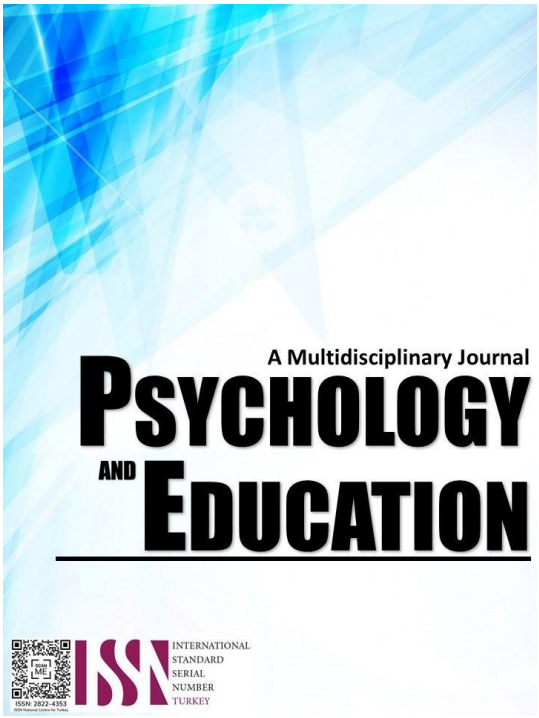
THE USE OF INTERACTIVE VIDEO AS A SUPPLEMENTARY TEACHING TOOL IN LEARNING



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Research Article

The Use of Interactive Video as a Supplementary Teaching Tool in Learning

Honey Mae S. Samson,* Wilfredo R. Miasco, Ely Jay A. Pasco
For affiliations and correspondence, see the last page.

Abstract

This study examined the academic performance of Grade 8 students in Araling Panlipunan at Lourdes Integrated School when exposed and not exposed to interactive video as a supplementary learning tool. It also explored the relationship between students' academic performance and their level of engagement. Utilizing a quasi-experimental research design, the study involved 50 students selected through total population sampling combined with a cluster sampling approach. Participants completed both pre-tests and post-tests. Quantitative data were analyzed using Pearson's product-moment correlation. The findings revealed that students exposed to interactive videos demonstrated higher academic performance compared to those who were not. Additionally, these students exhibited a higher level of cognitive and emotional engagement during lessons. A moderate to strong positive correlation was found between engagement scores and post-test results, indicating that increased student engagement is strongly associated with improved academic outcomes. Based on the results, the study recommends the use of interactive videos that are aligned with curriculum objectives and designed to accommodate diverse learning styles. It also emphasizes the importance of ensuring accessibility for all learners, regardless of technical skills or internet connectivity. Lastly, continuous evaluation and refinement of interactive video materials are encouraged to maintain their effectiveness, relevance, and engagement value in the learning process.

Keywords: *interactive video, supplementary learning tool, students' academic performance, level of engagement*

Introduction

In times past, classroom learning processes were often teacher-centered with students seated in rows, passively receiving information. The teacher was the only model for knowledge. With advances in technology and learning methods, the pendulum has swung back to more student-centered approaches. Those contemporary classrooms foster active learning, critical thinking, creativity, and the use of technology. Among the primary instruments in this transition is multimedia, especially in the form of interactive video. Multimedia encourages learner engagement by integrating images, sound, and story. Research has demonstrated that students focus better and are even more excited about learning when their lessons are multimedia-based.

This makes the learning experience both enjoyable and effective. Lin and Li (2018) state that multimedia environments engage students in behavioral, cognitive, and emotional ways. In this sense, a video demonstrates a much higher level of interaction in terms of delivering both content and an enjoyable experience for the students. Videos can specially create a representation of the lesson that will resonate within the learners' minds. They can present difficult ideas in ways that are easy on the eyes and stimulating for thought. Good video production is indeed conducive for processing and retention purposes on the part of students since it involves the use of both visual and auditory channels (Mayer, 2001; Moreno & Mayer, 1999).

Besides providing learner engagement, many studies say video stimulates customers' motivation and satisfaction. The video makes the abstract material concrete, anchors it in real-life situations, and breaks the monotony of conventional lectures. According to Sudjana and Rivai (1992), videos clarify messages, motivate students, and assist in realizing learning objectives. Interactive videos provide freedom as well. It allows students to access content anytime and anywhere, making it easier for learners balancing school and other duties. They can pause, replay or select parts of the material and this provides learners with a greater degree of control over their learning process, creating higher satisfaction and promoting personal learning. In brief, interactive video is a strong supplementation in education. It strengthens the student engagement, strengthens understanding and offers a flexible and personalized learning experience.

Interactive videos give freedom as well. A student can access content any time and from anywhere, a little help for learners juggling school with other affairs. The features of pausing, replaying, or choosing parts of the material grant learners a higher degree of control over their learning pace, thus creating higher satisfaction and encouraging self-study.

Overall, interactive video is a fortress supplement in education. It adds to student engagement, deepening understanding, and offers a flexible, personalized learning experience.

Research Questions

The study evaluated the interactive video's effectiveness as an additional learning aid in Araling Panlipunan 8. This study sought to answer the following significant questions:

1. What is the level of students' academic performance when exposed and non-exposed to interactive video as supplementary learning material? In terms of:

1.1 pretest; and
1.2 post-test?
2. What is the level of students learning engagement when exposed to interactive video?
3. Is there a significant relationship between students' learning engagement and academic performance on using interactive video as supplementary learning material?

Methodology

Research Design

The research design of this study is quasi-experimental. Quasi- experimental research design is one of the types of research design wherein one appraises effects of either an intervention or treatment, without random assignment. Here, the researcher tends to compare groups that show similarity in some respects but wherein participants are not randomly assigned to treatment or control groups. This approach is frequently used in situations where randomization is impracticable and allows researchers to study causal relationships while accepting the existence of contaminating variables. Cook and Campbell (2018) have defined quasi-experimental research design in a way that it describes a methodological design to evaluate effects of an intervention or treatment for which random assignment to treatment and control groups is not possible. Quasi- experimental designs are said to include a measure of control for inessential variables and to draw causal inferences but do so with less power and control than truly experimental designs.

In this study, the interactive video was used as independent variable, while academic achievement and level of engagement were the dependent variables

Respondents

The study was carried out at the Lourdes Integrated School, situated in Barangay Lourdes approximately 17 kilometers away from Valencia City, Bukidnon, in the Philippines. The rural and mountainous locale of the school speaks much about the kind of educational setting one would find in the region, and, therefore, the findings of this study can be generalized to similar contexts. Cultured into high academic standards and developed in the holistic growth of its students, Lourdes Integrated School has a diverse population of 324 learners coming from all walks of life, ages, and academic levels.

This school is a perfect site in which to examine the effectiveness of interactive video as a supplementary instructional medium, as it combines traditional and modern instruction. Infrastructure is in place for interactive video instruction, including computers, the Internet, and multimedia materials.

Furthermore, the fifteen teachers are well-trained and prepared to incorporate this technology into their instruction, and this greatly contributes to the successful conduct of the study.

The respondents involved in this study were the Grade 8 learners who registered for the Araling Panlipunan (AP) subject at Lourdes Integrated School. This population would consist of students from both sections of Grade 8 thus ensuring a comprehensive and representative sample. This included all Grade 8 AP students aiming to arrive at an accurate understanding of how interactive videos impact their learning, engagement, and academic performance in the subject.

This approach allowed for a comprehensive analysis of the effectiveness of interactive videos as an extra learning tool with valuable insight into their possible outcome improvement potential for students. Each of the sections, it may be said, is a homogeneous cluster; thus, it can be assumed that the students of each section share similar characteristics and experiences from which meaningful conclusions can be drawn regarding the effect of interactive videos on their learning.

Table 1. *Frequency Distribution of Respondents*

Grade 8 Sections	*Number of Students*	*Percentage (%)*
Section A	22	44
Section B	28	56
Total:	50	100

Instrument

For the instruments of the study, there were two major instruments that the researcher used to gather data: a self-constructed examination with fifty (50) items for measuring academic achievement and an adopted questionnaire to measure the level of engagement. The self-constructed examination was intended to measure the academic achievement of the students before and after introducing interactive videos as an add-on to learning. The instrument sought to determine how knowledgeable and conversant the students were with the subject matter of Araling Panlipunan. The examination was developed by researchers so that it could match the learning objectives and key concepts of Araling Panlipunan. The questions were a mix of problem-based and recall-based aiming at a deeper understanding and critical thinking skill. The researcher got the scores of the students from examination results, which were rated on a corresponding scoring system of the 5-point scale. The researcher used the second tool, adopted from the study of Johnmarshall Reeve (2013), in which student engagement was determined in terms of four properties or dimensions, namely behavioral,

emotional, cognitive, and agentic. This instrument aimed to gauge students' level of engagement on the use of interactive videos as a supplementary learning material.

Procedure

To begin data gathering, a letter requesting approval from the researcher's end to conduct the study was sent to the district supervisor and superintendent of the school's division for Valencia City. Before the administration of the questionnaire, informed consents were obtained from the participants for their voluntarily taking part in this study. Responses were kept anonymous and were solely utilized for the study's purposes. All information submitted was kept private and was disclosed in the form of totals. The participant had the option to omit any information that might be used to identify them.

The pre-test and post-test were prepared and given to the respondents to evaluate the academic performance of the students before using the interactive videos as a supplementary method in learning and after using the method. Pre- tests were given to all the Grade 8 learners in both sections. This established a baseline of the student's existing knowledge and understanding. The same examination was administered as a post-test after the instructional period, allowing for a comparison of academic achievement before and after exposure to the interactive videos. The adopted questionnaire for this specific study was exposed to the respondents to measure learner engagement while being exposed to interactive video use as supplemental material for their studies. The research questionnaires was collected, checked, tallied, tabulated, and will be analyzed together using important primary data needed for the study results.

Sample and Sampling Technique

The most appropriate sampling technique was total population sampling together with cluster sampling. Since the study has to include all Grade 8 students in both sections as part of their subjects to assess it well-understood, total population sampling is suitable for this context. This method assesses the entire population having characteristics of interest, in this case, all the Grade 8 students from the two sections (22 students from section A and 28 from section B); thus, the total sample size comes down to 50 learners. Because the units of analysis are intact classrooms, cluster sampling is also appropriate. Cluster sampling means presenting intact groups and not picking individuals from them. Here, the two sections of Grade 8 form the clusters, and all students in these sections were considered in the study. It saves effort and time not to go around randomly picking individuals from a much larger population since this approach is efficient and practical

Results and Discussion

This section discussed, analyzed, and interpreted the data regarding the research questions. Furthermore, it provides an elaboration of the basic information and understanding necessary in giving judgments and recommendations.

Level of students' academic performance not exposed to interactive video

Table 2. *Pre-test*

Scale	*Frequency*	*Percent*	*Qualitative Description*
44-50	0	0.0	Excellent
38-43	0	0.0	Very Good
32-37	1	4.5	Good
26-31	8	36.4	Fair
26 and below	13	59.1	Poor
Total	22	100.00	
Mean = 1.45		SD = 0.59	Poor

Table 3. *Post-test*

Scale	*Frequency*	*Percent*	*Qualitative Description*
44-50	0	0.0	Excellent
38-43	1	4.5	Very Good
32-37	5	22.7	Good
26-31	11	50.0	Fair
26 and below	5	22.7	Poor
Total	28	100.00	
Mean = 2.09		SD = 0.81	Fair

(5) 44-50 Excellent, (4) 38-43 Very Good, (3) 32-37 Good, (2) 26-31 Fair, (1) 25 & below Poor

The statistical data resulting from the pretest and posttest of the students not subjected to the interactive video as a supplementary tool in education this case, the Araling Panlipunan curriculum shown in the table. The mean score of the test of 1.45 shows that the respondents performed very poorly. It is clearly shown in the frequency distribution that 59.1 percent of the students perform poorly in the test while only 4.5 percent have obtained a good level of classification. Most respondents were only able to score higher during

the pretest for the specified curriculum with difficulty.

The posttest shows a slight increase in mean score from 2.09, and with the frequency distribution indicating that half of that population (50%) of learners were elevated from poor to fair, with also gaining a percentage of 22.7% of the learners earning a good standing in the grading system, does suggest some learning did occur from the official pretest to posttest even in the absence of the interactive movie. Other teaching strategies could have been responsible, such as conventional lectures, group discussions, or any other kind of learner-centered approach. Still, the impact appears to be marginal, which would indicate a need to begin researching alternative pedagogy in hopes of driving the learning results.

For the posttest scores to have such a great standard deviation above that for the pretest (from .59 accelerating to .81) means that potentially, the understanding of the subject was significantly different for each participant. This means that the methods or strategies adopted by the teacher did not ensure consistent understanding and knowledge or skills among the respondents.

In a research study dubbed The Effectiveness of Traditional Teaching, it is further stated that standard conventional teaching is being utilized but lacks sufficient power to improve students' performance. More engaging and student- centered methods may thus be required to ensure a greater degree of academic success (Uzoma et al., 2024).

Level of students' academic performance when exposed to interactive video

Table 3. *Pre-test*

Scale	*Frequency*	*Percent*	*Qualitative Description*
44-50	0	0.0	Excellent
38-43	0	0.0	Very Good
32-37	7	7.1	Good
26-31	2	25.0	Fair
26 and below	19	67.9	Poor
Total	28	100.00	
Mean = 1.39		SD = 0.63	Poor

Table 5. *Post-test*

Scale	*Frequency*	*Percent*	*Qualitative Description*
44-50	0	0.0	Excellent
38-43	12	42.9	Very Good
32-37	16	57.1	Good
26-31	0	0.0	Fair
26 and below	0	0.0	Poor
Total	28	100.00	
Mean = 3.43		SD = 0.50	Good

(5) 44-50 Excellent, (4) 38-43 Very Good, (3) 32-37 Good, (2) 26-31 Fair, (1) 25 & below Poor

This paper presents statistics summarizing the results of the pretest and posttest results of the students who were exposed to the interactive video as a tool for learning, specifically in the Araling Panlipunan 8 subject. As further support in frequency distributions of the pretest volume, 19 (67.9%) out of 28 learners scored poorly on the pretest while 7 (25%) scored fairly, and only 2 (7.1%) belonged to the scoring system as good. This strongly supported the pretest mean results of 1.39, indicating that most of the learners found the test very difficult. This means that before the introduction of the interactive video, most students found the subject matter very difficult or had some clear understanding of it, the minority percentage having done well in the subject matter. Thus, suggests the requirement of an instructional intervention to improve the performance of the students. Since the standard deviation of 0.63 indicates a rather wider range of student scores; thus, there exists more disparity in the prior knowledge and skill levels of the respondents. That is to say, the baseline knowledge levels among the participants changed quite a lot. However, the posttest has shown positive results with a mean of 3.43, suggesting a remarkable rise in the average score with significant numbers of pupils entering the high-performance rating. Twelve students (42.0%) were given a very high rating, while 16 students were rated as good (57.1%).

This means that from the time they received instructions using an interactive video, the performance of the learners has markedly shifted from lower skills to higher classifications. This could give confidence to the notion that the use of interactive video can uplift the performance levels of students. A pilot study conducted by Hwang et al. (2017) presented evidence that college students using interactive video techniques scored significantly higher on tests than those taught in traditional lecture formats in the context of higher education. This illustrates how well interactive video enhances retention and understanding. While the posttest standard deviation of 0.50 is a low value after exposure to the interactive video, it indicates some reduction of variability after the exposure of the participants to the interactive video. The decrease in standard deviation shows that the intervention did not just improve learning in general but made for a more equitable learning environment benefiting most of the participants; through this, the spread of scores among the learners was reduced. Such claims have been substantiated by several studies performed. García and Cole (2008) note that the study of

Boyle (1997) and Mayer (2009) has generally classified video as a very critical factor in learning outcome achievement and effective teaching and learning across various disciplines (Allen & Smith, 2012; Hsin & Cigas, 2013; Rackaway, 2012). This engagement with the content allows the students to better understand and remember the information presented. Interactive video is especially valuable for subjects dealing with abstract or hard- to-visualized concepts, as it helps the student in having a better understanding of the phenomena (Brame, 2016). Such dynamic tools give a variety of learning styles, and active learning, as Mayer's (2009) Cognitive Theory of Multimedia Learning indicates.

Moreover, student audiences who are weak and slow to catch up with a message become easily open and understand such innovations, due to the ability of video media to combine visual images with audio (Yudianto, 2017: 234). In addition to this, interactive video can be employed in social studies to rejuvenate a historical event or cultural discussion, thereby drawing students more closely to the content of the lesson. From this, one will conclude that interactive video is a more effective and positive approach to improving learning outcomes in students.

Table 4. *Level of Students' Engagement*

	Variables	*Mean*	*Standard Deviation*	*Qualitative Description*
Behavioral Engagement				
1	When I'm in this class, I listen very carefully.	3.27	0.47	High
2	I pay attention in this class.	3.00	0.00	High
3	I try hard to do well in this class.	3.64	0.49	Very high
4	In this class, I work as hard as I can.	3.36	0.49	High
5	When I'm in this class, I participate in class discussions.	3.46	0.51	High
Agentic Engagement				
6	I let my teacher know what I need and want.	3.32	0.47	High
7	I let my teacher know what I am interested in.	2.93	0.73	High
8	During this class, I express my preferences and opinions.	3.18	0.72	High
9	During class, I ask questions to help me learn.	3.46	0.51	High
10	When I need something in this class, I'll ask the teacher for it.	2.96	0.43	High
11	I adjust whatever we are learning so I can learn as much as possible.	3.14	0.36	High
12	I try to make whatever we are learning as interesting as possible.	3.71	0.46	Very high
Cognitive Engagement				
13	When I study for this class, I try to connect what I am learning with my own experiences.	3.46	0.51	High
14	I try to make all the different ideas fit together and make sense when I study for this class.	3.35	0.49	High
15	When doing work for this class, I try to relate what I'm learning to what I already know.	3.39	0.50	High
16.	I will make up my own examples to help me understand the important concept I am studying for this class.	3.39	0.50	High
Emotional Engagement				
17	When we work on something in this class, I feel interested.	3.43	0.50	High
18	This class is fun.	3.39	0.50	High
19	I enjoy learning new things in this class.	3.50	0.51	High
20	When I'm in this class, I feel good.	3.25	0.44	High
21	When we work on something in this class, I get involved.	3.46	0.51	High
	Overall	3.34	0.48	High

(4) 3.51-4.00 Very High, (3) 2.51-3.50 High, (2) 1.51-2.50 Low, (1) 1.00-1.50 Very Low

This dataset depicts the student levels of engagement with an interactive video as part of their supplemental learning tool. The categorization of forms of engagement referred to the Behavioral Engagement (BE) – BE1 to BE5, Agentic Engagement (AE) – AE6 to AE12, Cognitive Engagement (CE) – CE13 to CE16, and Emotional Engagement (EE) – EE17 to EE21. In the part of Behavioral Engagement (BE), scores can be from 3.00 (BE2) to 3.64 (BE3). They point out that students moderately adopted behavioral participation in learning activities.

The table shows in Behavioral Engagement (BE2) that there is no standard deviation (0.00), meaning all students responded in the same way for this indicator. While Agentic Engagement (AE) indicates much more varied mean scores for AE, AE7 has the lowest

value (2.93) and AE12 has the highest value (3.71). The most significant standard deviations in AE (e.g., AE6, AE7, and AE8) reveal that students have had more varied responses about their sense of autonomy and self-directed learning. There is a variation in Agentic Engagement (AE) where the AE mean scores fluctuate more, with AE7 (2.93) being the lowest and AE12 (3.71) being the highest.

The higher standard deviations in Agentic Engagement (e.g., AE6, AE7, and AE8) indicate that students had more varied responses regarding their sense of autonomy and self-directed learning. In behavioral trends of Cognitive Engagement (CE), the score ranges are consistently above 3.35. CE13 and CE16 recorded the highest with scores of 3.46 and 3.39, respectively. It indicates the achievement level of students in the process of engaging in deeper thinking and reflection while watching the interactive video. In terms of Emotional Engagement (EE), the data presents a high score ranging from 3.25 (EE20) to 3.50 (EE19) showing a generally positive emotional response to interactive video. The standard deviations are moderate, indicating some variation in emotional responses.

The mean scores for all engagement indicators vary from about 2.93 to 3.71 on a 5-point Likert scale, indicating a moderate to moderately high level of engagement. Cognitive Engagement (CE) and Emotional Engagement (EE) seem to be higher in mean scores implying that these types were more associated with the cognitive and emotionally engaged students than the others. Argentic Engagement (AE) has the lowest mean score (AE7=2.93) indicating that students perhaps did not take as much responsibility for learning. As stated by Hamalik (in Yudianto, 2017), the utilization of teaching media in teaching and learning processes can foster an emerging thirst and interest, help to spark interest and motivation to participate in learning activities, and have psychological effects on the students. The use of teaching media during teaching orientation would ensure that messages and content delivery at that moment are effective and enhance the effectiveness of the learning process. Besides, interactive videos could enhance motivation, provide immediate feedback, and improve retention rates (Liu, Y., & Elms, P. (2019).

This provision of an interactive digital learning module encourages students to think actively, not only in understanding the lesson content but also the stimulation urges them to build a framework for establishing hypotheses and determining appropriate hypotheses and design strategies to identify the "root" problem they face (Mayer & Moreno, 2002). Based on the above, it can be deduced that interactive digital learning modules are very effective in lifting student learning outcomes.

Table 5. *Correlation analysis of students' academic performance and the level of engagement*

		Engagement score	*Students' Academic Performance*
Engagement score	Pearson Correlation	1	.620(**)
	Sig. (2-tailed)		.000
	N	28	28
Students' Academic Performance	Pearson Correlation	.620(**)	1
	Sig. (2-tailed)	.000	
	N	28	28

The correlation matrix shows a relationship between student engagement scores and their academic performance. Pearson's correlation coefficient of .620 suggests that the correlation between engagement scores and students' academic performance, regarding post-test, is .620. This represents moderate to strong positive correlation; that is, higher engagement scores tend to coincide with higher post-test scores. The fact that the significance p-value is .000, which is less than 01, means that the correlation is significant at the .01 level, and thus, the probability that this relationship occurred based on chance is very low. The analysis was based on 28 students. Though small, the sample has a significant correlation suggesting a meaningful relationship in this case. Strong evidence has been found that higher student engagement is associated with better academic performance; this implies that if student engagement were to be increased, improved academic performance would likely be seen, This result has been supported by the study conducted by (Bailey et al., 2021; Guthrie & Wigfield, 2000; Lee et al., 2019; Rajabalee & Santally, 2021) Engagement positively correlates with motivation and learning performance. Additionally, encouraging engagement with effort leads to better learning activities for individuals (Paas et al., 2003). Hence, the study rejects Ho that states there is no significant relationship between students' academic performance and learning engagement on interactive video as supplementary learning material.

Conclusion

The study aims to ascertain whether the level of performance of students exposed to interactive video modules, where they can manipulate and operate the video by themselves, was different from that of students who depended solely on the strategy of the teacher during classroom discussion and to determine the levels of engagement of students with interactive video. The study also sought to identify the levels of engagement of the students with the interactive video.

A modified Likert scale questionnaire adopted from Johnmarshall Reeve's (2013) study was used to measure the level of students' engagement in terms of Behavioral Engagement (BE), Argentic Engagement (AE), Cognitive Engagement (CE), and Emotional Engagement (EE). Performance levels of students were assessed through a conducted pre-and post-test through a pre-constructed quarterly examination adopted through the division. For performance levels in school, the degrees of academic performance and levels of engagement were assessed using descriptive statistics such as percentage frequency, mean, and standard deviation. In the end, this

also involved using the Pearson product- moment correlation approach.

In conclusion, the results of the qualitative description of the post-test for the exposed and non-exposed groups were both poor because both groups were novices on the topic, with only a few of them understanding the subject matter. Thus, this must call for an intervention for instruction so that student performance can be improved.

The post-test of the non-exposed group increased from poor to fair, which might be because teaching techniques, such as conventional lectures, group discussions, or other learner-centered approaches, might be the reason for this. However, the improvement is inconsequential, perhaps prompting an inquiry into other all-encompassing teaching strategies to augment learning results even further. There was a significantly variated difference based on understanding the content among the participants as per the result of the standard deviation. The contrast of the above with the comparatively high improvement of the exposed group up to good could lend credence to the hypothesis that indeed interactive videos raise students' performance levels.

While the standard deviation for the post-test is somewhat low after the exposure to the interactive video, the decreased standard deviation says that the approach not only enhanced overall learning but also helped to create an equitable learning environment that most of the participants benefited from the intervention through reducing the spread of scores among the learners.

According to Boyle (1997) and Mayer (2009), video is a critical component in achieving learning outcomes and is a good teaching and learning method in many subjects. The interactivity of the video could allow students to make sense of and remember the content by becoming engaged with it (Allen & Smith, 2012; Hsin & Cigas, 2013; Rackaway, 2012).

It was also found that the descriptive analysis for all engagement indicators was mostly high, indicating that most of the students were engaged during the discussion using the interactive video. Higher mean scores for cognitive engagement and emotional engagement imply that cognitively and emotionally, the respondents were engaged as compared to the other types of engagement. The correlation coefficient for the engagement scores and the post-test raw scores showed moderate-to-high positive correlations: higher engagement scores were associated with higher post-test scores, and a p-value of .000 less than 0.01 means that the correlation is statistically significant at the 0.01 level, providing strong evidence that higher student engagement is linked to better post-test performance.

Thus, it can be inferred that enhancing student involvement would lead to better educational performance.

This study shows that interactive learning tools have the potential to enhance the teaching of Araling Panlipunan. Several specific suggestions are offered for effectiveness and sustainability:

Curriculum developers and instructional designers: possibly will make use of interactive videos directly for specific learning objectives in Araling Panlipunan to ensure coherence and meaningful learning.

ICT coordinators and the Technical Support Team: may ensure that videos are accessible on different devices and in low-band-bandwidth conditions to remove barriers concerning connectivity and technical skills.

School Administrators and Teacher Training Coordinators: might also have to conduct continuous training and support to ensure that teachers are well-skilled and confident in using interactive videos in their teaching methods.

Finally, Educational Institutions, EdTech Planners, School Heads, and Teachers: may possibly partner in collaboration with experts in Araling Panlipunan to produce accurate, culturally relevant, and historically valid content. It is also suggested that students be involved in the development of these contents to increase their engagement and relevance.

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Affiliations and Corresponding Information

Honey Mae S. Samson
Lourdes Integrated School
Department of Education – Philippines

Wilfredo R. Miasco, PhD
Valencia City Division
Department of Education - Philippines

Ely Jay A. Pasco, MAT
Valencia Colleges (Bukidnon), Inc.- Philippines