

# INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY: APPLIED BUSINESS AND EDUCATION RESEARCH

2024, Vol. 5, No. 4, 1298 – 1303

<http://dx.doi.org/10.11594/ijmaber.05.04.16>

## Research Article

### Localized Video Clip Presentation In Improving The Level of Performance in Science of Grade-IV Learners in The Remote Area Schools at San Marcelino District

Cesar A. Tiburcio\*

Sto. Tomas Elementary School, Subic, Zambales 2209, Philippines

#### Article history:

Submission April 2024

Revised April 2024

Accepted April 2024

#### \*Corresponding author:

E-mail:

[cesar.tiburcio@deped.gov.ph](mailto:cesar.tiburcio@deped.gov.ph)

#### ABSTRACT

The study determined the effects of localized video presentation Science grade four learners at Sa Marcelino District. In this study, the quasi-experimental design is used in the study, Pre-test and post was administered in the study to determine the effects of the localized video presentation.

The result indicates that localized video presentation has a significant difference in improving the performance of the grade four learners in Science. Moreover, the level of performance of the learners have a positive correlation on the use of intervention.

Thus, the researcher recommends to develop and conduct another study in using localized video presentation to improve the performance of their study.

**Keywords:** *Grade four learners, Localized instructional materials, Video presentation*

#### Introduction

Today's children will require opportunities to cultivate a learning disposition that will enable them to be proactive seekers of knowledge - lifelong learners - who can keep up with and inform the process of change (Dearing, 1997; Rutherford & Ahlgren, 1990; West, 1998). Teachers who show excitement for learning and demonstrate personal commitment to lifelong learning are critical in creating the suitable environment for this to occur. Developing these characteristics in pre-service teachers is an essential component of pre-service education.

Science education, in particular, plays an important role in the formation of critical and informed citizens in a quickly changing modern society. The objective is to make science education meaningful and useful for today's youngsters, so that, as Rutherford and Ahlgren (1990) argue:

Develop the understandings and mental habits required to become compassionate human beings capable of thinking for themselves and confronting life head on. It should also prepare them to work constructively with other citizens to create and protect an open, decent, and vital society.

#### How to cite:

Tiburcio, C. A. (2024). Localized Video Clip Presentation in Improving The Level of Performance in Science of Grade-IV Learners in The Remote Area Schools at San Marcelino District. *International Journal of Multidisciplinary: Applied Business and Education Research*. 5(4), 1298 – 1303. doi: 10.11594/ijmaber.05.04.16

Classroom instructors' efforts and ideas are critical in making science more meaningful for students. Teachers must be able to respond effectively not just to social expectations, but also to the changing nature of the profession and a reform agenda that includes the implementation of new curriculum and initiatives in scientific education. Among the reform initiatives is a rethinking of the aim of science education and its role in preparing pupils to be scientifically literate, socially adept, and enthusiastic lifelong learners.

## **Methods**

### ***Research Design***

The study employed a between-group quasi-experimental design; random assignment of individuals to groups was not feasible. For the purposes of this experiment, no fake groups were formed: children enrolling in Grade four at a rural school in San Marcelino were divided in two. United Nations Women's Aeta School, Baliwet E/S, Sta. Fe E/S, Sta. Fe O-it and Dalanawan E/S were identified as the control group, while kids enrolling in Buhawen E/S, Pili E/S, Aglao E/S, Jud Hendricks Memorial Aeta School, and Chiang Cho Te Memorial Aeta School were selected as the experimental group. The control group was simply exposed to traditional instructional methods, whereas the experimental group received localized video clip presentations.

The study looked at students' knowledge and perceptions before and after the new content was introduced. A series of questionnaires for the pre-test and post-test were administered to both groups of students.

### ***Sources of Data***

The study was conducted at San Marcelino public schools located at San Marcelino, Zambales. The respondents of the study were 68 Grade IV pupils which include 34 males and 34 females.

### ***Instrument and Data Collection***

A pilot pretest was given to ten groups of responders before to the studies. The experimental group was exposed to video clip presentations, whilst the control group received traditional instruction. Similarly, both groups were

given a pretest at the start of each class and a posttest at the end of the lecture. The pretests and posttests provided to the experimental and control groups were identical.

The intervention lesson was read and examined by the students, and the researcher directed them to learn based on their own personal experiences. Furthermore, the control group received the same lecture, amount of interaction time, and guidelines as the experimental group. They received the identical pretests and posttests following the treatment. The researcher then tallied and analyzed their scores in each treatment to see if there were any significant differences in their mean scores between the pretests and posttest.

The diagnostics test (Pre-Test and Post-Test) was used in this study to help the researcher determine the status of the Grade-IV students' performance level before and after video clip presentation. Quizzes were also used to track the development of replies.

The following were the research instruments use in the study

### ***1. Video clip Presentation***

There were video segments aimed to assist teachers in providing the necessary support for children to progress. They attempted to broaden and enhance their abilities, knowledge, and comprehension of science, moving from concrete to abstract concepts. They allowed pupils to explore their understanding and make sense of these new scientific concepts. They assisted pupils in formalizing their ideas based on what they had learned from the teacher. Furthermore, they were instructional materials aimed to reteach the concept (s) and skill (s) to help learners master a competency-based skill that they were unable to develop during classroom training.

It includes a carefully curated and thoroughly studied list of resources to assist pupils reinforce concepts and skills they had acquired. It also contained additional important information not available in the books. In a nutshell, the strategic intervention materials ensured that the activities were aligned with the tasks/objectives, that the activities were short and simple, that there were a variety of activities to cater to different learning

styles, that there were a sufficient number of activities so that the learner could practice developing the skill, and that the activities were simple, easy to understand, and reproducible.

## 2. PRE-TEST/ POST-TEST

It was a 40-item teacher-made test designed to assess students' mastery of the lesson selected by the researcher. The items in the test were examined, and the difficulty/discrimination indices were used to dismiss or reject them. ones that did not fall within the ranges of 0.20 to 0.80 difficulty index and 0.30 to 0.80 discrimination index were deleted, while ones that fell within the prescribed limits were kept. Furthermore, the validated test was completed, and a pilot pretest was given to two groups of responders prior to the studies. The experi-

mental group was exposed to video clip presentations, whilst the control group received traditional instruction.

Similarly, both groups received a pretest before the lecture and a posttest after the class. The pretests and posttests administered to the experimental and control groups were similar.

## 3. Rating Scale

To determine the level of performance in Science of the of the Grade 4 Learners, a rating scale was designed by the Researcher for the 40 test items for the pretest and post test. The level of Performance will be measured by getting the mean of scores of both the experimental and controlled group for their pretest and post test result. The level of performance will be shown in table.

Table 1. Rating Scale of the Mean Score

31 – 40	Excellent
21 – 30	Very Good
11 – 20	Good
1 – 10	Needs Improvement

## Result and Discussion

This area covers presentation, analysis, and interpretation. Data is divided into component parts and presented in the appropriate order and categories. It entails modifying and summarizing, selecting pertinent and relevant raw data and reducing it to understandable and interpretable forms in order to study the linkages between the research topic and the intended solution. Analyzed research data can be displayed as text, tables, graphs, or other graphical forms.

The presented data was interpreted. This was accomplished by drawing inferences pertinent to the research questions, from which generalizations were constructed. Finding

meanings and developing conclusions are critical components of interpretation.

Interpretation was carried out while the results were being presented and analyzed, followed by the drawing of linkages and tying to existing theories.

## Presentation of Result and Discussion of Findings

Findings and result of the study were presented, discussed and analyzed using tables and rating scales.

1. What was the level performance of Grade IV in Science based on the pretest and post-test results using the two strategies in teaching?

Table 2. Result of Pretest and Post Test Result of the Grade IV Learners Using the Localized Video Clip Presentation

	Descriptive Statistics		
	Mean	Std. Deviation	N
VAR00001	17.4118	4.88750	68
VAR00002	36.6471	2.27750	68
Rating Scale :	E : 31-40	VG : 21-30	G: 11-20
			NI : 1-10

As shown in Table 2. Variable 1 shows the pretest result of the Grade 4 Learners using the Localized Video Clip Presentation . Before the use of the tool, the mean result of the pretest is 17.4118. This could be explained that the level of performance of the Grade 4 Learners

before the use of the tool is good. while the post test result is 36.6471 under variable 2. Mean of the post test result showed that the level of performance of the Grade 4 Learners after the use of Localized Video Presentation is excellent.

Table 2. Result of Pretest and Post Test Result of the Grade IV Learners Using the Traditional Method

Descriptive Statistics			
	Mean	Std. Deviation	N
VAR00003	16.2206	3.72104	68
VAR00004	17.9706	3.25517	68

Rating Scale : E : 31-40    VG : 21-30    G: 11-20    NI : 1-10

Table 2 shows the result of the pretest and post test using the traditional way of teaching. The mean score for the learners is 16.2206. The result of pretest revealed that their level of performance is good. With the same traditional way of teaching, post test result for the mean

score of the students is 17.9706. The level of performance falls on the very good level.

2. Was there a significant difference that exist between the pretest and post test mean result of the two methods of teaching?

Table 3. Significant Difference on the Mean Scores of the Pretest and Post Test of the Controlled and Experimental Class

Method of Teaching	Mean of Pretest	Mean of Post Test	Increment
Video Clip Presentation	17.4118	36.6471	19.2353
Traditional Method	16.2206	17.9706	1.75

Table 3 explains the significant difference on the mean score of the pretest and post test of the two method of teaching if the controlled and experimental group of respondents. Result showed that both the two methods increased after the administration of the post test of the two method. However, the localized video presentation has a higher increment on the mean of the scores that the use of traditional

method. The increment explains that the pupils who are exposed to localized video presentation learned well and performed well in science rather that those pupils who are exposed from the traditional method of teaching?

3. Was there a correlation in between the post test and pretest result of the Grade 4 Learners to their level of performance using the ff. method of teaching?

Table 4. Correlation Result Using the Localized Video Presentation

Correlations

	VAR00001	VAR00002
<b>Pearson Correlation</b>	1	.350**
<b>VAR00001 Sig. (2-tailed)</b>		.003
<b>N</b>	68	68
<b>Pearson Correlation</b>	.350**	1
<b>VAR00002 Sig. (2-tailed)</b>	.003	
<b>N</b>	68	68

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Table 4 shows the Pearson correlation result of the mean of the pretest and post test. result revealed that at 0.01 level of significance, correlation is significant. This indicates that the

use of the localized video clip presentation in Science improves the level of performance of the Grade 4 learners .

Table 5. Correlation Result Using the Traditional Method

Correlations

	VAR00003	VAR00004
<b>VAR00003</b>		
<b>Pearson Correlation</b>	1	.643**
<b>Sig. (2-tailed)</b>		.000
<b>N</b>	68	68
<b>VAR00004</b>		
<b>Pearson Correlation</b>	.643**	1
<b>Sig. (2-tailed)</b>	.000	
<b>N</b>	68	68

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Table 5 shows the Pearson correlation result of the mean of the pretest and post test. result revealed that at 0.01 level of significance, correlation is also significant. This indicates that the traditional method used in teaching in

science also improves the level of performance of the Grade 4 learners , however, more improvement was obtained by the learners who were exposed to the localized video clip presentation.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The sequence of values defined by VAR00001 <=18.00 and >18.00 is Sample random.	One-Sample Runs Test	.053	Retain the null hypothesis.
2	The sequence of values defined by VAR00002 <=37.00 and >37.00 is Sample random.	One-Sample Runs Test	.001	Reject the null hypothesis.
3	The sequence of values defined by VAR00003 <=16.50 and >16.50 is Sample random.	One-Sample Runs Test	.625	Retain the null hypothesis.
4	The sequence of values defined by VAR00004 <=19.00 and >19.00 is Sample random.	One-Sample Runs Test	.053	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Using the non-parametric test , the decision obtained using the traditional method is to accept the null hypothesis, and the decision obtained during the use of the localized video clip presentation is to reject the null hypothesis reject the null hypothesis .. It can be inferred from the result that the use of the Localized Video Clip Presentation has a significant effect on the level of performance in Science of the Grade 4 Learners.

Conclusion

The level of performance in Science of the Grade 4 learners of the selected school of the district of San Marcelino who are exposed to the use of localized video clip presentation improved from good rating to excellent rating result. There is also a big difference on the use of the localized video clip presentation in improving the level of performance of the Grade 4 learners from an increment of 19.2353 mean

score of the post test result . The level of performance in Science of the Grade 4 Learners has a positive correlation on the use of the localized video presentation.

### Recommendations:

The use of the localized video clip presentation in teaching Science is highly recommended to be used to the entire district of Zambales not only for Grade 4 learners but also to all Grade levels in the elementary. Parallel study should also be conducted by other researchers for the improvement of teaching in all subject areas.

### References

- Andújar, J. M., Mejías, A., & Del Carmen Bellido Márquez, M. (2011). Augmented reality for the improvement of remote laboratories: an augmented remote laboratory. *IEEE Transactions on Education*, 54(3), 492–500.  
<https://doi.org/10.1109/te.2010.2085047>
- Baroody, A. J., Feil, Y., & Johnson, A. R. (2007). An alternative reconceptualization of procedural and conceptual knowledge. *Journal for Research in Mathematics Education*, 38, 115-131.
- Büken, R., & Artvinli, E. (2021). Analysis of geography attainments in the Social Sciences curriculum of Turkey according to the revised Bloom's Taxonomy. *Romanian Review of Geographical Education*, 10(2), 89–107.  
<https://doi.org/10.23741/rge220215>
- Clark, R. C., & Mayer, R. E. (2011). *E-Learning and the Science of Instruction: Proven Guidelines for Consumers and Designers of Multimedia Learning*. San Francisco, CA: Pfeiffer.  
<http://dx.doi.org/10.1002/9781118255971>
- Goldman, E., Barron, L., & Witherspoon, M. L. (1991b). Hypermedia Cases in Teacher Education: A context for understanding research on the teaching and learning of mathematics. *Action in Teacher Education*, 13(1), 28–36.  
<https://doi.org/10.1080/01626620.1991.10462759>
- Improving chemical education from high school to college using a more hands-on approach - ProQuest. (n.d.).  
<https://www.proquest.com/open-view/f109030b9df8bc566a9a2731c1e0eb2e/1?pq-origsite=gscholar&cbl=18750>
- Kasturi, R., Goldgof, D. B., Soundararajan, P., Manohar, V., Garofolo, J. S., Bowers, R., Boonstra, M., Korzhova, V. N., & Zhang, J. (2009). Framework for Performance Evaluation of face, text, and vehicle detection and tracking in video: Data, Metrics, and Protocol. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 31(2), 319–336.  
<https://doi.org/10.1109/tpami.2008.57>
- Kettanurak, V., Ramamurthy, K., & Haseman, W. D. (2001). User attitude as a mediator of learning performance improvement in an interactive multimedia environment: an empirical investigation of the degree of interactivity and learning styles. *International Journal of Human-Computer Studies*, 54(4), 541–583.  
<https://doi.org/10.1006/ijhc.2001.0457>
- Media and Attention, Cognition, and School Achievement on JSTOR. (n.d.).  
[www.jstor.org. https://www.jstor.org/stable/20053120](https://www.jstor.org/stable/20053120)
- Yang, H., & Meinel, C. (2014). Content based lecture video retrieval using speech and video text information. *IEEE Transactions on Learning Technologies*, 7(2), 142–154.  
<https://doi.org/10.1109/tlt.2014.2307305>