Modular Distance Learning. Students' behavior and performance are insufficient to demonstrate the learners' ability. As a result, the researcher wants to figure out the relationship of the teacher's role to the students' behavior and performance, a basis for an intervention plan.

Theoretical Framework

This study is anchored on the Cognitive Theory of Multimedia and the following underlying learning educational theories: cognitive development and constructivism.

The goal of learning, according to the Cognitive Theory of Multimedia Learning by (Mayer and Titsworth 2016), is meaningful learning, which necessitates cognitive processing that includes paying attention to the presented material, mentally organizing the presented material into a coherent structure, and integrating the presented material into a coherent structure, and integrating the presented material with prior knowledge (Brame, 2015). This theory pointed the five cognitive processes in multimedia learning: choosing appropriate words on presented text or narration; choosing related images from the presented graphics; arranging the selected words into coherent verbal presentation; arranging selected images into coherent pictorial representation; and integrating the pictorial and verbal representations into prior knowledge (Mayer, 2014). Thus, deeper learning can occur when information is presented in both text and graphics than text alone.

In Jean Piaget theory of cognitive development, it explains the role that the human brain plays in helping learners understand new and complex concepts. Through the given instructional video, students apply their ability to effectively absorb, understand, and apply concepts related to cognitive abilities (Arshavskiy, 2018). Metacognition is an approach to learning whereby learners think about their thinking. Here learners self-monitor, self-assess, and self- correct their strategies to learning as necessary throughout a given

learning process (Tate, et al., 2014). It is parallel student self-assessment; it is a process where the students are given a chance to reflect and rate their own work and judge well, they have performed in relation to a set of assessment (Adamos and De Guzman, 2015). Primary, the instructional video is the tool for learning among the students. This will be their references and used in their activities and learning tasks.

Constructivism is the theory that argues that knowledge is constructed when the learners are able to draw ideas from their own experiences and connect them to new ideas (K12 Curriculum Guide, 2017). According to Corpuz and Salandanan (2015) constructivist teaching is based on the belief that learning occurs when learners are actively involved in a process of meaning and knowledge construction as opposed to passively receiving information. Learners are the makers of meaning and knowledge.

Demonstration video can help teachers construct discussion for the students remotely. Thus, students can generate knowledge by engaging their intellectual faculties to construct their own. The teacher's role in a constructivist learning situation is to facilitate learning by creating an enabling environment (Wawuda, 2019).

In the Theory of Multimedia Learning meaningful learning, this pointed out the five cognitive processes in choosing appropriated words on presented text or narration, choosing related images, and arranging the selected words into coherent words and integrating the presented material with prior knowledge. While in cognitive development the brain functions is to understand new complex concepts after watching the videos the students can be seen and observed that that can apply their cognitive abilities by thinking. The learning abilities and skills was seen in a set of assessment using the instructional video when using in their activities and learning tasks. Constructivism was drawn when the learners are active and knowledgeable when they engage in the intellectual faculties in constructing their own by creating an enabling environment.

Research Methodology

Descriptive survey and quasi-experimental method of research was applied in this study with the following phases: (1) Development of recorded as instructional material in teaching and learning Araling Panlipunan; (2) Validation of the developed instructional material by the teacher-respondents on the following criteria: (a) objective, (b) content, (c) assessment and outcome, (d) visual quality and (e) audio quality; and (3) Validation of the instructional material using the result in the pre-test and post-test scores among the selected Junior High School students of Caigdal National High School.

The study respondents come from the Caigdal National High School of Unisan, Quezon with a total of eighty-one (81) Junior High School students however, because of the limitation in mobility due to pandemic, purposive sampling was used in selecting the respondents who were the sixty-seven (67) students as computed using Slovin's formula. The researcher used purposive sampling because they believed that through this sampling technique, they would obtain a representative sample by using a sound judgment which also result in saving time and finances (Black K, 2010, as cited in Ana Ph, 2021). In addition, this is an effective method when applied to small population or group, thus, it would be easier to make conclusions and generalization (Glen, 2021). In determining the acceptability of the material, the researcher gathered the data from the fourteen (14) different junior high school teachers in Unisan, District, Quezon namely: Caigdal National High School, Leonarda D. Vera Cruz National High School, and Unisan Integrated High School.

For the pre-test and post-test questionnaire, the researcher gathered textbooks and related materials which served as references in the development of the recorded video. After reading, they conceptualized all the necessary information to be included in the learning material. As there were limitations and effort, the following topics, in line with the most essential competencies, are used: (a) *Konsepto at Palatandaan ng Implasyon*, (b) *Dahilan ng Implasyon*, and (c) *Iba't Ibang Epekto ng Implasyon*. The researcher arranged the sequence of the topics to make the content easy for the student to understand.

A twenty (20) – item multiple choice test was developed and was given to the students as their pre-test and post-test. First, the Table of Specifications (TOS) was made based on the content of the lesson in the Third Quarter of Araling Panlipunan 9, Implasyon. The researcher emphasized the three cognitive objectives namely knowledge (60%), comprehension (30%) and application (10%). It was constructed to ensure proper distribution of test items. Moreover, each item has four options in which the students can select their answers. The test was shown to the research adviser, and expert from different schools for comments and suggestions. Based on their comments and suggestions, revision was done to come up with the final questionnaire.

The researcher worked on the development of the recorded video based on the identified topics. For the proper sequence of the activities, the researcher patterned the learning packet in the Alternative Delivery Mode (ADM) Module (Regional Memorandum No. 20-41, s 2020). After the development of the material, it was shown to their research adviser for additional suggestions and comments. After final editing, the developed learning material was subjected for validation.

After the revision of the material, it was subjected to validate procedure to verify if it could be used as a teaching tool. A questionnaire was employed as the research instrument to gather the needed data from the pool of respondents who evaluated the material in terms of content and parts and characteristics of developed recorded video. These steps in development and validation of recorded video followed the ICSDR (Identify, Conceptualize/Connect, Storyboard, Develop, Review/Reflect/Revise) model.

The responses were analyzed statistically to determine whether the recorded video could be used as instructional material in Araling Panlipunan.

Results and Discussion

This chapter presents the results of the study. Descriptive analysis and interpretation of data are also given in the discussion in attaining the objectives of the study. Tabular and combination with textual presentation was used.

Teachers use instructional materials to support the teaching and learning process to be more efficient. Likely, these educational resources are used to develop student's knowledge, abilities, and skills to monitor the assimilation of information, and to contribute to their overall improvement and upbringings (Shapovalenko, 2010).

Apart from instructional modules, workbooks and the likes' as recorded video is also utilized as a material for teaching.

Validation Level of the Recorded Video as Instructional Material

In this study, the level of the level of validation of recorded video as instructional material was described in terms of objectives, content, assessment and outcome, visual quality and audio quality and was determined by weighted mean and standard deviation.

Validation Level of the Recorded Video as Instructional Material in Terms of Objective

The level of validation of recorded video as instructional material was described in terms of objectives was *highly acceptable* supported by the grand (M=4.59). This means that the respondents perceived that the objectives of the recorded video were beyond the acceptable standards. The validators strongly agree that the objectives are aligned with the Most Essential Competencies (MELCs), which gained the highest (M=4.71, SD=0.47). Similarly, they *strongly agree* that *the objectives are appropriate to the expectations and needs of the learners*, obtaining the lowest (M=4.50, SD=0.52). This means that the objectives of the recorded video conform with the required competencies and are appropriate to the needs of the learners.

Iihan and Oruc (2016) affirmed that multimedia technique increased the academic success of learners in social studies lesson compared to the traditional classroom. Likewise, the output of the study tagged as interactive video materials in Araling Panlipunan enhanced the performance of the learners. They were able to attain higher score after exposure to researcher-developed material (cited in Javellana, 2020).

Validation Level of the Recorded Video as Instructional Material in Terms of Content

The level of validation of recorded video as instructional material was described in terms of objectives was *highly acceptable* supported by the grand (M=4.63). This means that the respondents perceived that the content of the recorded video were beyond the acceptable standards.

The validators *strongly agree* that *the content of the recorded video is clear, accurate, and up to date*, which gained the highest (M=4.79, SD=0.43). Similarly, they *strongly agree* that *the content of the recorded video covers the appropriate length of details and information of the topic*, obtaining the lowest (M=4.43, SD=0.51). This means that the content of the recorded video is clear and accurate enough that covers the needed information of the topic.

It was also supported by the study of Villasante (2008) as cited in Echevarria (2013) that instructional material should stimulate the students' interest in learning and which encourage the users to develop students' critical thinking and problem-solving skills that allows the students to use their material, and it is worth the time and expense.

On the same concept, Lopez (2019) in their study emphasized that electronic design instructional material should catch students' attention to think critically and solve the given problem interestingly and patiently.

Validation Level of the Recorded Video as Instructional Material in Terms of Assessment and Outcome

The level of validation of recorded video as instructional material was described in terms of assessment and outcomes was *highly acceptable* supported by the grand (M=4.56). This means that the respondents perceived that the assessment and output of recorded video were beyond the acceptable standards.

The validators *strongly agree* that *the assessment and outcome encourage learners' engagement and motivation* (M=4.64, SD=0.50). Similarly, they *strongly agree* that *the assessment and outcome measures what is intended to measure based on the objectives*, obtaining the lowest (M=4.50, SD=0.52). This means that the assessment and outcome of the recorded video encourage the learners' engagement and motivation and they also measure the students understanding of the concepts based on the given objectives.

Accordingly, this suggestion matched with Dela Cruz (2020) that learning is an active learning process that needs to be motivated and guided towards desirable ends Popham (2008) as cited in Tolentino (2018) believed that when an assessment is of high quality, it can accurately and precisely detect changes in student achievement and can contribute to continuous improvement of the educational system in the institution.

Validation Level of the Recorded Video as Instructional Material in Terms of Visual Quality

The level of validation of recorded video as instructional material was described in terms of visual quality was highly acceptable supported by the grand (M=4.76). This means that the respondents perceived that the visual quality of recorded video were beyond the acceptable standards. The validators *strongly agree* that *appropriate color coordination is used, and it is pleasing to the viewer*, (M=4.79, SD=0.52). Similarly, they *strongly agree* that *there are special effects used to enhance learning by drawing attention to specific attributes of what is being presented* (M=4.71, SD=0.50).

This means that the visual quality of the recorded video is pleasing to the students which also uses other special effects to gain their attention and further enhance learning.

It is supported by the claim of Sriyulianti (2011), who contended that looking at visuals helps students understand difficult words more quickly. Pictures make vocabulary learning more enjoyable and interesting because they can memorize meaning of the difficult words. Krippel, et al. (2015) concluded, in their research on understanding multimedia learning, that the fundamental principle behind this, people learn better from words and pictures than from words alone.

They also suggested that multimedia learning should focus more on the visual and auditory skills of the students in enhancing their knowledge and skills.

Validation Level of the Recorded Video as Instructional Material in Terms of Audio Quality

The level of validation of recorded video as instructional material was described in terms of audio quality was *highly acceptable* supported by the grand (M=4.47). This means that the respondents perceived that the audio quality of recorded video were beyond the acceptable standards.

The validators *strongly agree* that *the vocabulary used in the narration is appropriate for the intended audience and background music or sound effects are conducive to learning* (M=4.57, SD=0.51). Similarly, they *strongly agree* that the speed of the narration is at normal to be understood obtaining the lowest (M=4.36, SD=0.50). This means that the audio quality of the recorded video is conducive to learning that uses narrations, music or sound effect that can be understood well.

Fukaya, et al. (2011), find that the audio-video with text is effective compared to text only but if the quality of communication deteriorates nevertheless the audio-video degrades the learning effectiveness compared to text only case eventually become lower.

Likely, Asejo (2019) on their research also revealed that there's a significant difference in the pre-test and post-test scores and further concluded that the audio- visual presentation they used to contribute a lot in the performance of students.

Performance of the Students in Pre-test and Post-test

To determine the effectiveness of the recorded video, pre-test and post tests were employed. This would also show their performance before and after the utilization of the instructional material. Frequency and mean percentage were used to show the results.

Table 6 revealed the performance of the students in pre-test. It can be manifested that 24 out of 67 or 36 percent of the students showed a *fairly satisfactory* performance while 43 out of 67 or 64 percent *did not meet expectations*. The mean of 59.40 implied that most of the students *did not meet expectation* based on their pre-test. This means that the students were not knowledgeable enough about the topic prior to the utilization of the recorded video.

Accordingly, as mentioned by Puri (2019), pre-test is given to students at the beginning of a course to determine their initial understanding. Likely, pre-test allow the teachers to see if what is being covered in the lesson is already mastered and give students a preview of what will be expected of them and help them begin focus on the key topics that will be covered. In addition, the result of the pre-test implies a need for instructional tool for the students to learn even though the teachers were geographically remote from each other.

Performance of the Students in Pre-test

After conducting the pre-test, the recorded video was given to the students to be used as instructional tool in understanding the concepts of selected topics in Araling Panlipunan 9.

It was viewed on the discussion of Llego (2020) that in modular distance learning, learners can access electronic copies of learning materials on a computer, tablet, PC, or smartphones.

Table 7 revealed the performance of the students in post-test. It can be manifested that 18 out of 67 or 27 percent of the students showed an *outstanding* performance while 4 out of 67 or 4 percent *fairly satisfied*.

The mean of 85.60 implied that most of the students *very satisfactory* based on their post-test. This means that the students were knowledgeable enough about the topic after the utilization of the recorded video.

This also implies that the students perform better in the post-test through the use of recorded video compared to the pre-test result. The table also shows apparent positive change of student performance. It can be viewed that the recorded video sent to the students was effective.

Performance of the Students in Post-test

Through the helped of the barangay officials, the recorded video was used by giving their copies and allowing the students to use their personal computer or laptop to watch. Likely, some of the students were given a copy and used their cellphones as their medium even without the internet connectivity. This amount helped allot in the performance of the students to improve their post-test-result.

Santiago (2019) used the pretest-post-test to determine the impact of remedial classes to the students' performance in Geometry. According to Ching (2016), the advantage of pretest-posttest design is that it can determine whether there is a change in the behavior and outcomes after intervention.

When a learning material has an impact on the target end-users it should be maintained and continued to be used as well as carefully updating it as needed (Mossico, 2018). Kay (2012) also affirmed that students had generally good affective and cognitive attitudes toward the use of video to promote learning.

Significant Difference between the Performance of the Students Before and After Utilizing the Recorded Video as Instructional Materials

Minitab 14 was used in computing the data gathered and treated them statistically using Paired T-test. The computed p-values were compared to the level of significance at 0.05 to determine the significant difference between the performance of the students before and after utilizing the recorded video as instructional material.

As gleaned, a *significant difference* between the performance of the students before and after utilizing the recorded video as instructional material was obtained.

Significant Difference between the Performance of the Students Before and After Utilizing the Recorded Video as Instructional Material

The obtained (MD=-26.20) between the pre-test and post-test and the computed t-value (-33.42) supported the result of the analysis. Moreover, the p-value (0.000) which was lower than 0.05 level of significance affirmed the result as significant. This further means that the use of video record as instructional material brought about the difference on the student's performance positively. With the aid of the video record, students' performance improved greatly on the post-test. Presented in the above table was the significant difference between the performance of the students before and after utilizing the recorded video as instructional material.

Calado (2021) affirmed that using an instructional video is effective and it has a powerful way to engage students with the content and deepen understanding and retention. It can create experiences not only using print materials alone but a go-to resources that can be watched from anywhere. They also added, that using video, it has a variety of ways in educational setting. Furthermore, in the study of Robles and Acedo (2019) concluded that developed video tutorials may be used as instructional materials, remediation, and enhancement activities of the 21st teachers.

Conclusion

Based on the findings, the following conclusions were drawn from the study:

There is a very satisfactory performance was achieved on the post-test after utilizing the recorded video, with that there is a significant difference between the pre-test and the post-test scores before and after utilizing the material and this entails that the material is valid. Therefore, the null hypothesis is rejected. Thus, it can be utilized in teaching Araling Panlipunan.

Recommendations

In light of the findings and conclusions, the following were recommended:

1. The administrator may encourage the implementation of varied learning activities and instructional materials that suit the learning preference of the students. This may also be included to their Basic Education Learning Continuity Plan (BE-LCP).
2. The developed recorded video may be adopted to use as one of the tools in modular, online, and blended learning.
3. The recorded video may be submitted to the Learning Resource Portal and register for its copyright.
4. Recorded video may be developed in other topics in Araling Panlipunan or in other subjects.
5. Similar or parallel studies on the effectiveness of the recorded video may be conducted and to pilot test using more respondents and in other locale.

References:

- Alber, R. (2019). Using video content to amplify learning. George Lucas Educational Foundation. [Edupia.org/article/using-video-content-amplify-learning](https://edupia.org/article/using-video-content-amplify-learning)
- Awolaju, B. (2016). Instructional materials as correlates of student's academic performance in biology in senior secondary schools in Osun state. *International Journal of Information and Educational Technology*, vol. 6, No 9. www.ijiet.org
- Basilan, M. LJ (2018). Scantiness of instructional materials in senior high school: Basis for a proposed digital instructional archive. *Asia Pacific Journal of Multidisciplinary Research*, vol.6(2). Retrieved from www.apjmr.com
- Columbano, M. (2019). Development and validation of modules in basic mathematics to enhance students' mathematical performance. *International Journal of Innovative Technology and Exploring Engineering (IJITEE)* Vol.8 Issue-12
- Frey, B.B. (2018). Pre-test-post-test designs. *The Sage Encyclopedia of Educational Research Measurement, and Evaluation*. <https://dx.doi.org/10.4135/9781506326139.n538>
- Kosterelioglu, I. (2016). Student views on learning environments enriched by video. *Universal Journal of Educational Research*. <http://www.hrpub.org>

Nollen, S. (2015). Learning styles of grade 9 students of sariaya Institute: Basis for the development of electronic design instructional materials In Araling Panlipunan IX. Unpublished Master's Thesis. Sacred Heart College, Lucena City.

Robles A. C. & Acedo, E. M. (2019). Development and validation of educational video tutorials for 21st century secondary learners *Asian Journal of Multidisciplinary Studies*, vol 2(2). <https://asianjournal.org>

Velasco, M. (2020). Learning modality preference of grade 10 students: Kotobe author-based e-module (KABEM) in mathematics. Unpublished Master's Thesis. Southern Luzon State University, Lucban, Quezon