

International Journal of Multidisciplinary Approach and StudiesISSN NO:: 2348 – 537X

Unveiling the Impact of Teacher-Crafted Video Lessons on Academic Excellence

Ghiselle Love U. Aniñon* & Fernan Q. Abragan**

Mindanao State University at Naawan9023, Naawan, Misamis Oriental Philippines School of Graduate Studies

ABSTRACT

This study seeks to know the perceptions of students towards the use of teacher-made video as a medium of supplementary instruction. One of the most varied and unique virtual learning tools available, video provides a sensory learning environment that helps learners comprehend more and remember information better. The study specifically addresses the academic performance, perception of the students in Science using teacher-made video, and the significant relationship between the students' academic performance in Science and their perception towards teacher-made video lesson. The data was collected for three grade levels (Grade 9,10 and 11). In total there were 96 students surveyed across the three grade levels using the quarter 1 and quarter 2 grades and the five level Likert items survey questionnaire. Due to the quantitative method research of this study, data was organized and analyzed using quantitative analysis software. Statistical Package for the Social Sciences (SPSS) version 29 was used to process and analyze quantitative data. The study found that with the use of teacher-made video lessons the results of the respondents grades were improved based on Figure 1. Majority of the students prefer watching video lessons as it enhanced by video snippets helped students pay attention, avoid boredom, and thus participate more actively in class both mentally and physically. 'Better comprehension' of subjects or problems pertaining to particular regions is often provided. Teacher-made video lessons provide the benefit of facilitating a deeper understanding for these students based on the results of the survey. However, the correlation between the between the students' academic performance in Science and their perception towards teacher-made video lesson shows low significance since only 4 out of the 18 questions were statistically significant. This further recommends the favorable time of the respondents and the enhancement skill of the teachers in producing video lessons.

KEYWORD: teacher-made video lesson, academic performance, perception, distance learning, covid-19 pandemic

INTRODUCTION

Teaching is not only the mere transmission of information, but rather is a process that requires understanding and assimilation by the recipient of the transmitted message. Therefore, it is essential that the channel selected by the teacher (the way to transmit the information) be the proper one to achieve the teaching objectives and the learning principles, which to a great extent depend on the effectiveness of the selected method or methods. Therefore, learning enables people to become involved and put all their senses to use, creating spaces for reflection about how they do things. Since the student population is an



ISSN NO:: 2348 - 537X

increasingly heterogeneous entity, meaning that the education system should find the new keys to efficiently satisfy student needs for achieving their objectives (Costa and Vansnick, 1997b).

Teachers used to conduct lectures, interactive activities, and other classroom engagements in a face to face mode prior to the COVID-19 pandemic. However, this global health catastrophe opened doors of opportunities to modify the way we teach mathematics in schools. Because of the pandemic, education had to migrate to the online environment (Crawford et al., 2020; Syauqi et al., 2020). With these limitations in pedagogy and learning resources in universities in the Philippines and other countries considering the new normal mode of learning, numerous studies suggested the use of educational videos in mathematics education and other fields. Ariyanti and Santoso (2021) found out that the students prefer online mathematics learning through videos where the teacher discusses the lesson in a stepby-step manner. It was also concurred by what Tanujaya et al. (2021) had advanced on the use of video in an effort to increase engagements between teachers and students in learning.

Teachers need to make more creative and innovative strategies to achieve the learning outcomes of mathematics instruction. Wang (2021), in his study in an online undergraduate math course, revealed that students improve much more in test performance when using fewer technologies and tools like videos and forums. The Covid-19 pandemic exacerbated the need to integrate appropriate technologies like videos in education to make online aided learning (Pal & Patra, 2020).

In line with this, the Department of Education OUCI-2020-307 suggests flexible learning options that will recalibrate the strategy of assigning teaching responsibilities to teachers and learning activities to the learners. Learners and home learning facilitators found to be experiencing difficulties shall be provided additional support by the teachers/learning support aides. A flexible learning option is defined as a design and delivery of programs, courses, and learning interventions that address learners' unique needs in terms of place, pace, process, and products of learning (Commission on Higher Education Memorandum No. 4, s. 2020). It involves the use of digital and non-digital technology and covers both face-to-face/in-person learning and out-of-classroom learning modes of delivery or a combination of modes of delivery. It ensures the continuity of inclusive and accessible education when the use of traditional modes of teaching is not feasible as in the occurrence of national emergencies.

One of the most varied and unique virtual learning tools available, video provides a sensory learning environment that helps learners comprehend more and remember information better. Computer-based video instruction (CBVI) has been defined as learning that has been created by instructors for their students, with a clear purpose, targeted learning objectives, an intended audience, and the ability to assess learning effectiveness after viewing (Gibbons et al., 1977; Kim & Thayne, 2015; Mechling, 2005; Rayner et al., 2009). The most popular social media platform for training is online video. According to academics, Facebook and YouTube are the two social media platforms most frequently utilized for business purposes. The usage of videos by accounting teachers to deliver course material is probably going to increase (Holtzblatt and Tschakert, 2011). Video has received a lot of support from educators and researchers as a crucial tool for setting the stage or context for learning. Videos are useful examples of digitized text, music, and image files that can be submitted to a shared online community.



International Journal of Multidisciplinary Approach and StudiesISSN NO:: 2348 – 537X

The students' smartphones and portable devices are rapidly increasing for the past years (Benedict & Pence, 2012; Ranga, 2017; Williams & Pence, 2011). As a result, students are overwhelmed by many online applications that can be used for learning school subjects. However, finding relevant online resources is a challenge for them to choose the most aligned learning materials taught in school. To address this, the teacher may create a customized lesson in videos or digital materials to use them as a replacement for face-to-face discussion, especially when distance learning happens. Students have learning ownership, utilizing self-paced learning, watching the video repeatedly, and providing a platform for reviewing the lesson. These empower the students to become responsible for their learning through devices as a ubiquitous opportunity.

On the other hand, it has been suggested that videos may only present a portion of the story when used in classroom instruction because they are open to individual prejudice and interpretation. Furthermore, evaluating the effectiveness on students' academic performance, behaviour and perceptions on teacher-made instructional video as an instrumental medium can be challenging and rather disputed. This study sought to know how students perceived the use of teacher-made video lessons to enhance the academic performance and learning process in accordance with the course objectives.

The current study seeks to know the perceptions of students towards the use of teacher-made video as a medium of instruction. The study specifically addresses three research questions:

- 1. What is the academic performance of the students in Science using teacher-made video lesson?
- 2. What is the perception of the students in Science using teacher-made video lesson?
- 3. What is the significant relationship between the students' academic performance in Science and their perception towards teacher-made video lesson?

METHODOLOGY

2.1 Research Model

A quantitative method employing a questionnaire to measure students' perceptions was used in this study. The study identified students' perception regarding the effectiveness of teachermade video clips used as classroom materials to realize the goals of the lesson. The survey created to assess student perception of the teacher-made video lecture was included in Appendix 3. The survey included the five level Likert items in which the students were asked to respond. The data was collected for three grade levels (Grade 9,10 and 11). In total there were 96 students surveyed across the three grade levels. Students' response to the survey was voluntary and anonymous. The researcher measured student performance using actual grades from quarter 1 and quarter 2. As an additional measure, the researcher asked students to self-report both their first quarter grade and second quarter grade. The researcher obtained performance data from 96 students. The questionnaire consisted of closed and semi-closed questions to provide objective and quantitative description data on the issues under discussion.

2.2 Data Analysis

Due to the quantitative method research of this study, data was organized and analyzed using quantitative analysis software. Statistical Package for the Social Sciences (SPSS) version 29



ISSN NO:: 2348 - 537X

was used to process and analyze quantitative data. In terms of the study's credibility, ethical standards were upheld at all times, as evidenced by the fact that everyone who participated in it was made aware of its purpose, treated with respect, and had their identities kept secret. To confirm the authenticity of the instrument's content, subject matter experts examined it. The results of this investigation were presented in the section that follows.

RESULTS AND DISCUSSION

1.1 Students' proficiency using Teacher-made Video Lesson

As shown in figure 1, the summary of the students' progress in the first and second quarter indicates their proficiency level. Following the DepEd Order No. 8 series 2015 adopting the policy guidelines on classroom assessment for the K-12 Basic Education Program, the grades were scaled together with its descriptor.

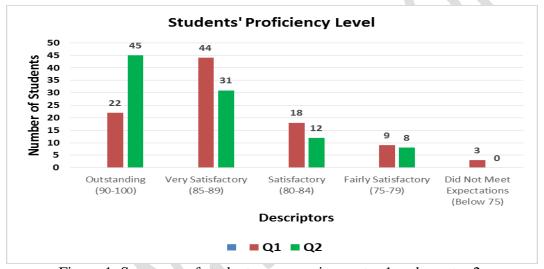


Figure 1. Summary of students progress in quarter 1 and quarter 2.

The students' proficiency level in quarter 1 shows that there are 22 who were outstanding, 44 were very satisfactory, 18 were satisfactory, 9 were fairly satisfactory, and 3 did not meet expectations. After a series of video lessons presented during the second quarter, the students' progress were collected. Outstanding students rose to 45, very satisfactory were down to 31, satisfactory were 12, fairly satisfactory were 8, and no students did not meet expectations. This figure indicates increase in student progress and proficiency level after watching the video lessons.

It agrees with what Kahrmann (2016) have found out that the teacher's voice has been found to be an effective design feature of the tutorials for both the students and the parents. All positive comments centered on how the tutorials sounded like the teacher was talking directly to the student in a conversational style which could result in an increase in student-teacher interaction (Bergmann & Sams, 2014). Moreover, learners learn best when teachers use as varied instructional interventions as possible to provide opportunities to grasp the lesson in the most interactive and engaging multimedia instruction, like the use of videos (Eren & Ergulec, 2020). Hence, teacher-created videos make learning personalized, as reflected in the personalization principle of Mayer et al. (2015).



and Studies

International Journal of Multidisciplinary Approach

ISSN NO:: 2348 – 537X

1.2 Academic performance of the students in Science using Teacher-made Video Lesson Table 1. Academic performance of the students in Science using Teacher-made Video Lesson

	Mean	N	Std. Deviation
QUARTER 1	85.75	96	5.3567
QUARTER 2	88.17	96	5.3992

Table 1 presents the performance of the students in Quarter 1 and Quarter 2. The quarter 1 mean of the students' grade is 85.75 (SD = 5.3567), and the quarter 2 mean of the students' grade is 88.17 (SD = 5.3992). It indicates that there was an increase in their mean performance from quarter 1 to quarter 2. It means that with the use of teacher-made video lessons the results of the respondents grades were improved.

According to Sloan and Lewis (2014), stated that students who watch lecture videos report that they have a greater knowledge of the material, and some studies have found that this is reflected in their marks. It corroborates with the study of Kahrmann (2016), who found out that other factors that students' thought enabled the videos to be effective included the videos being available on their phones so they could watch them anywhere, anytime. With the increased use of video lessons, students might get the optimum benefits from these resources and eventually might become self-directed learners (Ozkan & Budak, 2021).

2. The perception of the students in Science using Teacher-made Video Lesson

The survey created to assess student perception of the video lecture is included in Appendix 3. The survey includes 18 sets of five level Likert items to which the students were asked to respond. The data was collected for three grade levels (Grade 9, 10, 11). In total there were 96 students surveyed across the three levels. No link can be made to the performance of an individual student in the class and their responses. A summary of responses for each individual question is displayed in Table 1 to 3. Each specific question is displayed below the corresponding figure.

Table 1: The perception of the students in Science in terms of the usefulness of Teachermade Video Lesson

	Mean	Std. Deviation	Interpretation
Q1: I found the video lesson useful.	4.12	.637	Agree
Q2: The video was a faster way to cover lessons than a face-to-face lecture.	2.88	1.181	Neutral
Q3: The video was a more effective way to cover lessons than a face-to-face lecture.	2.83	.959	Neutral
Q4: I was able to learn more from the video lesson since I was able view at my own pace and to rewind and review portions, I did not understand the first time.	3.77	.718	Agree
Q5: I missed being able to ask questions during the video lesson.	3.37	.976	Neutral



ISSN NO:: 2348 - 537X

The means were interpreted are as follows: Strongly disagree in the point range of 1.00-1.80, Disagree 1.81-2.60, Neutral 2.61-3.40, Agree 3.41-4.20, and Strongly Agree 4.21-5.00

As shown in Table 1, responses to questions were generally polarized indicating general agreement among students as to their views on the effectiveness of the method. Based on the Table 1, the results of questions 1 and 4 with mean of 4.12 and 3.77, and standard deviation of 0.637 and 0.718 respectively, a vast majority of the students found the video lesson useful and to learn at their own pace and to review areas when and where required as opposed to being tied to the pace of the entire class. Questions 2, 3, and 5 was designed assuming that majority would feel that video lesson was the most effective and that many students find it neutral in their response. This may be in part since many students do regularly ask questions during lecture and leave it to a few students who feel comfortable doing so.

Table 2: The perception of the students in Science using Teacher-made Video Lesson if time constraints were considered.

	Mean	Std. Deviation	Interpretation
Q6: I found the lesson examples in class useful.	4.29	.679	Strongly Agree
Q7: If time constraints were not an issue, I would prefer both lecture and lesson activities to occur face to face in class time.	3.77	.840	Agree
Q8: Taking into consideration time constraints I would prefer all lecture to take place, face to face in class to be covered by textbook examples.	3.49	.929	Agree
Q9: Taking into consideration time constraints I would prefer only lesson activities in face-to-face class time and all lecture to take place via recorded video.	3.19	1.039	Neutral
Q10: Taking into consideration time constraints I would prefer some lectures to take place via recorded video and the time made available to be used for performing the lesson activities.	3.48	1.005	Agree

The means were interpreted are as follows: Strongly disagree in the point range of 1.00-1.80, Disagree 1.81-2.60, Neutral 2.61-3.40, Agree 3.41-4.20, and Strongly Agree 4.21-5.00

Table 2 is intended to show the desires of students in relation to division of class time devoted to do class activities and that devoted to lecture. A majority expressed the value of having activity sessions in class and would prefer both lecture and activities to occur in face to face if time constraints were not an issue. These can be seen from the results of question 7 with a mean of 3.77 and a 0.840 standard deviation. Also, mostly students agreed the shift of some lectures to take place via video lesson and face to face as a viable alternative given time considerations as shown in question 8 and 10. Students are not clear to prefer only lesson activities in face to face class time and all lecture via recorded video as it described in question 9.



ISSN NO:: 2348 - 537X

Table 3: The perception of the students in Science if several lectures presented using **Teacher-made Video Lesson**

	Mean	Std. Deviation	Interpretation
Q11: If several lectures were presented via			
video lesson, I would watch none of the	2.63	1.233	Neutral
videos.			
Q12: If several lectures were presented via			
video lesson, I would watch some of the	3.40	.923	Neutral
videos.			
Q13: If several lectures were presented via	3.41	1.042	Agree
video lesson, I would watch all of the videos.	J. 4 1	1.042	Agice
Q14: If several lectures were presented via			
video lesson, I would watch the videos before	3.83	1.063	Agree
the corresponding lesson activities.			-
Q15: I would watch the videos more than once	4.07	000	A ama a
to review the lesson.	4.07	.909	Agree

The means were interpreted are as follows: Strongly disagree in the point range of 1.00-1.80, Disagree 1.81-2.60, Neutral 2.61-3.40, Agree 3.41-4.20, and Strongly Agree 4.21-5.00

Table 3 shows that students response if several lectures were presented via video lesson, they would watch none or some of the videos were neutral as described in question 11 and 12 with mean of 2.63 and 3.40, and standard deviation of 1.233 and 0.923 respectively. This is one key concern that students might just ignore the videos and miss out on a significant source of the theory behind the activities being performed. However, many students indicated that they had watched and that they would watch videos more than once. This could alleviate some of the time demands imposed on faculty as well as improving understanding and retention.

Table 4: The perception of the students in Science using videos made by the subject teacher and a stranger

	Mean	Std. Deviation	Interpretation
Q16: I would prefer to watch the videos only made by the subject teacher.	3.51	1.076	Agree
Q17: I would prefer to watch the videos only made by a stranger.	3.05	1.080	Agree
Q18: I would prefer to watch the videos both made by the subject teacher and a stranger.	3.92	.902	Agree

The means were interpreted are as follows: Strongly disagree in the point range of 1.00-1.80, Disagree 1.81-2.60, Neutral 2.61-3.40, Agree 3.41-4.20, and Strongly Agree 4.21-5.00

As shown in Table 3, an overwhelming majority of students that they would prefer to watch videos both made by the subject teacher and a stranger. This may be due to the fact that they can also access video lessons from other sources like YouTube and Facebook where they can watch and also enjoy the videos.



and Studies

International Journal of Multidisciplinary Approach

ISSN NO:: 2348 – 537X

Majority of the students prefer watching video lessons as it enhanced by video snippets helped students pay attention, avoid boredom, and thus participate more actively in class both mentally and physically. 'Better comprehension' of subjects or problems pertaining to particular regions is often provided. Teacher-made video lessons provide the benefit of facilitating a deeper understanding for these students.

Table 5. Relationship between the students' academic performance in Science and their perception towards teacher-made video lesson

Pearson Correlation between Academic performance and questions on Student Perception	r - value p - valu		Remarks
1. I found the video lesson useful.	-0.055	0.594	Not Significant
2. The video was a faster way to cover lessons than a face-to-face lecture.	-0.079	0.443	Not Significant
3. The video was a more effective way to cover lessons than a face-to-face lecture.	-0.011	0.882	Not Significant
4. I was able to learn more from the video lesson since I was able view at my own pace and to rewind and review portions, I did not understand the first time.	0.015	0.594	Not Significant
5. I missed being able to ask questions during the video lesson.	-0.244	0.017	Significant
6. I found the lesson examples in class useful.	-0.016	0.875	Not Significant
7. If time constraints were not an issue, I would prefer both lecture and lesson activities to occur face to face in class time.	0.108	0.293	Not Significant
8. Taking into consideration time constraints I would prefer all lecture to take place, face to face in class to be covered by textbook examples.		0.558	Not Significant
9. Taking into consideration time constraints I would prefer only lesson activities in face-to-face class time and all lecture to take place via recorded video.	-0.124	0.229	Not Significant
10. Taking into consideration time constraints I would prefer some lectures to take place via recorded video and the time made available to be used for performing the lesson activities.	-0.103	0.059	Not Significant
11. If several lectures were presented via video lesson, I would watch none of the videos.	-0.226	0.027	Significant
12. If several lectures were presented via video lesson, I would watch some of the videos.	-0.104	0.312	Not Significant
13. If several lectures were presented via video lesson, I would watch all of the videos.	-0.053	-0.053 0.606 Not Sig	
14. If several lectures were presented via video lesson, I would watch the videos before the	-0.147 0.152 Not Signific		Not Significant



International Journal of Multidisciplinary Approach and Studies ISSN NO:: 2348 – 537X

corresponding lesson activities.			
15. I would watch the videos more than once to review the lesson.	-0.204	0.046	Significant
16. I would prefer to watch the videos only made by the subject teacher.	-0.100	0.333	Not Significant
17. I would prefer to watch the videos only made by a stranger.	-0.180	0.079	Not Significant
18. I would prefer to watch the videos both made by the subject teacher and a stranger.	-0.215	0.035	Significant

^{*.} Correlation is significant at the 0.05 level (2-tailed)

Table 3 shows the correlation between the Students' perception towards teacher-made video lesson (Questions 1-18) and their Academic Performance in Science. The tables describes that out of 18 questions only 4 (5, 11, 15, 18) shows significant relationship between the students' academic performance in Science and their perception towards teacher-made video lesson. The remaining 14 questions (1, 2, 3, 4, 6, 7, 8, 9, 10, 12, 13, 14, 16, 17,) shows that there is no significant relationship between the two variables.

CONCLUSION AND RECOMMENDATIONS

Based on the findings, the respondents had favourable perceptions. The results of the questionnaire's positive percentages for each statement allowed one to see it. The majority of respondents acknowledged that it held their interest, accelerated their academic progress, exposed them to current events, enhanced the quality of their assignments, gave students more control over their learning, and that teacher-made videos are practical, affordable, and available.

The use of teacher-made video lessons can be suggested since videos allow for more effective learning environments by arousing student interest, helping focus on the topic, helping refocus when interest wanes and helping students reach learning goals via sound and images. The researchers found that, students' perceived videos in general as being of some benefit to their learning process. The findings show that teacher-made video lessons are very important to the participants' learning outcome and approach. However, it must be noted that effectively using video requires effort and planning on the part of teachers.

In view of the established findings, the use of teacher-made video lessons improves the academic performance of the students in. It provides the students adequate time to understand the lesson because of its pause-and-play property. In a situation where the teacher could not give the face-to-face instructions, offline videos can convey science concepts and processes. Its accessibility across time and place is of great help to students who have no access to a stable internet connection. Maximizing the use of available resources provided by the government, the school, and most importantly, the teacher is very necessary as this will pave the way in the delivery of quality education not only during the COVID 19 pandemic but in other situations where distance learning is the only option.

^{**.} Correlation is significant at the 0.01 level (2-tailed)



ISSN NO:: 2348 - 537X

However, Weng et al. (2014) highlight the obstacles that may prevent teachers from adopting CBVI, such as the preparation and actual video making being time-consuming, particularly if technological knowledge and self-efficacy is low. External barriers such as lack of time, professional development, technical support and connectivity concerns mirror those found in general education technology literature (Bower, 2017; Minshew & Anderson, 2015; Penuel, 2006).

In terms of the low correlation between the students' academic performance in science and their perception towards teacher-made video lesson, this may be due to the fact that survey was done during the last period of the class, indicating an hour before lunch time. Moreover, the respondents are 100% Muslims and were having their one-month fasting period as part of the celebration of Ramadhan. The study of Osterbeek and Klaauw, that discusses Ramadhan, fasting and educational outcomes, find that Ramadan observance has a negative impact on performance; one additional Ramadan week lowers the final grade of Muslim students by almost 10% of a standard deviation. It being recommended in this study that survey must be made during the favorable time of the respondents, enhancement skill of the teachers in producing video lessons.

Implication

It has shown that after using teacher-made video lessons students tend to feel they have an enhanced understanding of content, and some studies have indicated better learning outcomes as evidenced by improved grades. This implies that the use of teacher-made video lesson as a means to increase available time for in class activity performance in a teaching and learning context has been well received by a large number and varied group of students. A portion of face to face lectures was replaced with pre-recorded lecture video whose viewing was assigned for homework. The freed lecture period was used for additional in class activity development. The effectiveness of the change in format was assessed through an anonymous online survey in which students indicated strong support of the approach. Many felt they were able to learn more effectively and gain a better understanding of conceptual material as well as problem solving experience. It is unclear whether this was actually the case or if this was merely perception. Among other things, that teacher-made video lessons increase students' desire to participate in class.

REFERENCES

- Antonio, Rommel Jr. (2021). Teacher-Made Offline Video Lecture (T-MOViLe): Its Effect to Students'
- Performance in Mathematics: Binan Integrated National High School ii.
- https://www.researchgate.net/publication/363503526 iii.
- iv. Ariyanti, G. & Santoso, F. (2021). The effects of online mathematics learning in the covid-19 pandemic period: A case study of senior high school students at Madiun City, Indonesia. *Mathematics Teaching Research Journal*, 12(3), 4-11.
- Bana E Costa, C.A. And Vansnick, J.C. (1997b). A theoretical framework for v. by a Categorical Based Evaluation Measuring Attractiveness (MACBETH). Multicriterua Analysis, Springer, Berlin, pp. 15-24.



and Studies ISSN NO:: 2348 – 537X

- vi. Benedict, L., & Pence, H. E. (2012). Teaching chemistry using student- created videos and photoblogs accessed with smartphones and two- dimensional barcodes. Journal of Chemical Education, 89(4), 492-496. https://doi.org/10.1021/ed2005399
- vii. Bergmann, J. and Sams, A. (2014). Flip Your Classroom Reach Every Student in Every Class every day. Get Abstract Compressed Knowledge.
- viii. Bester, G. & Brand, L. (2013). The effect of technology on learner attention and achievement in the classroom. South African Journal of Education. Vol.33, No.2, 1-15. Retrieved from http://www.scielo.org.za/scielo.php?script=sci_arttext&pid=S0256-01002013000200001
- ix. Birişçi, S. (2013). Attitudes and opinions of students on video conference based distance education. Journal of Instructional Technologies & Teacher Education, Vol.2, No.1, 24-40. Retrieved from http://www.jitte.org/ojs/index.php/jitte/article/view/
- x. Boateng, R., Boateng, S. L., Awuah, R. B., Ansong, E., & Anderson, A. B. (2016, May 11). Videos in learning in higher education: Assessing perceptions and attitudes of students at the University of Ghana Smart Learning Environments. SpringerOpen. Retrieved May 1, 2023, from https://slejournal.springeropen.com/articles/10.1186/s40561-016-0031-5
- xi. Bollmeier, S., P. Wenger and A. Forinash (2010), 'Impact of online lecture capture on student outcomes in a therapeutics course', *American Journal of Pharmaceutical Education* 74, no. 7: 1–6. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2972522/.
- xii. Choi, H., and S. Johnson (2005), 'The effect of context-based video instruction on learning and motivation in online courses', *The American Journal of Distance Education* 19, no. 4: 215–227. https://doi.org/10.1207/s15389286ajde1904_3.
- xiii. Commission on Higher Education. (2020). Memorandum no. 4 series of 2020: Guidelines on the implementation of flexible learning.
- xiv. https://ched.gov.ph/wp-content/uploads/DRAFT-Guidelines-Flexible-Learning for-Public Consultation.pdf.
- xv. Cramer, K. M., K. R. Collins, D. Snider and G. Fawcett (2007), 'The virtual lecture hall: Utilisation, effectiveness and student perceptions', *British Journal of Educational Technology* 38, no. 1: 106–115. https://doi.org/10.1111/j.1467-8535.2006.00598.x.
- xvi. Crawford, J., Henderson, K., Rudolph, J., Malkawi, B., Glowatz, M., Burton, R., Magni, P., & Lam, S. (2020). COVID-19: 20 countries' higher education intra-period digital pedagogy responses. *Journal of Applied Learning & Teaching*, 3(1) 1-20. DOI: 10.37074/jalt.2020.3.1.7.
- xvii. Department of Education Order. (2015). Deped Order No. 8 Series 2015. The Policy Guidelines On Classroom Assessment For The K 12 Basic Education Program.
- xviii. https://www.deped.gov.ph/wp-content/uploads/2015/04/DO_s2015_08.pdf



and Studies ISSN NO:: 2348 – 537X

- xix. Eren, E. & Ergulec, F. (2020). Teknolojik pedagojik içerik bilgisi tabanlı öğretim tasarımı modeli: okulüniversite işbirliği kapsamında bir değerlendirme. *Kırşehir Eğitim Fakültesi Dergisi*, 21(3)1247-1290. DOI: 10.29299/kefad.853475
- xx. Gibbons, J. F., Kincheloe, W. R., & Down, K. S. (1977). Tutored videotape instruction: A new use of electronics media in education. Science (New York, N.Y.), 195(4283), 1139–1146. https://doi.org/10.1126/science.195.4283.1139
- xxi. Hew, K. F. and C. K. Lo (2018), 'Comparing video styles and study strategies during video-recorded lectures: Effects on secondary school mathematics students' preference and learning', *Interactive Learning Environments*. https://doi.org/10.1080/10494820.2018.1545671.
- xxii. Kahrmann, C. R. (2016). *Efficacy of math video tutorials on student perception and achievement*. Doctor of Education in Teacher Leadership Dissertations, Kennesaw State University, Paper 9. http://digitalcommons.kennesaw.edu/teachleaddoc_etd
- xxiii. Kim, Y., & Thayne, J. (2015). Effects of learner-instructor relationship-building strategies in online video instruction. Distance Education, 36(1), 100–114. https://doi.org/10.1080/01587919.2015.1019965
- xxiv. Mayer, R.E., Moreno, R., & Sweller, J. (2015). *E-learning theory*. https://www.learning-theories.com/e-learning-theory-mayer-sweller-moreno.html
- xxv. Mechling, L. (2005). The effect of instructor-created video programs to teach students with disabilities: A literature review. *Journal of Special Education Technology*, 20(2), 25–36.
- xxvi. https://doi.org/10.1177/016264340502000203
- xxvii. Nabayra, Jahfet N. (2020). Mathematics Learning in the New Normal Through Teacher-Created Videos: The Freshmen University Students' Experience. International Journal of Arts and Humanities Studies. ISSN: 2754-4311
- xxviii. DOI: 10.32996/bjahs
 - xxix. Journal Homepage: www.al-kindipublisher.com/index.php/bjahs
 - xxx. Nikopoulou-Smyrni, P. & Nikopoulos, C. (2010). Evaluating the impact of video-based versus traditional lectures on student learning. Educational Research, Vol.1, No.8, 304-311. Retrieved from http://bura.brunel.ac.uk/handle/2438/4652
 - xxxi. Oosterbeek, Hessel, & Klaauw, Bas van der. (2012) Ramadan, fasting and educational outcomes. Economics of Education Review Volume 34, June 2013, Pages 219-226.
- xxxii. https://doi.org/10.1016/j.econedurev.2012.12.005
- xxxiii. Ozkan, Z. & Budak, S. (2021). A comparison of students' preferences in online algebra instruction pre- and post-covid-19. *International Journal of Interactive Mobile Technologies*, 15(17). 4-17. https://doi.org/10.3991/ijim.v15i17.23579
- xxxiv. Pal, D., & Patra, S. (2020). University students' perception of video-based learning in times of COVID-19: A TAM/TTF perspective. *International Journal of Human-Computer Interaction* 1–19. https://doi.org/10.1080/10447318.2020.184816430



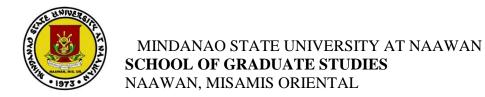
and Studies ISSN NO:: 2348 – 537X

- xxxv. Rayner, C., Denholm, C., & Sigafoos, J. (2009). Video-based intervention for individuals with Autism: Key questions that remain unanswered. Research in Autism Spectrum Disorders, 3(2), 291–303. https://doi.org/10.1016/j.rasd.2008.09.001
- xxxvi. Rose, K. (2009), 'Student perceptions of the use of instructor-made videos in online and face-to-face classes', *Journal of Online Learning and Teaching* 5,
- xxxvii. no. 3. https://jolt.merlot.org/vol5no3/rose_0909.htm.
- xxxviii. Tanujaya, B., Prahmana, R., & Mumu, J. (2021). The mathematics instruction in a rural area during the pandemic era: Problems and solutions. *Mathematics Teaching Research Journal*, 13(1), 3-15. https://commons.hostos.cuny.edu/mtrj/wp-content/uploads/sites/30/2021/04/v13n1-The-Mathematics-Instruction-in-Rural-Area.pdf
- xxxix. Wang, H. (2021). What works and what does not: A reflective practice on an online mathematics class. *Mathematics Teaching Research Journal*, *13*(1), 16-29. https://commons.hostos.cuny.edu/mtrj/wp-content/uploads/sites/30/2021/04/v13n1-What-Works-and-What-Does-Not.pdf



and Studies ISSN NO:: 2348 – 537X

Appendix 1. Letter of request sent to the respondents to participate in the study.



April 3, 2023

Dear Respondents,

The undersigned is a student of Master of Science Education major in General Science at Mindanao State University At Naawan, Naawan, Misamis Oriental. Currently, she is working on his quantitative field research entitled "Academic Performance And Perception Of The Students Towards Teacher-Made Video Lessons" in partial fulfilment of the requirements for the subject of Science Teaching Strategies and Techniques.

With your permission, the undersigned is asking a favor from you to answer the questionnaire honestly for the benefit and success of this study. Rest assured that your responses will be kept confidential and this would be purely used for this research only.

Thank you and keep safe.

Very truly yours,

GHISELLE ULOVE

Researcher

U.

ANIÑON

ISSN NO:: 2348 - 537X

Appendix 2. Letter of request sent to the MSU-N IDS Principal for the conduct of the study.



MINDANAO STATE UNIVERSITY AT NAAWAN SCHOOL OF GRADUATE STUDIES NAAWAN, MISAMIS ORIENTAL

April 3, 2023

Juana A. Bolos

Principal, Pagayawan Integrated School Pagayawan, Bacolod, Lanao del Norte

Dear Ma'am,

The undersigned is a student of Master of Science Education major in General Science at Mindanao State University At Naawan, Naawan, Misamis Oriental. Currently, she is working on his quantitative field research entitled "Academic Performance And Perception Of The Students Towards Teacher-Made Video Lessons" in partial fulfilment of the requirements for the subject of Science Teaching Strategies and Techniques.

With your permission, the undersigned is asking permission from you to conduct her research among your Grade 9 to Grade 11 students in your respective school to answer the questionnaire honestly for the benefit and success of this study. Rest assured that the result of this effort will be kept confidential. May this request be granted.

Thank you very much.

Very truly yours,

GHISELI

Researcher

ANIÑON

U.



and Studies ISSN NO:: 2348 – 537X

Appendix 3. Questionnaire.

Name: _____ Grade Level and Section: _____ Instruction: Read each statement carefully and use the scale below, just indicate a checkmark (/) on the column which best describes your perception towards online class.

5-Strongly Agree 4-Agree 3-Neutral 2-Disagree 1-Strongly Disagree

TEACHER-MADE VIDEO LESSON SURVEY

This questionnaire is designed to assess your perceptions of the use of lecture videos to increase time for in class problem solving applications. Please answer the questions as honestly as possible and to the best of your ability. Participation is voluntary, and all responses will be kept anonymous.

The researcher would like to start by asking you some background information about you in part I of the questionnaire. Some of these questions might not apply to you, and the researcher apologize for this, however it is important that the researcher ask everyone the same things so please bear with on this. Please try to be as truthful as possible when answering these questions, but please be assured that the answers you give will be kept confidential. Thanks for your time!

- I. Encircle the letter of your choice.
 - 1. Age: What is your age?
 - a. 12-14
 - b. 15-17
 - c. 18-20
 - d. 21 or older
 - 2. Gender: What is your gender?
 - a. Male
 - b. Female
 - c. Prefer not to respond
 - 3. Among the Five Muslim barangays of Bacolod, where are you located?
 - a. Babalayan Townsite
 - b. Delabayan West
 - c. Demarao
 - d. Pagayawan
 - e. Punod
 - f. Outside of Five Muslim barangays of Bacolod (Please Specify
 - 4. Class Standing: What is your class standing?
 - a. Grade 9
 - b. Grade 10
 - c. Grade 11
 - 5. Do you have network signal in the area where you live?
 - a. Yes (Please Specify: Smart/Globe)
 - b. No
 - 6. Do you have internet connection provider in the area where you live?



ISSN NO:: 2348 - 537X

- a. Yes (Please Specify: Smart/Globe/PLDT)
- 7. What gadgets do you own or have in your home where you can view a video lesson? (You can circle more the one)
 - a. Cellphone
 - b. Tablet
 - c. Laptop Computer
 - d. Desktop Computer
 - e. Television

II. Please check the box your level of agreement with the following statements.

Statements	Strongly Disagree	Disagree	Neutra l	Agree	Strongl y Agree
1. I found the video lesson useful.					
2. The video was a faster way to cover					
lessons than a face-to-face lecture.					
3. The video was a more effective way					
to cover lessons than a face-to-face					
lecture.					
4. I was able to learn more from the					
video lesson since I was able view at my					
own pace and to rewind and review					
portions, I did not understand the first time.					
5. I missed being able to ask questions during the video lesson.					
6. I found the lesson examples in class					
useful.					
7. If time constraints were not an issue,					
I would prefer both lecture and lesson					
activities to occur face to face in class					
time.					
8. Taking into consideration time					
constraints I would prefer all lecture to					
take place, face to face in class to be					
covered by textbook examples.					
9. Taking into consideration time					
constraints I would prefer only lesson					
activities in face-to-face class time and					
all lecture to take place via recorded					
video.					
10. Taking into consideration time					
constraints I would prefer some lectures					



ISSN NO:: 2348 – 537X

to take place via recorded video and the			
time made available to be used for			
performing the lesson activities.			
11. If several lectures were presented			
via video lesson, I would watch none of			
the videos.			
12. If several lectures were presented			
via video lesson, I would watch some of			
the videos.			
13. If several lectures were presented via			
video lesson, I would watch all of the			
videos.			
14. If several lectures were presented via			
video lesson, I would watch the videos			
before the corresponding lesson			
activities.			
15. I would watch the videos more than			
once to review the lesson.			
16. I would prefer to watch the videos			
only made by the subject teacher.			
17. I would prefer to watch the videos			
only made by a stranger.			
18. I would prefer to watch the videos			
both made by the subject teacher and a			
stranger.			

Please write any additional comments or important points you feel were missed in the survey.

Thank you for your time and participation!