

Modular and Recorded Video Lessons in Teaching Music, Arts, Physical Education and Health (MAPEH)

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Abstract: This study focused on determining the effectiveness of Modular and Recorded Video Lessons in teaching the subject Music, Arts, Physical Education and Health (MAPEH) and on identifying area of concerns based on findings. The modular and recorded video lessons presented to the respondents during class were designed by subject experts in Department of Education Carcar City Division. A quasi experimental method was used and a book-based pre-post-test was utilized as the main instrument in determining if there was an increase in students' performance after the delivery of the lessons in the second quarter. There were 50 students who participated in the study, a total of 25 students were exposed to modular lessons and another 25 students, to recorded video lessons. Results indicate that the performance level of the students from the modular group and experimental group increased significantly after the delivery of lessons however, there was no significant difference of performances between the control and experimental group in the post-test results. Hence, it can be concluded that the performance of both groups are comparable. The given results have been confirmed with a subjective assessment of students' regard for learning with the use of the learning modalities. The findings of the study are recommended for consideration in the school's effort for continual improvement in the delivery of quality education to students.

Keywords: MAPEH, recorded video lessons, quasi – experimental design, Carcar City division.

1. INTRODUCTION

The year 2020 has been challenging for the teachers because of the pandemic that started in Wuhan, China. The pandemic has created the largest disruption, and this is no exception in the field of education. It has affected the lives of all students across the world and this is highly considered the first pandemic to have had a profound impact on education (Schleicher, 2020).

According to a recent report, many schools and higher education institutions were closed (UNESCO, 2020, as cited in Marinoni, van't Land, & Jensen, 2020). Country like South Korea has been forced to close their schools shortly after they re-opened due to the emergence of more contagious corona virus cases (British Broadcasting Corporation [BBC], 2020). Yet there are schools that are still operating but then again, they have to get through new challenges and processes. Since the pandemic has also affected the teaching and learning process, classroom teaching has been replaced by distance teaching and learning. As a result, there are schools that are confronted with the sudden and unprepared shift to online teaching just like schools in India, where online education was not very common. The pandemic transformed the conventional chalk-talk teaching model to one driven by technology with the single stroke of a pen (Koti, 2020). The pandemic crisis really forced a move towards different learning modalities, thereby creating space for more flexible learning possibilities.

In the Philippines, while the government and health officials are trying to flatten the curve of this pandemic, the Department of Education (DepEd) has been exerting ways to continuously provide quality education to learners. DepEd is working hard to have various learning modalities of teaching and one of these is blended learning. Blended Learning from the point of view of the DepEd is a combination of online distance learning and in person delivery of printed materials to the different homes of the students through the help of the barangay. Learners are taught using a variety of learning materials and other various means (Custodio, 2020). According to Atty. Alberto Muyot, the rights of children to education can still be fulfilled even if schools are closed. The availability of learning delivery modalities may not be easy at this time but is very possible to explore. Because of this shifting of modality, many teachers or even students are challenged to equip themselves to keep abreast with this change (Save the Children, 2020).

Despite the challenges in the teaching and learning process, Carcar City Division strongly supports DepEd's program by providing quality relevant and accessible education in the new normal way of learning. This is made possible by innovating new tools and system for learning delivery modality and one of these is the Recorded Video Lesson (RVL). Since video plays a vital role in motivation, it provides avenue in facilitating many teaching approaches and supports the teaching and learning process (Hovland, Lumsdaine & Sheffield, 1949, cited in Cruse, n.d.). RVL from the viewpoint of the Carcar City Division is a learning delivery modality where teacher's discussion is recorded, saved and forwarded to the different learning centers with television sets provided to aid teaching and learning. The lessons of the modules and in the recorded video lessons are prepared and checked by the Carcar City Division experts.

As one of the MAPEH teachers in Tal-ut National High School, it is also the researcher's concern to know how effective the delivery of lessons in teaching MAPEH for grade 9 based on the learning delivery modality set by the Carcar City Division. With the use of recorded videos, this study would like to determine if students would have achieved more mastery of the different competencies and if this would help improve their mastery level and increase their academic performance in the field of MAPEH subject.

2. REVIEW OF RELATED LITERATURE AND STUDIES

Utilizing aural-visual materials inside the classroom is not new. Tracing back on how filmstrips were first used during World War II as an educational and training tool for soldiers (Hovland, Lumsdaine & Sheffield, 1949, as cited in Cruse, n.d.). Researchers, even educators have acknowledged the power of aural-visual learning materials to capture the interests of students, add their motivation and increase learning experience. The availability of aural-visual materials in the classroom was evident and so with the developed content and technology during that time. Lesson content has developed from different educational televisions during 1950s and 1960s, which allowed replay of recorded lectures, through different instructional televisions just to complement classroom instruction (Corporation for Public Broadcasting, 2004) and this becomes supplemental classroom tools (Cruse, n.d.).

Based on the recent research and educator surveys, educational televisions and recorded videos enhance reading and lecture material, help in the development of students' knowledge, reinforce comprehension and discussion, offer greater accommodation of diverse learning styles, enhance students motivation and energy and enable teacher effectiveness (Corporation for Public Broadcasting [CPB], 2004, as cited in Cruse, n.d.).

With the *No Child Left Behind* policy, educational institutions have this number of student achievement as reflected by systematic, empirical research. Media particularly television has been considered for over 50 years for its contribution and value to education and leads to a positive outcome in both academic and even emotional learning. A survey conducted in 2004 by the Corporation for Public Broadcasting revealed that children's watching of related educational series on television has been shown to have a positive and long-term learning outcome (Cruse, n.d.).

A research that has been conducted on the impact of educational television and recorded video on children literacy skills. It is found out that children's watching of Sesame Street (a television program) and so with their academic and mental development has been documented for over 35 years (Cruse, n.d.). Another study conducted stresses that the said Sesame Program provides powerful learning evidence for the educational effectiveness and this contributes to have a long-term positive benefit for students (Fisch, 2005, as cited in Cruse, n.d.).

A number of studies have supported the utilization of video with students in a different content areas and social skills. These include the study by Rockman et al. (1996, as cited in Cruse, n.d.) of the academic impact of home and school watching of Bill Nye the Science Guy revealed that students who viewed the program were able to give more complete

explanations of concepts after watching the show. In addition, the gaps in knowledge base between male and female and between minority and majority students were smaller and closer to parity after watching the program. A study of the impact of Cyberchase on children's problem-solving skills revealed that viewers outperformed nonviewers in solving problems and resulted in more complex solutions (Fisch, 2003, as cited in Cruse, n.d.). In two unrelated studies, the utilization of video to anchor learning instruction to a shared classroom experience showed in improved vocabulary use, more understanding of plot and characterization and the ability to draw inferences relating historical information (Barron, 1989, as cited in Cruse, n.d.).

Choosing an effective video is an important part of integrating and relating this medium into practice and realizing the promise of multimedia inside or outside the classroom. In reviewing all contexts of each major classroom technology over the past century, Fabos (2001, as cited in Cruse, n.d.) shows that one of the most important factors in achieving or failing educational videos is the quality of its content than the technology itself. Denning (no date, as cited in Cruse, n.d.) provides some suggestions when evaluating videos: Different presentations, age fit narration and thinking skills, chunking or organization of the lessons, offer meaningful examples, provide open-ended questions, throw questions to carry out individual thinking, and provide teacher an outline of possibilities for previewing activities. Since videos provide information both aural and visual, these two modes must work together for videos to be more effective. Too much sound, tracks, visuals, and narration that are align or fit with each other, and too much use of slides can somehow distract the main message of the lesson (Cruse, n.d.).

Hadgu, Huynh, and Gopalan (2016) stated in their study that it appears that the students of the digital times prefer to access pre-recorded lessons remotely than being inside the classroom. All of these and more have stirred to the different concerns on the conventional way of teaching. Some studies attempted to answer this dogma. Based on their findings, not all students assumed responsibility and used pre-recorded lessons as expected because only 36% of the students accessed pre-recorded lessons, and such behavior is observed by other students as well (Vandsburger & Duncan-Daston, 2011, as cited in Hadgu et al., 2016). The statistics of the student logs revealed that most of the students accessed these lessons only a day or two prior to their assigned exam (Hadgu et al., 2016). The same observations are made by others (Groissen, Van Bruggen, & Jochems, 2012, as cited in Hadgu et al., 2016) suggesting that students using pre-recorded lessons had less time to process the information that was given in the video format compared to live lessons. Other things such as lack of motivation, organization to plan scheduled study times, and the lack of prioritization and distractions could not be denied. Other similar studies from students who used pre-recorded lesson suggest that they were less effective than live lessons for the reason of the lack of visual and kinesics stimulation (Lovell, & Plantegenest, 2006, as cited in Hadgu et al., 2016). With virtual lectures come from a rich learning environment where teacher clarification and student-to-other student engagement flourishes. This proves that the live lessons experience and interactive classroom community can illustrate more actual information presented in class (Leadbeater, Shuttleworth, Couperthwaite & Nightingale, 2013, as cited in Hadgu et al., 2016).

Pre-recorded video lesson appears to help students excel and perform higher in MQ and CQ. Reasons like the ability to revisit terminology or other related concepts presented in the lecture videos at their own pace because of the ability to access these videos shortly before the exam (Prunuske, Batzli, Howell, & Miller, 2012, as cited in Hadgu et al., 2016). Recorded videos increase students engagement leading to their achievement. Since videos provide the power to pause and replay in some areas of the discussion or review areas in the lesson whereas in face-to-face lesson discussion, students depend on their ability to take down notes. In fact, a survey conducted by another study revealed that students in a face-to-face lessons showed that they spent most of their time in taking down notes rather than in listening and understanding the concepts (Leadbeater, Shuttleworth, Couperthwaite, & Nightingale, 2013, as cited in Hadgu et al., 2016). Furthermore, watching pre-recorded lessons can improve MQ accuracy by providing aural and visual cues highlighting the essential parts that students may have missed if they were to attend lessons in the face-to-face (Hadgu et al., 2016). In addition, their study reveals that pre-recorded lessons implementation can provide additional choices of study methods for learners (Cardall et al., 2010, as cited in Hadgu et al., 2016). Although pre-recorded lessons help facilitate learning instruction, improve students' learning memory, but it limits their understanding in conceptualizing complex ideas due to some technical problems (Rose, 2009, as cited in Hadgu et al., 2016). Interpersonal and professionalism skills development are essential parts of the students and usually learned in the traditional classroom experience. However learning through pre-recorded lessons alone may sometimes deprive students' interpersonal aspects of learning because they could not engage in groups of people that will help them interact and develop into professional beings (Karnad, 2015, Prodanov, 2012, as

cited in Hadgu et al., 2016). When lesson is delivered in a systematic way with the guidance of a teacher expected students will learn better in contrary to those recorded video lessons even if there's a teacher. In other words, learning through recorded video lessons offers limitations(Hadgu et al., 2016).

Other study suggests that utilizing personal video was valuable to teachers in Mathematics professional development. It also found out that using personal video may have been an agent for promoting other teaching mode by heightening teacher's attention to student's level of thinking, instructional preferences, and increasing accountability for Mathematical Professional Development (Coddington, 2017).

Karnad (2013) suggests that recorded lessons may also be a useful tool for students with learning disabilities. This is because of the strategic manner in which students utilize recorded lessons to reinforce their understanding of recorded material, rather than watching recordings as a replacement for attending lecture lessons. There are evidences that the availability of having access to recorded lectures is the main cause to miss lectures. Traphagan et al. (2009, as cited in Karnad, 2013) revealed in the survey that majority of students (55%) strongly agreed that they preferred to have recorded lessons in the class, and other available forms. Massingham and Herrington (2006, as cited in Karnad, 2013), revealed that competitions in school be it academic or sports and health related illnesses were the factors why these students missed lectures than the availability of recorded lessons. However, the result also revealed that students only spend attend lesson lecture if they get or perceive value in them, and having access to recorded lessons is unlikely to have an effect on class when not generally valued by students. They suggest that learners may benefit from being better informed about distance learning techniques in order to have more effective learning strategy. Taplin et al. (2011, as cited in Karnad, 2013) tend to argue that some studies may be biased towards student's preference on lecture capture. For example, as only 39% of students surveyed by Gosper et al. (2008, as cited in Karnad, 2013) claimed to "almost always or always" spend and attend live lessons, Taplin et al. (2011, as cited in Karnad, 2013) argue that sample used by Gosper et al. (2008, as cited in Karnad, 2013) mainly consisted of learners who were already using and valuing recorded lessons by iLecture. Taplin et al. (2011, as cited in Karnad, 2013) emphasize a valid point that the approaches used in some of these studies could lead to biased results. Students' feedback on recorded lessons has largely been positive (Woo et al., 2008, as cited in Karnad, 2013). Positive feedback giving to students with regards to recorded lessons may be clarified by the cognitive theory of multimedia learning, which simply translates that when the mode of delivery is presented through visual and aural modalities, students will be able to learn better and acquire more retention as this focuses the use of their working memory (Mayer, 2001, as cited in Karnad, 2013). Davis et al. (2009, as cited in Karnad, 2013) added that watching recorded related lessons contributes a lot in students' learning for it allows them to engage various activities that will no longer focused on taking down notes but instead they are into active learning like working cooperatively in a group of people with different backgrounds, participating lesson discussion and solving problem activities. Owston et al. (2011, as cited in Karnad, 2013) suggested that students have their preferred way in receiving information that depends on their ability to communicate effectively. It could be from a recorded way in teaching the lessons which was supported by media richness theory. It could also be in a face to face lesson discussion. Face to face communications is considered to be the richest modality because of its ability to provide cues, and other related responses. However, when students are exposed to emails, they may find it as difficult as face to face because they may experience limitations in some parts of the communication (Owston et al.,2011, as cited in Karnad, 2013).

Ritter (2012, as cited in Karnad, 2013) found that making lecture lessons available online to be time consuming and considered to be less likely to engage in the process. These attitudes and perceptions may also change as lecturers interact with recorded lessons. A survey conducted and it revealed that 72% of respondents preferred to watch recorded videos in advance however, 83% of respondents preferred to watch the recorded videos when they were ready.

Moskal et al. (2012, as cited in Karnad, 2013) acknowledge the effectiveness of blended learning and teaching, when it includes the lecture capture, student, lecturer, administrative and operational support networks to be more effective. Blended learning requires the participation of all stakeholders taking into considerations the impact it contributes to the whole activity, to the objectives and goals of the institution.

Kırkgöz (2011) revealed that students showed positive response with regards to video recording speaking tasks. Students were amazed on the important features of the utilization of this video recorded speaking task. It enables students to interact and collaborate with other classmates. It allows them to be more innovative which is in contrary to the conventional way in doing this in the classroom. It offers a good opportunity in facilitating learning.

Grobler (2013) reveals that majority of the students have experienced recorded video lessons as better than the presentation of micro-lesson. The following are some of the many ideas presented: DVD lesson was better than to micro-lesson simply because visual examples are better than just hearing what should be done. They have realized that learning and teaching are embedded in both student and teacher. They learned that there are different approaches of teaching.

With this, it gives insights on both strengths and weaknesses of the teachers. Lecturers sometimes forget that even students have their different learning styles. Learning must be more relevant and effective by accommodating the visual and kinesthetic learners more (Kiviet & Du Toit, 2010, pp.50/51, as cited in Grobler, 2013). With the analysis of the two recorded video lessons, it reveals that students realize the importance of attention phase in the lesson discussion proper and the successful implementation of teachers in delivering the lesson through proper utilization of the learning materials (Onwu, Botha, De Beer, Dlamini & Mamiala, 2010, p. 204, as cited in Grobler, 2013). As mentioned in the abstract, it revealed that 93.6% of the students had positive results about analysis and assessment of the lessons. However, 6.4% of the students were negative about this activity. Factors like time management, attention span, and short term memory that they were experiencing upon the exposure of the video lessons. In general, the utilization of recorded video lessons can be effectively used in instruction (Grobler, 2013).

Nagi (2016) stated that many researchers suggest that if students were exposed to videos provided with the tasks to be answered by them, they could acquire better understanding. For most of the students really learn especially when videos allocated time match to their attention span of time leading to better results in learning. All these are supported from various studies on the proper utilization of videos and recorded audios leading to positive learning outcomes. As early as 2002, Young and Asensio wrote a paper entitled as "Looking through 3 "I"s". They proposed a guide on the process how teachers properly utilize recorded videos with appropriate images, interactivity and integration across all the subjects. Willmot et al. (2012, as cited in Nagi, 2016) "showed that there is strong evidence that recorded videos can motivate and engage when integrated and incorporated into student centered learning activities." Work done by Kearney (2011, as cited in Nagi, 2016) shares some light on the benefits of utilizing videos to create authentic learning opportunities and possibilities for students as well as in stimulating and enhancing academic rigor. In an experiment conducted about teaching and learning process, it revealed that students could provide better assignments when watching youtube videos (Liberatore et al., 2013, as cited in Nagi, 2016).

Viksilä (2011) revealed that it appears that when teachers prepare a recorded video lecture, it has to be the same with giving a typical classroom teaching type of a lecture. The amount of energy of work to be done by each teacher to the video lesson increases significantly if these video lessons are created as the same in the live lectures. Utilization of video lectures can have more control of students' own time and place of studying. Video lessons make studying more convenient. In addition, video lectures are a good way to show what universities and other schools are really doing. However, many teachers have to update and even rearrange the content of their lesson when converting it to support the video lessons environment. It appears the learning will take place when schools have to better adapt students' life in different situations. Video lessons and independent learning seem to be a valuable opportunity to develop efficient and effective distance learning.

Bos, Groeneveld, Bruggen, and Brand-Gruwel (2016) revealed that there is a significant difference of the form of instruction towards the exam performance in the assessment of the knowledge base; however, it does not correlate to the higher order thinking skills. When evaluating the knowledge base, those students who preferred and used recorded lessons as a supplement scored significantly higher than those students who only attended lectures. It also revealed that time spent by supplementers had a low correlation with exam score than time being spent by the students who attended face to face lessons. The lower correlation can be explained by the diminishing returns of the extra effort. An increased number of time on task will lead to a marginal increase in their final mark (Bos et al., 2016). This opposes with the earlier research revealed that students spent time with longer duration in the recorded lessons. They achieved significantly higher scores (Cramer et al., 2007, as cited in Bos et al., 2016). Bos et al., (2016) revealed that to develop a knowledge base teaching lessons in different face to face seem to be the most effective teaching method in transferring knowledge. In other words, recorded lessons have added value for learning objectives that talk with developing a knowledge base, if only these recordings are being used miserly and with restraint. But for learning objectives that talk with higher order thinking skills, recorded lessons seem to offer less value though neither do face to face lessons (Bos et al., 2016).

When reading through books for an academic course sometimes becomes boring, digital media that are available online attracts anyone. This shows that visuals are more appealing and can make a person read multiple pages. Some youtube and TED videos are successful because of this characteristic: well-prepared short videos that engage the audience. However the importance of good video quality can add to the efficacy of the content. If videos don't have good quality sometimes it offers distractions to the viewers. These are a few suggestions to enhance e-learning videos: a) make short videos five to ten minutes; b) Videos should be in high quality; c) This should be made available all formats that can work with smart phones and other portable devices; d) Follow up questions are very necessary after every segment. This should be made available in the form of review video responses (Nagi, 2016).

Educational videos provide a variety of opportunities for learning that need to be explored. As mentioned in the different research studies, film, television, and even recorded videos are made more available and accessible through a Video-on-Demand and the potential for learning and or even exploration already exists before us (Cruse, n. d.).

3. RESEARCH METHODOLOGY

This study used the quasi-experimental method to evaluate the effectiveness of using recorded videos in the teaching of MAPEH to the Grade 9 students of Tal-ut National High School for SY 2020-2021. The pre-test post-test non-equivalent group experimental design was employed using appropriate statistical tools to analyze and interpret data.

The subjects in the study were the 50 Grade 9 students of Tal-ut National High School. Twenty-five students from Grade 9-St. Anne were in the control group and 25 students from Grade 9-St. Martha were in the group that was exposed to the intervention – the use of RVLs.

Since the two sections were in diverse classes, the investigator conducted a pairwise matching in relation to gender and grade 8 MAPEH grades to make sure that these aspects would not alter the outcome of the investigation.

Composition of respondents in both control and experimental group.

Group	Male	Female	%
Control Group	12	13	25 (50%)
Experimental Group	12	13	25 (50%)
Total	24	26	50 (100%)

This study was conducted in Tal-ut National High School located in Tal-ut, Valencia, Carcar City, Cebu. The school, was established in 2009, is one of the schools in the city of Carcar and second national high school in the barangay of Valencia. From an initial population of 40 students, it has currently grown to 424 student with 15 teachers, 4 functional classrooms, and one computer laboratory room. The school has two sections of Grade 9 composed of 52 and 54 students respectively.

The fundamental instrument of the investigation was a 40-item book-based exam. A pre-test and a post-test were given to both the control and experimental group. The tests covered the topics and competencies stipulated in the DepEd K to12 curriculum. The test questions focused on the following MAPEH topics: Music of the Classical Period (for Music), Arts of the Renaissance and Baroque Periods (for Arts), Social Dances and Dance Mixers (for PE), and Short-term and Long-term Effects of substance Use and Abuse for Health. The topics were not yet discussed for they were intended for week 5 and 6. A set semi- structured questions were asked during the focused group discussion with the group of students who experience the intervention strategy in order to solicit their regard for learning.

The researcher started the data gathering requesting permission to conduct the study from the Schools Divisions Superintendent of Carcar City and the School Head of Tal-ut National High School. Once approved, parents' consent and the student-participants' assent were also secured and documented. With the permission of the Superintendent of Carcar City and the School Head, the study was conducted in the second quarter of school year 2020-2021. The researcher personally administered the pre-test and the post-test to the two groups before and after the conduct of the experiment. These two groups were taught the same topics and competencies. The students in the experimental group were further assessed to determine how they regard their learning with the use of the pre-recorded videos. The researcher conducted a

focused group discussion wherein students were given open-ended questions and were encouraged to share their thoughts freely.

The following statistical tools were used in analyzing the data gathered.

Frequency - was used to determine the least and mastered competencies based on the responses.

Mean - was used to reveal the pretest and posttest MAPEH mean average score of both the control group and the experimental group.

Percentage - was used to find out the percentage gain in terms on the resulted pre and post-tests of the experimental and control groups.

T-Test - was used to determine the significant differences in the mean scores of experimental group and control group in the pre and post-tests.

4. RESULTS AND DISCUSSION

Pre-test MAPEH 9 Performance of the Control and Experimental Groups

The control and experimental groups were both given a pre-test to determine the entry level of the two groups prior to the conduct of the experiment.

Table 1 A: Pretest Scores of the Students in Control and the Experimental Group

Student	Control Group	Experimental Group
A	14	9
B	10	12
C	11	10
D	16	15
E	21	13
F	10	10
G	15	6
H	18	12
I	22	12
J	8	20
K	11	13
L	19	9
M	18	16
N	19	10
O	15	18
P	19	15
Q	10	17
R	23	13
S	10	11
T	19	13
U	17	23
V	15	9
W	13	15
X	12	16
Y	19	12
MEAN	15.36	13.16
%	51%	44%

As shown in table 1A, pretest results reveal that both groups did not meet expectation in performance level since the groups got a mean score below 75%. The results signify that the students in both groups did not have mastery of the said competencies.

Deped K- 12 curriculum is a spiraling curriculum which simply means that the competencies have been introduced from the lower grades but of different level of difficulty. The results further reveal that students' retention level is low. Some competencies really need a good foundation in MAPEH according to most of the school teachers. Challenges when in retention and mastery of the lessons are very common.

The results further imply that there could be other reasons that affect the students' performance like readiness of the students to answer the test. Since students are not yet exposed to the model of discussion, they really have a difficult time in answering the pre-test (Abella, 2017, as cited in Oacan, 2020). This means that students are expected to have low scores during the pre-assessment stage especially when basic concepts and skills were not harnessed during their foundation years of learning.

Table 1 B: Post-test Scores of the Students in Control and the Experimental Group

Student	Control Group	Experimental Group
A	19	18
B	18	17
C	18	26
D	25	24
E	29	24
F	27	10
G	23	16
H	24	24
I	24	21
J	11	30
K	13	18
L	27	16
M	24	24
N	24	19
O	24	32
P	22	12
Q	23	22
R	34	29
S	20	17
T	29	22
U	25	35
V	18	31
W	17	26
X	14	27
Y	25	21
MEAN	23.08	22.44
%	77%	75%

The same Post-test were given to the control group and experimental group to determine if there was an increase on their performances after instruction using the different instructional delivery. The control group yielded a 77% mean performance while the experimental group got 75%. Both results showed an increase from the pre-test means. This can be explained that students learned with the aid of the recorded videos with respect to the subject matter. Many students said that the videos were very convenient since they could watch it at their own pace, replay and review some parts that they did not understand the first time.

In the case of the experimental group, the overall performance could be traced to the kind of learning instruction they were exposed to and that is the use of the recorded video lesson throughout the learning process. As what Mohammed and Abdulghani (2016, as cited in Oacan, 2020) stated, recorded videos can be an opportunity in facilitating teaching and learning approaches like self -directed and collaborative way of learning.

Testing Difference of Pre-test and Post-test Scores

The outcomes of the Test of Difference on Pre-test and Post-test Scores of both groups are summarized in Table 2A and Table 2B.

Table 2 A: Test of Difference on Pretest Scores

	Computer T-Value	<i>p</i> -value	Decision on <i>H</i> ₀	Interpretation
Pretest Control- Pretest Experimental	1.82	0.081	accept <i>H</i> ₀	not significant
If <i>p</i> -value is ≤ 0.05 , significant				

Table 2A presents the test of difference on the pre-test scores of the students. The findings indicate that the t-value is 1.82 with the *p*-value of 0.08 which is greater than the 0.05 level of significance. This means that there is no significant difference between the pre-test scores of the control and the experimental groups, thus, accepting the null hypothesis.

This further signifies that their performance before the respective interventions were comparable – that no group performs better than the other. It can also be deduced from the mean and standard deviation that the students have extreme low scores during the pre- assessment stage.

This may be attributed to their lack of readiness, low comprehension skills and lack of retention of previous lessons. This problem is evident among public high school students especially in this time of pandemic where face to face classes are not yet possible.

These results are supported by Abello (2020, as cited in Oacan, 2020) who said that students really have a difficulty during the pretest because they were not exposed yet to the model of the discussion. This means that learners are expected to get low scores during the pretest especially when basic concepts and skills were not harnessed during their foundation years.

Table 2 B: Test of Difference on Posttest Scores

	Computer T-Value	<i>p</i> -value	Decision on <i>H</i> ₀	Interpretation
Post-test Control- Post-test Experimental	0.36	0.73	accept <i>H</i> ₀	not significant
If <i>p</i> -value is ≤ 0.05 , significant				

Table 2B reveals that there is no significant difference in the post-test mean scores between the control group and the experimental group of the students as shown by the data of the t-test value of 0.36 with the *p*-value of 0.73 which is greater than the 0.05 level of significance thereby accepting the null hypothesis. With this result, there is no statistically significant difference between the mean scores of students in the control and experimental group.

The modular approach used for the control group yielded fairly satisfactory performance. The results agree with the study of Nesmith (2008, as cited in Oacan, 2020) which says that students can still learn from the conventional approach of teaching but they are required to demand effort, time and memorization of facts and these limit the students to engage and do active and enjoyable activities related to the lessons. They take a passive role in the process of learning as they are mostly doing memorization of concepts and facts. On the other hand, the experimental group that was taught with recorded video lessons would have learned the concept better if the teacher had a follow up discussion after watching the recorded video lessons. It was noted that using the RVL may not be practical due to the fact that students had to watch the videos several times in order to fully understand the lesson. Other students needed assistance from the teacher. Videos can be a good springboard for students in stimulating students' interest and curiosity specifically those difficult topics. The students noted that the medium of instruction could also be a factor in understanding the concept delivered in the recorded video lessons English is the language of instruction used all throughout. These statements also suggest that English as a language of teaching is a potential barrier in understanding concepts. This result is supported by Sepulveda

(2003, as cited in Oacan, 2020) who said that language barrier has a significant effect on students' learning. The students considered this as an important tool in understanding related concepts.

The two groups were comparable in terms of their knowledge about the subject matter that no group performs better than the other.

Testing Mean Gain Difference in Scores

The main gain difference between the two groups; experimental and control is shown in the table that follows.

Table 3: Test of Difference in Mean Gain Differences of their Scores

	Computer T-Value	p-value	Decision on Ho	Interpretation
Difference	-1.0	0.33	Accept Ho	not significant

If p-value is ≤ 0.05 , significant

Table 3 reveals that there is no significant difference on the mean gain difference between the control group and the experimental group as shown in the t-test value of -1.00 with the p-value of 0.33 which is greater than the 0.05 level of significance, hence, accepting the null hypothesis. With this result, there is no statistically significant difference between the mean gain differences of the scores of students in the control and experimental group.

Different media have limitations and offer specific capacities, which give different learning experiences. In any method of instruction, learnings could have so much impact if with enough preparations. The utilization of these instructional videos has been evident in all schools nowadays and some of these enable students to experience less excitement in the learning process since they will just be sitting and watching and do not have the opportunity to engage to other students.

The results agree with the study of Muller (2008, as cited in Oacan, 2020) wherein the findings revealed that watching videos may not have necessary impact on students' learning and understanding of concepts even if the videos are within the standards and were clear, concise and easy to understand but it can somehow help the students be motivated in class. Another contributing factor is that students most of the time put a little amount of mental effort in watching the recorded videos. Students learn with the help and assistance of the teachers who provide more inputs as well as proper integration and utilization of the recorded video lessons as an instructional aid. As Steffes and Duveger (2012, as cited in Oacan, 2020) revealed in their study that a teacher must acquire a best possible plan for good quality video-delivery and content; hence, the absence of such factors can lead to students' poor performance in any subjects and will lead to lack of interest as well.

Output of the Study

This action plan is based on the findings of the study *Modular and Recorded Video Lessons in Teaching MAPEH 9*. The intent is to enhance both the Modular and Recorded Video Lessons used in the subject. This can be utilized for the delivery of the lessons. The feedback given by the students during the FGD are also considered in order to improve the two learning modalities.

The action plan is designed to provide directions to the teacher and the school in general who may wish to utilize and strengthen both modular and recorded video lessons in teaching MAPEH. It provides learning activities to address various issues and concerns, thus, addressing the varied needs and interests of the students. This further helps the teachers and the school in improving and sustaining the quality of instructional delivery.

General Objectives:

1. Develop activities which may be described as useful, productive, and may influence the successful implementation of modular lessons and RVL.
2. Initiate actions that will contribute to the resolution of the hindering factors, issues and concerns.
3. Show appreciation on the delivery of the modular and recorded video lessons by the successful implementation of the identified activities.

Areas of Concern	Objectives	Suggested Activities	Persons Involved	Materials/ Resources Needed	Sources of Fund	Timeline Date & Time	Expected Output
Learning Delivery Modalities (Modular & RVL)	<input type="checkbox"/> Enable teachers to create good quality instructional videos and modules <input type="checkbox"/> Design support strategy including technical support that guides to Modular and RVL pedagogy. <input type="checkbox"/> Enable teachers to design assessment tools appropriate to distance learning and too provide timely and constructive feedback to students	<p>More Workshop for the teachers in making RVL and trainings in crafting modules.</p> <p>Provision of Technical Assistance from the School Head and Division Office</p> <p>Assessment Tools Making Feedback Giving</p>	Teachers, ICT Coordinators School Head, Public Schools District Supervisors, Education Program Specialists, Resource Speakers	Internet Connection, Laptop, Cellphones, Snacks	Division MOOE, School MOOE	April 5-6, 2021 (2 days)	Produced RVL, Crafted Modules, MOV's: (Certificate, Narrative Reports, Documentation, Attendance Screenshot)
Leamers	<input type="checkbox"/> To create a monitoring and support system for students' engagement and participation in distance learning	<p>Crafting of the schedule of visits and establishments of Learning Centers (CLC's) in barangays</p> <p>Establishment of guidelines for the Home Visitation</p> <p>a. For students at risk of dropping out (SARDO) b. For regular students included in monitoring</p>	Teachers, School Head, PSDS	RVL's and Modules		Weekly	Answered Activity Sheets MOV's: Narrative Reports, Documentation, Attendance (Screenshots)
Language Barrier	<input type="checkbox"/> To create a Reading program appropriate to distance learning that will help improve students' reading comprehension thereby supporting independent learning.	<p>Creation of the Reading Work-out Program</p> <p>a. Comprehension b. Vocabulary c. Need-based intervention targeting the level of the students</p>	Teachers, School Head, Public Schools District Supervisors, Education Program Specialists, Resource Speaker	Internet Connection, Laptop or Cellphones, Snacks	Division MOOE, School MOOE	April 08, 2021 (1 day)	Module Activities, Test Questions Making MOV's: Certificate, Narrative Reports, Documentation, Attendance (Screenshots)

5. CONCLUSION

Based on the findings, both the modular lesson and recorded video lesson can be effectively used in instruction in teaching Music, Arts, Physical Education and Health.

6. RECOMMENDATIONS

Based on the findings of the study, the following recommendations are given.

1. The action plan, among other measures, be implemented to improve quality of instructional delivery.
2. Similar study be conducted to determine the effect of modular instruction and recorded video lessons in other subject areas with another group of participants.

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