



Effects of Offline Videos as Supplementary Learning Material to Modules in Increasing the Grade 11 ABM Students' Learning Performance and Quality of Experiences

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ABSTRACT

This research focused on the use of offline videos as a supplement to modular instruction in the subject Organization and Management of Grade 11 – ABM students during the school year 2020 – 2021 at Imelda National High School, Población, Imelda, Zamboanga Sibugay to determine the effects of offline videos on learners' learning performance and quality of experiences. A quantitative–descriptive method was used in this study since the objectives of the researcher were to determine the average result in the organization and management tests before and after the intervention, and the significant increase in the percentage of the summative test between the pre-test and post-test results. The primary aim of this study is to examine the effects of using supplementary offline video material as a supplement to modular learning instruction in one of the high schools in the province of Zamboanga Sibugay. Offline videos were supplemented to students through online platforms like Messenger and email. The study used the experimental and control groups, the first group was taught using instructional modules with offline videos while the second group was taught using instructional modules only. There were four (4) pre-tests and post-tests given to collect more accurate data. The results of the tests were collected and treated using mean and t-tests. As a result, students were better able to comprehend and recall important points from a lecture; these enhancements were significant for students' learning outcomes. The findings showed that displaying the educational meaning of supplementary videos was a more effective tool for increasing students' learning. Participants were pleased with the technical aspects and the lecture presentations' quality. The study results revealed that it produced remarkable research results and affirmed that using offline video learning materials as a support to modular instruction is the best way to improve students' academic or learning performance during this pandemic period, as evidenced by the given research results. The research study confirmed a positive result through subjective assessments of students' quality of experience with the use of offline video learning materials.

Keywords: ABM students, learning performance, quality of experience, students' performance, supplementary offline video

1. INTRODUCTION

WHEN COVID-19 spread and halted all agencies' operations, from manufacturing to service, classes in all schools around the world were affected by the pandemic. Schools stopped the daily routine or the usual thing students and teachers do, face-to-face classes were

stopped, and learning was affected.

DepEd issued Memorandum Order 42, series of 2020 mandating all schools in the country to implement social distancing among students, teachers, and other stakeholders within school premises, and issued an official statement dated March 22, 2020, to cancel all formal classes from kindergarten to senior high school and stopped face-to-face

teaching. The department's decision to temporarily close public and private schools was prompted by the principle that large, or mass gatherings contribute to a serious risk to safeguarding the health of the public during the pandemic. When the school officially opened on October 5, 2020, many of the schools opted to choose modular distance learning instruction. San Antonio (2020) mentioned that almost 13 million public school students or 59% of roughly 22 million enrollees this year will be using printed modules.

Schools in the country opted to choose different modalities to support students' learning, most of the schools used modules, and the difficulty of learning from modules was experienced by learners, and offline videos were used to supplement students' learning. Offline videos are educational videos recorded and made available to students containing the discussions and in-depth explanations of the lessons in the modules.

For the setup in the Senior High School, all learners enrolled in modular distance learning. The process of modular is that the teacher releases the modules, and the parent/guardian returns the answered modules after a week and the same cycle happens in the following week and so on. One of the problems of the students was when the Organization and Management (OM) subject was introduced in the first semester to the ABM students using modular instruction, as students were not able to comprehend some of the management concepts and resulting in lower grades. Some of the students are fast learners but some are not, management subject lessons are fast-facing and almost all topics are interrelated to each other, in other words, one topic is a prerequisite for another topic/s. Some students got low grades in their performances because they believed that they could not solve management situational analysis cases or practice sets. During the first two weeks (which covers four modules or equivalent to four-week lessons), thirty (30%) of the entire class got low grades in both guided practice and independent practice activities. The statement above is congruent with the study of Chen (2017) that the instructional process in the modularized program is below expectation. Students were still found to be outsiders in the process of knowledge construction playing a recipient role. It was also found that continuous assessment has continued to be perceived and practiced as continuous testing in which students sat for tests and quizzes frequently with no written and/or oral feedback. The modules are composed of identification, classification, multiple-choice, and performance tests. However, the Mean Percentage Score in the Organization and Management subject of Grade 11 ABM during the first two weeks is 82.78%. The standard MPS is 75. In total, ABM students got passing grades and MPS.

The concern of this research endeavor is that the scores and MPS could be higher if they could better understand and remember key points of a lecture in the mini-lesson well.

This action research focuses on the idea that offline videos containing lectures for every module of the concerned subject could help students to understand the concepts better and achieve higher scores and mean percentage scores or MPS.

1.1 STATEMENT OF THE PROBLEM

This research sought to provide answers and document the effects of offline videos as a supplement to modular teaching instruction in Organization and Management subjects in Grade 11 – ABM students

of Imelda National High School in the school year 2020 – 2021. This study sought to answer the following questions:

1. Does the use of offline videos as a supplement to modular instruction improve the learning performance and quality of experiences of the ABM students in the Senior High School of Imelda National High School in Organization and Management subject?
2. How effectively do offline videos as a supplement to modular instruction improve the learning performance and quality of experiences of Grade 11 ABM students at Imelda National High School?
3. Is there a significant difference in the pretest mean scores between the control group and the experimental group?
4. Is there a significant difference in the post-test mean scores between the control group and the experimental group?
5. Is there a significant difference between the mean gain scores between the control group and the experimental group?

2. METHODOLOGY

This research focused on the use of offline videos as a supplement to modular instruction in the subject Organization and Management of Grade 11 – ABM students during the school year 2020 – 2021 at Imelda National High School, Población, Imelda, Zamboanga Sibugay to determine the effects of offline videos on learners' learning performance and quality of experiences.

A quantitative–descriptive method was used in this study since the objectives of the researcher were to determine the average result in the organization and management tests before and after the intervention, and the significant increase in the percentage of the summative test between the pre-test and post-test results.

The study is descriptive in nature because the study wanted to discover the association between variables, in this study the researcher wanted to look at the relationship between offline videos to students' learning performance and the quality of experiences.

This research utilized the quasi-experimental research design because the respondents were not grouped by randomization and since there was one section used for the study, a total enumeration of sampling was used. This design involves the use of two groups namely; the experimental and control groups. The experimental group was taught using instructional modules with offline videos while the control group was taught using instructional modules only.

The respondents were one section of Grade 11 ABM students of Imelda National High School who were enrolled for the school year 2020 – 2021. The sampling used was a total enumeration or census sampling since there was only one section for ABM Strand in the school. The respondents of this study were divided into two heterogeneous groups; one group was classified as a control group and was taught using instructional modules only while the other group, the experimental group, was taught using instructional modules with offline video as supplementary. Both groups are taught the same subject matter. The researcher distributed hard copies of both the pretest and posttest for week one and week two respectively during the distribution of modules to both groups (control and experimental). During the conduct of the pre-tests and post-tests, the learners were monitored and checked in the group chat. The offline videos were sent through learners' messenger/email.

As to the validity of the instruments used, the modules used during the conduct of the study were checked and validated by the Division Quality Assurance Team, the pre-tests, and post-tests were validated by two experts in assessment and one in teaching pedagogy within the school.

The researcher asked permission from the School Principal and Assistant Principal of the Senior High School to conduct a study. The researcher provided a consent form to the parents of the research respondents stating the terms and conditions of the research study since the respondents were minors and in conformance with the Data Privacy Act of 2012. The respondents were also informed of the results of the research study.

TABLE 1
 RESPONDENTS OF THE RESEARCH

Grade Level and Section	No. of Respondents	
	Pre-test	Post-test
Grade 11 ABM (Control Group)	10	10
Grade 11 ABM (Experimental Group)	10	10

Table 1 provides the respondents of the research. The pre-test – post-test experimental and control group designs were assigned to the ABM group and were measured or observed twice. This means that there were two pre-tests and two post-tests given to the respondents to collect more accurate data and for reliability. The measurements or observations were collected after each test was completed by the respondents and this was done during the retrieval of modules.

Moreover, the questions in the pre-test and post-test were given by the researcher. The Grade 11 - ABM students were grouped into two (2) and were taught the subject matter and were tested using the same questions. The research started in December 2020 and ended in April 2021 of the same school year.

The findings of the study became essential in intensifying the use of offline videos as supplementary learning material for Grade 11 ABM students in implementing a modular distance learning program through administrators' consideration and perusal of the matter.

3. RESULTS AND DISCUSSION

The following tables show the effectiveness of the offline videos as a supplement to modular instruction to improve the learning performance and quality of experiences of Grade 11 ABM students of Imelda National High School, including the advantages and disadvantages, and lastly, the table also features the significant difference in the pretest mean scores between the control group and the experimental group.

TABLE 2
 MEAN RESULT OF TWO (2) PRETESTS AND POSTTESTS

	n	Mean of the Pre-test Result	Mean of the Post-test Result
Control	20	15.9500	16.8000
Experimental	20	18.2000	18.6000

Table 2 shows that the result of posttests increased in the experimental group and was always higher than the control group in both tests. The research study indeed proved that offline videos as a supplement to modular instruction improved the learning performance and quality of experiences of the ABM students in the Senior High School of Imelda National High School in Organization and Management subject.

The experimental results revealed that the approach that focuses on supplementing videos as a follow-up to the lecture presentation in the modules has the greatest effect on learning efficiency and enhancing ABM students' learning output and quality of experiences. Both contexts of the supplementary videos yielded the same findings. It showed the importance of using offline videos as learning materials in supplement with modular instruction.

Furthermore, the data in Table 2 also showed that there is a big difference in the test results of students when it is supplemented by offline videos as learning materials and increases students' quality of learning experiences.

It demonstrated that supplementing students' modular learning with offline videos will improve memory by watching repetition and better comprehension of the learning process. As a result, regardless of the location or background of supplementary videos, methods of supplementing offline videos as teaching materials resulted in a higher number of correct answers.

The findings showed that displaying the educational meaning of supplementary videos was a more effective tool for increasing students' learning. Participants were pleased with the planning of the experiment procedure, technical aspects of the presented content, and quality of the lecture presentation, according to the experimental results of the quality of experience evaluation for each tested method of using supplementary offline videos.

The result of the study was supported by Evans (2008) and Ozan (2013) instructional videos are more instructive and informative as support to learning since learners can easily access them.

In the study of Karmila et al. (2020), they probed that instructional or lecture videos contributed to the improvement of students' understanding and academic achievement.

TABLE 3
 T-TEST OF THE DIFFERENCE IN THE PRETEST MEAN SCORES BETWEEN THE CONTROL AND THE EXPERIMENTAL GROUPS

Groups	N	Mean	SD	Mean Difference	t-test	p-value	Interpretation	Decision H_0
Control	20	15.9500	2.01573	1.40000	-2.405	.027	Significant	Rejected
Experimental	20	18.2000	1.32188					

Table 3 presents the pretest mean scores of both control and experimental groups with a mean difference of 1.40000 with a p-value of 0.027 which was less than the 0.05 level of significance, this means that the difference was significant which implied that the two groups of respondents had relatively not on the same status at the beginning of the study.

The findings of the study revealed that when learners encounter new concepts, their understanding differs because the topic is unfamiliar to them, which was not even the same as before in junior high school. Because the respondents were unfamiliar with the subject, a low pretest result was expected. A student's reaction to a new situation was influenced by inherent instincts to respond as well as factors from similar situations to which he/she had previously acquired responses or even inferences (Zilbersheid, 2013).

TABLE 4
 T-TEST OF THE DIFFERENCE IN THE POST-TEST MEAN SCORES BETWEEN THE CONTROL AND THE EXPERIMENTAL GROUPS

Groups	N	Mean	SD	Mean Difference	t-test	p-value	Interpretation	Decision H ₀
Control	20	15.9500	.99868	2.6500	-7.740	.000	Significant	Rejected
Experimental	20	18.200	.24495					

Table 4 illustrates the post-test mean scores of the 20 and 20 respondents from the control and experimental groups had a mean difference of 2.65000 and a p-value of 0.000 which was less than the 0.05 level of significance which revealed a significant result. The computed t-value (-7.740) implied that using offline videos to support students' learning would increase their learning performance and quality of experiences. The results of the post-test revealed a substantial difference in the student's performance in the subjects, indicating that using offline videos as supplementary learning material for ABM students in teaching concepts and theories in Organization and Management was a better teaching tool. This was also supported by Cruze (2014) in her study stating that it was indeed clear that offline videos are a gateway to new learning modalities.

TABLE 5
 T-TEST OF THE MEAN GAIN SCORES BETWEEN THE CONTROL AND THE EXPERIMENTAL GROUPS

Group	N	Mean	SD	Mean Difference	Mean Gain	t-test	p-value	Interpretation	Decision H ₀
Control	20	15.9500	.99868	2.6500		-7.740	.000	Significant	Rejected
Experimental	20	18.200	.24495						

Control	20	15.9500	2.01573	0.85	0.45	-3.240	.039	Significant Rejected
Experimental	20	18.200	1.32188	0.40				

Table 5 shows the mean gained scores for both the control and experimental groups were shown with a mean gain of 0.45 and a significant p-value of 0.039. Since the respondents only study when they were ready, they were never "forced" to learn, and learning took place, it was implied that using offline videos as supplementary to modules as a tool in increasing students' learning performance and quality of experiences was an effective method of teaching and learning that would help improve learners' performance.

The result of this study was also supported by Thorndike's Law of Readiness which states that a satisfying state of learners' satisfaction results when an individual was ready to learn and was allowed to do so. Being forced to learn when not ready, or being prevented from learning when ready to learn, results were unsatisfactory.

4. CONCLUSION

The aim of this study was to determine the effects of offline videos as a supplement to modular teaching instruction in Organization and Management subject in Grade 11 – ABM students of Imelda National High School in the school year 2020 – 2021. Based on the results, it was proven that the use of offline videos as supplementary learning materials to modules improves the students' academic performance in the subject Organization and Management. In the situation where the teachers could not provide the venue for face-to-face classes, offline videos can help supplement the learning that cannot be given by modules alone, thus it served as a bridge to students' learning gap. The offline videos provided the student enough time to pause and play the video according to their convenience, through this process students can learn from the video itself. The accessibility to offline instructional videos made the students maximize the resources provided by the school and most importantly the teachers provided ways to deliver quality instruction despite the distance due to the pandemic.

5. RECOMMENDATIONS

Based on the series of tests through students' activities in the Organization and Management subject in the Senior High School, the researcher proposed some recommendations for ABM teachers, students, school administrators, and other researchers.

1. Teachers should support offline videos of topics that they find more difficult for students to understand in modular instruction.
2. Teachers should develop more offline videos as learning materials on different topics for variation of teaching strategies.
3. Students should be more adept at the latest trends in technology to cope with the increasing demand for digitalized lectures because of the pandemic.
4. School administrators should provide a seminar or training on developing offline videos through different digital platforms and

schools need to invest in training teachers with the latest technology updates so that they can produce offline videos relating to their lessons.

5. Future researchers should conduct a true experimental study on this study to determine the effect of offline videos as supplementary to modular learning on the academic performance of students in other learning areas to confirm the effectiveness of the use of offline videos.

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