
Remote Teaching-Learning and Students' Academic Life: COVID-19 Pandemic Context

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Abstract

This descriptive-correlational study investigated the relation of remote teaching and learning to the academic life of 318 students selected through convenience sampling) enrolled in a university during the academic year 2020-2021. Mean, Pearson r, t-test, and one-way ANOVA determined the respondents' perceptions on remote teaching and learning, achievement, attitude, relationship of remote teaching and learning to achievement and attitude, and difference between achievement and attitude to profile variables, respectively. Respondents are predominantly female, below 21 years old and are enrolled in general education courses. The results showed that remote teaching and learning are effective and beneficial. Respondents' performance and attitude are very good and unfavorable, respectively. However, the study showed that there is no correlation between achievement and attitude. Motivation and enjoyment impact achievement and attitude. Respondents are similar in achievement and attitude when grouped by age and gender, but they differ in attitude based on year level. Findings also showed that remote teaching and learning positively impact achievement, but negatively impact attitude on specific learning platforms. Accordingly, respondents' concerns include internet access and lagging gadgets. Additionally, respondents also underscored that the learning environment, activity/time, and psychological challenges are significantly few. Hence, the study suggests that teachers should provide efficient interventions to students' concerns. Furthermore, quality may be preferred over quantity in activities and resources, and online materials are utilized efficiently. This study may be replicated to rural, rural, and urban Southeast Asian areas in a post-pandemic setting to compare results.

Keywords:

academic life, COVID-19 pandemic, remote learning, remote teaching

Introduction

The COVID-19 pandemic has precipitated a global health crisis with serious economic, social, and psychological repercussions. It has caused unanticipated and unaccepted disruptions and fatalities. According to the United Nations Educational, Scientific, and Cultural Organization (UNESCO, 2022), the virus caused a global pandemic that affected teaching and learning in schools and higher education institutions worldwide. However, Strategic Development Goal (SDG) 4 of the United Nations has endeavored to provide inclusive education for all,

thus, even if there is a health crisis, education must be continued, redirected, and revised through shifting to online learning (United Nations, 2020).

Research (Kumar et al., 2021; Mohamed et al., 2020) claimed that COVID-19 pandemic disrupted in-person interaction with teachers, students, and management due to a shift to online learning. This situation prompted a comparison of the effects of remote teaching and learning with those of in-person modality. In remote teaching and learning delivery, students attend synchronous classes but learn and complete tasks asynchronously. This setup

has resulted in the extension of deadlines for the submission of assignments, tasks, and examinations for students in consideration of internet connection issues, mental health concerns, and the effects of pandemic. In addition, since education was provided remotely, parents served as their children's teachers at home. According to Sierpowska (2020), school closures and distance learning have compelled parents to monitor their children's education. In the Philippines, the COVID-19 pandemic has led to the closure of schools as a result of the implementation of community lockdowns, resulting in the adoption of remote teaching and learning modalities.

Remote Teaching and Learning

The COVID-19 pandemic posed schools with a significant challenge. In a very short period of time, schools had to modify their tools to support full remote teaching and learning environments. The nationwide lockdown compelled teachers and students to transition from traditional curriculum implementation to remote teaching and learning. The Philippine Commission on Higher Education (CHED, 2020) issued COVID advisory No. 6, which states that during the period of extended ECQ, higher education institutions (HEIs) with the resources to do so may continue to deploy flexible learning and other alternative modes of delivery in lieu of on-campus learning. In the case of the National Center for Teacher Education, the school implemented the *Kaway-Aralan sa Bagong Kadawyan* which includes initiatives of series of webinars on various teaching-learning modalities and platforms to increase teachers' readiness and confidence in response to CHED advisory No.6 where higher education institutions are strongly encouraged to develop their own teaching platforms tailored to the requirements and circumstances of students, and the pandemic's demands. Institutions improve the educational process by encouraging students to learn independently, collaboratively, and productively. While these measures were done to address the learning needs during the pandemic, it is still a question whether students are learning successfully during the pandemic. If they are learning at all, how effectively are they doing so? Are they pleased with the way in which they are learning? This is to guarantee that no student is left behind and that every student has access to high-quality instruction.

Given the challenges in teaching and learning brought about by the COVID-19, the paradigm of remote teaching emerged. Emergency remote instruction is a temporary transition in the delivery of education to a model in which all instruction is conducted online (Hodges et al., 2020). Additionally, although remote learning also takes place online, it is distinct from online learning. The goal of remote learning is to recreate the classroom setting through computer-based instruction. This entails that the student logs in into the virtual classroom at predetermined times to view lectures or participate in group learning activities (Geneva College, 2020). Remote learning facilitates the most efficient use of existing resources, such as the vast array of technologies that offer remote learning capabilities (Bozkurt et al., 2020). In the case of the National Center for Teacher Education, remote learning may be synchronous, in which students attend live lectures, and/or asynchronous, in which students view lecture recordings at a later time. Students attend weekly synchronous sessions, while the rest of the week is asynchronous. During this time, they study the course materials and complete and submit assignments according to the course syllabus and adjustment matrix. Students submit tasks with Google Classroom and take exams via Google Form and other platforms.

As an educational solution in the midst of the COVID-19 pandemic, universities across the country turned to remote learning. This is due to the fact that remote learning provides access to education to those who may not have other options. Remote learning increases the adaptability of education. Regarding class organization, instructors are determined. Students have a flexible relationship with their academics. Students can interact with their coursework at a more individualized pace through remote learning. Visual learners can benefit from distance learning. The instructional models, online lectures, and exams improve the performance and attitudes of visual learners (Abramson, 2021).

Several studies (Iglesias-Pradas et al., 2021; Mazlan et al., 2021; Mohamed & Mahdy, 2020), support the adoption of remote learning as they found that online learning is beneficial, efficient, can improve students academically, are more independent, and active during sessions. Moreover, Gonzalez et al. (2020) expressed that remote learning due to COVID-19 improved students' learning habits

consistently, resulting in increased efficiency and improved learning performance.

However, remote learning lacks social interaction and stunts social-emotional learning, leadership, social skills, and public speaking. Technology can be complicated and fickle. It is prone to many glitches and disruptions giving stress to both teachers and students. Distance learning can be distracting i.e., websites, news notifications, or emails complicating the situation and dropping the quality of student work. Remote learning hinders some moments in class. Several studies have shown that remote teaching and learning presents teachers and students with numerous obstacles, such as unstable internet connectivity, insufficient learning resources, electric power interruptions, vague learning contents, overloaded lesson activities, limited teacher scaffolds, poor peer communication, conflicts with home responsibilities, a poor learning environment, financial issues, physical health compromises, and mental health struggles (Dizon & Errabo, 2022; Manalo et al., 2022; Rotas & Cahapay, 2020). In addition, Samortin et al. (2022) identified three factors that allowed them to gain a comprehensive understanding of the students' distant learning experiences: the digital technology gap, independent study and a sense of learning responsibility, and financial capabilities and resources. These themes reveal underlying issues and concerns that merit discussion in terms of the remote learning experiences of students. Furthermore, Ignacio (2021) discovered that the continuation of online lessons had resulted in a variety of problems for students and teachers, ranging from a shortage of technology to mental health difficulties.

Strategies in Remote Teaching and Learning

Teachers utilized several online tools to maximize online teaching and learning in response to the demand to address remote instruction. These technologies include WhatsApp, Google Classroom, and Zoom etc. Other universities have established their own learning management systems (LMS) to aid in the monitoring and management of remote teaching and learning. These apps and online platforms are less costly and simpler to use, and they encourage students to engage in educational transactions. Lessons, tasks, and activities are both synchronously and asynchronously transmitted. Synchronous communications replicate engagement in a conventional classroom, in which

students and teachers engage in dialogue and provide feedback. Asynchronous tools include audio channels, video conferencing, and online chat rooms. Asynchronous technologies include online forums, email, and WhatsApp. Learning can occur anywhere and at any moment. Students appreciate professors who communicate well with them. When teachers provide prompts and objective feedback, students are more motivated to study online (Mazlan et al., 2021).

Effects of Remote Teaching and Learning on the Academic Life of Students

Concerns have been expressed regarding the consequences of remote teaching and learning in the academic life of students as a result of the unexpected shift in education delivery during the pandemic. Concerns were expressed over expectations for the transition to remote learning, its impact on student outcomes, and its effectiveness relative to in-person instruction.

Several papers examined the effects of remote learning in student academic life uncovered recurring themes: students enrolled in online courses tend to receive lower grades, are less likely to perform well in subsequent coursework, and are less likely to graduate than similar students enrolled in in-person classes (Armstrong-Mensah et al., 2021; Cacault et al., 2021; Kofoed et al., 2021). In addition, Selvaraj et al. (2021) confirmed that regular classes are more efficient and interactive. Students preferred more regular classes because they believed that they were superior. Although online teaching and learning provide some convenience, the technical challenges and extra effort required task teachers and students. Moving on, Hamid, SENTRYO, and HASAN (2020) discovered that student's perception of the implementation of online learning was ineffective. However, they found that the carrying capacity of network access and the ability of devices to access the internet impact the effectiveness of virtual learning.

The overarching goal of education is to improve curriculum delivery in order to achieve the course intended learning outcomes. This study investigated the influence of remote teaching and learning on student's achievement and attitude. The findings would prompt education leaders and teachers to continually utilize innovative and appropriate platforms during and beyond the pandemic, and to better understand

students' situation and condition. Learners are the most valid and reliable teacher and course evaluators. Their input is crucial in developing and implementing more effective and innovative teaching strategies to ensure realization of course learning objectives. Thus, the justification for the research.

Purposes of the Research

This study investigated how remote teaching and learning affected students' academic life during the COVID - 19 pandemic. It answered the following specific questions:

1. What is the respondents perception of remote teaching and learning during COVID-19 pandemic?
2. What is the respondents level of achievement and attitude using remote teaching and learning?
3. Is there a significant relationship between the students' level of achievement and attitude using remote teaching and learning?
4. Is there a significant difference in the level of achievement and attitude among the participants when grouped according to age, gender, year, and program?

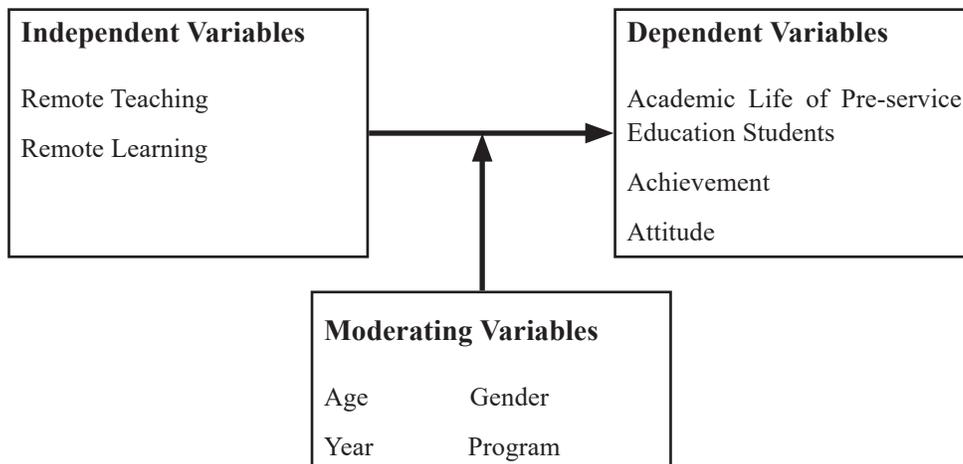
5. What are the common issues and challenges the participants experienced during remote teaching and learning?
6. What did the participants learn from remote teaching and learning?
7. What recommendations would the participants offer to help improve remote teaching and learning?

Framework of the Study

This study investigated how remote teaching and learning affected the academic life in terms of achievement and attitude of pre-service education students. The independent variables consist of remote teaching and learning while the dependent variables include achievement and attitude. It is assumed that remote teaching and learning relates to the respondents' achievement and attitude. The moderating variables include age, gender, year level, and program. It could be implied that there is a significant difference in the achievement and attitude of the respondents when grouped according to age, gender, year level, and program.

Figure 1

Framework of the Study



Methodology

Research Design

This is a descriptive-correlational study which determined the relation of remote teaching and learning and achievement and attitude, perceptions, learning experiences, and concerns of students during COVID-19 pandemic. Also, it determined if significant difference exists on the achievement and attitude of the respondents when grouped by age, gender, year, and program.

Respondents of the Study

The respondents were 318 conveniently selected pre-service education students of a premier teacher education institution in the Northern part of Luzon, Philippines enrolled during Term 2; AY 2020-2021.

There are 251 respondents (78.93%), between ages 16 and 20, while 67 respondents (21.07%) are under the age of 21. Generally, the respondents are predominantly female (220, 69.18%). Mostly the respondents are freshmen and sophomores (240, 95.6%). The Bachelor of Social Science Education students are the smallest in frequency (21, 6.60 %).

Instruments

In order to collect the necessary data for the study, the researchers devised a questionnaire asking how remote teaching and learning should be delivered. Similarly, it gathered respondents' achievements and attitudes toward remote teaching and learning, issues and challenges encountered, learning experiences, and recommendations for enhancing the delivery and outcomes of remote teaching and learning. The instruments included 27 items on teacher-related activity, learner-online engagement, and the impact of online learning. The attitude scale has 22 items concentrated on instruction in online learning (confidence), personal experience in online learning (enjoyment), and learner satisfaction in online learning (motivation). Each of the items was answered using a four-point Likert scale ranging from "strongly agree" to "strongly disagree" and "very favorably" to "very unfavorably," respectively.

The Cronbach alpha coefficient was utilized to validate the test with 100 students and five university

educators from another university in Roxas, Isabela. The instrument has a high degree of reliability and .72 consistency.

Data Gathering Procedure

Through the Academic Dean, the Office of the Executive Director and Provost granted permission to perform the study. Before the test, the researchers explained the objectives of the study to the participants. With their consent, they were able to fill out the Google form. The respondent's identity was guaranteed, and the students are assured that the information that they have provided does not affect their grades and is kept confidential. The researchers observed three phases in conducting the survey. The pre-survey phase involves identifying prospective samples, planning the variables for the study, formulating the different questions that will measure the desired outcomes of the study. To establish the internal consistency of the items, the instruments were submitted for face, content and expert validation, and reliability testing using the Cronbach alpha. At least one hundred students who are not participants in the study but are part of the population, were given the instrument. Depending on the findings of the validation, adjustments were made as needed. In addition, the items were subjected to pilot testing, underwent analysis and revisions based on the result of the cronbach alpha and exploratory factor analysis. During the survey phase, google forms were provided to the participants of the study with their consent to participate. All those who agreed to be the participants proceeded in answering the Instrument. Confidentiality was given priority while conducting and after conducting the survey. Follow-up interviews were made for clarifications about their answers. The researchers also conducted interviews through the Google form to 30 participants to confirm the data collected.

Data Analysis

The data were analyzed using frequency, percentage, and mean to establish the respondents' perception of remote teaching and learning and attitude. Pearson r was utilized to determine the relationship between remote teaching-learning and achievement and attitude, one-way ANOVA and t-test to determine if there was significant difference in their achievement and attitude when grouped according to profile variables.

Ethical Considerations

The researchers informed the respondents of the purpose of the study, that the latter's participation was voluntary and confidentiality of information was ensured. The respondents anonymity was guaranteed. They may opt to participate or not by ticking the corresponding portion of the Google form. Since the data was collected online, the hazards to both respondents and researchers during the pandemic were kept to a minimum.

The respondents expressed their thoughts freely and confidently. There was no conflict of interest since the researchers did not handle the respondents. The data collected were respected and kept private and will be deleted when no longer needed.

Results and Discussion

Table 1 shows that the respondents strongly agree ($\bar{x}=3.28$) on teacher related activity. They perceived that their professors share updated learning materials and encourage active engagement from them ($x=3.41$); teachers are efficient in using Zoom, Google Meet, and other platforms ($x=3.37$); they employ various teaching strategies ($x=3.35$); and they ensure that everyone meets deadlines on time ($x=3.35$). Flexibility required on tasks, and context and teaching presence, such as cognitive presence, social presence, and facilitatory presence are evident during remote and online learning (Rapanta et al., 2020).

Respondents agree (2.62) on online engagement. They agreed that the subject matter is delivered interestingly and meaningfully. There is active engagement and interaction between the teacher and students ($\bar{x}=2.79$), and learners are actively engaged ($\bar{x}=2.72$).

Table 1

Perception on Remote Teaching and Learning

Statements	Weighted Mean	Verbal Description
Teacher Related Activity		
1. The teachers are very considerate and understanding of student's situations.	3.27	Strongly Agree
2. Individual differences are respected and understood in online learning.	3.30	Strongly Agree
3. The faculty gives reasonable course requirements to students.	3.11	Agree
4. The faculty explains the lesson very well using PowerPoint and other applications.	3.23	Agree
5. The faculty uses different strategies in teaching.	3.35	Strongly Agree
6. The faculty is efficient in using the Zoom, Google Meet, Google form and other platforms.	3.37	Strongly Agree
7. The faculty tries to find out students' concerns while on remote teaching and learning.	3.31	Strongly Agree
8. The faculty encourages active engagement of students in the synchronous session.	3.41	Strongly Agree
9. The faculty assists academically challenged learners through remediation.	3.11	Agree
10. The faculty refers students with academic concerns to persons who can help them.	3.15	Agree
11. The faculty ensures that everyone complies with requirements on time.	3.35	Strongly Agree
12. The faculty shared updated learning materials.	3.41	Strongly Agree
Mean	3.28	Strongly Agree

Learner's Online Engagement

13. Remote teaching and learning improve the academic performance of students.	2.67	Agree
14. Remote teaching and learning encourage active engagement and interaction between or among the teacher and students.	2.79	Agree
15. Learners are actively engaged during remote teaching and learning.	2.72	Agree
16. Learners are able to comply with the course requirements on time	2.64	Agree
17. Lessons are easily understood in remote teaching and learning.	2.40	Disagree
18. The subject-matter/information is delivered interestingly and meaningfully.	3.04	Agree
19. Remote teaching and learning are effective and efficient.	2.54	Agree
20. Students are more comfortable studying through remote teaching.	2.17	Disagree
21. Remote learning helps learners become more critical and open in sharing their opinions and ideas.	2.58	Agree
Mean	2.62	Agree

Effect of Online Learning

22. Remote learning is the “new normal” way of learning.	2.97	Agree
23. Remote teaching and learning encourage self-learning or independent study.	3.25	Strongly Agree
24. Learners are more content with their rating in remote learning than in face-to face.	2.31	Disagree
25. Through remote learning, learning resources are always available and easier to share.	2.73	Agree
26. Remote learning develops collaboration and interaction among students.	2.61	Agree
27. In remote learning, submission of requirements is easier and faster.	2.57	Agree
Mean	2.94	Agree

Legend:

Points	Mean Range	Description	Levels of Attitude
4	4.00 - 3.25	Strongly Agree	Very Favorable
3	3.24 - 2.50	Agree	Favorable
2	2.49 - 1.75	Disagree	Unfavorable
1	1.74 - 1.00	Strongly Disagree	Very Unfavorable

The obtained mean effect of learning is 2.94, (agree). The respondents strongly agreed that online learning encourages self-learning or independent study. They agreed that it is the new normal way of learning, learning resources are always available and easier to share and it develops collaboration and interaction among student1.

The above findings imply that remote teaching and learning have met its ultimate goals and objectives. Despite the high pressures and stress, the increased uncertainties and anxieties about COVID-19, the professors delivered the curriculum very well following the quality policy of the university. They ensured that students successfully achieved the course learning outcomes. The findings of this study support the findings of Hamid et al. (2020) and Selvaraj et

al. (2021) that remote teaching and learning provide convenience, technical challenges and extra effort required, taxed teachers and students, and was ineffective. In fact, the capacity of network access and the ability of devices to access the internet impact the effectiveness of virtual learning.

Table 2 reveals the respondents' achievement in terms of their general weighted average covering the 2nd trimester, AY 2020-2021. The general average is 1.49, Very Good. There are 19 (5.97%) students with excellent General Weighted Average (GWA) (1.24 – 1), 143 (44.97%) students obtained very good (1.49 – 1.25), 121 (38.05%) received good (1.74 – 1.5) grades, and 26 (38.05%) with satisfactory grades (1.99 – 1.75). Only a few were rated satisfactory, fairly satisfactory, and acceptable.

Table 2

Participants' Level of Achievement in terms of General Weighted Average (GWA)

Grade Point Scale	Frequency	Description
1.24-1	19	Excellent
1.49-1.25	143	Very Good
1.74-1.5	121	Good
1.99-1.75	26	Satisfactory
2.24-2	5	Fairly Satisfactory
2.25-3	4	Acceptable
General Average	1.49	Very Good

This result confirms that despite the challenges of dread, grief, anxieties, tensions, weak and unstable WIFI access, energy interruptions, financial constraints, and numerous tasks and activities to comply; generally, the participants performed very

good to excellent academically. They were motivated and confident to achieve their learning goals to have a meaningful and happy life.

The results of the present study corroborate with the findings of Mahdy (2020) and Mazlan et al. (2021) that online learning is beneficial and efficient during the epidemic. Nonetheless, a sluggish internet connection, large number of activities, information that cannot always be taught through online learning, and no interaction between the teacher and students adversely affect online learning. Finally, Kibona and Mgaya (2015) confirmed that gender, age groups, marital status, smartphone addiction, university program, and smartphone usage positively impact students' GPAs.

Majority of the participants' attitude towards instruction in online learning is unfavorable, disagreeing with almost every statement and strongly disagreeing (very unfavorable) with online learning

Table 3

Participants Level of Attitude on Remote Teaching and Learning

Statements	Weighted Mean	Verbal Description	Attitude Level
A. Attitude towards Instruction in Online Learning (Confidence)			
1. I prefer online learning to face-to face class.	1.81	Disagree	Unfavorable
2. I Find online learning interesting.	2.40	Disagree	Unfavorable
3. I feel confident during online learning.	2.11	Disagree	Unfavorable
4. I love online learning.	2.05	Disagree	Unfavorable
5. I find online learning more enjoyable than face-to-face learning.	1.71	Strongly Disagree	Very Unfavorable
6. I am comfortable studying at home.	2.16	Disagree	Unfavorable
Mean	2.04	Disagree	Unfavorable
B. Personal Experience in Online (Learning (Enjoyment)			
7. I am bored most of the time in online class.	2.66	Agree	Favorable
8. I am anxious and nervous most of the time in an online class.	3.05	Agree	Favorable
9. I experience difficulties doing my projects while at home.	3.31	Agree	Very Favorable
10. I find it hard to communicate my thoughts or feelings with my teacher when in remote learning.	3.11	Agree	Favorable
11. I feel obliged to comply with my requirements that I am unable to enjoy studying.	3.17	Agree	Favorable
12. I am lagging behind in accomplishing my tasks while studying online.	3.09	Agree	Favorable
13. I feel frustrated when I cannot cope with the demands of online learning.	3.42	Strongly Agree	Very Favorable
14. I feel uncertain of my academic performance in online learning.	3.29	Strongly Agree	Very Favorable
Mean	3.14	Agree	Favorable

C. Learner's Satisfaction in Online Learning (Motivation)

15. I am very attentive in online classes.	2.42	Disagree	Unfavorable
16. I always look forward to my online class.	2.56	Agree	Favorable
17. I feel more responsible with my academic tasks and output.	2.82	Agree	Favorable
18. I am actively engaged in online learning.	2.46	Disagree	Unfavorable
19. I am more responsible and diligent in online learning.	2.32	Disagree	Unfavorable
20. Because of remote learning, I became an alert and enthusiastic learner.	2.37	Disagree	Unfavorable
21. I attend my classes regularly and on time.	2.91	Agree	Favorable
22. I feel secure that I am with my family while studying online.	2.90	Agree	Favorable
Mean	2.60	Agree	Favorable

Legend:

Points	Mean Range	Description	Levels of Attitude
4	4.00 - 3.25	Strongly Agree	Very Favorable
3	3.24 - 2.50	Agree	Favorable
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1	1.74 - 1.00	Strongly Disagree	Very Unfavorable

as more enjoyable than face-face learning with. As regards personal experiences and satisfaction in online learning, the respondents' attitude is both favorable.

The aforementioned signifies that the respondents were not ready for remote teaching and learning due to the diversity of situations. The pandemic was not an anticipated event. Students perceived online learning quite ineffective due to lack of self-esteem, poor motivation, confidence, financial limitations, poor gadgets, connectivity, and energy interruptions.

This study confirms the investigation of Adams et al. (2021) that there was a substantial rise in anxiety, decrease in weariness, and social participation. The carrying capacity of devices for network access influences the effectiveness of virtual learning (Hamid et al., 2020).

Table 4 confirms the significant relationship between achievement and attitude on enjoyment and motivation. The respondents' confidence in remote teaching and learning bears no relationship to their achievement. These results imply that the respondents are intrinsically motivated learners as shown in their GWA. They complied with the tasks and requirements with enjoyment and passion, and actively engaged in their classes and satisfied the professor's expectations.

Moreover, the relationship between the respondents' attitude and achievement shows a

Table 4

Relationship between Level of Achievement and Attitude

Variables	Pearson-r	p-value
Achievement		
1. Attitude towards online Learning (Confidence)	.050	.373
2. Personal Experience (Enjoyment)	.185**	.001
3. Learner's Satisfaction (Motivation)	.167**	.003

*significant at $p < .05$

weak positive correlation. This result suggests that respondents' attitude is not limited to their success in online learning. Their profile variables also relate to their remote learning productively. The result is in contradiction with the findings of Dewi and Hasibuan (2019) where there is a moderate correlation between attitudes towards e-learning and student learning achievement.

Table 5 reveals that regardless of age, the respondents' demonstrate the same attitude towards remote teaching and learning. The null hypothesis is rejected. As regards gender, all the participants

show the same attitude towards remote teaching and learning as indicated in the obtained F-test (2.21) and p-value (.11).

However, there is a significant difference in the respondents' attitude according to year level. The test reveal that freshmen have a positive attitude when compared to the sophomores ($p = .01$) and juniors ($p = .000$). The difference between the second – and third-year groups is not significant ($p = .805$). This result suggests that throughout remote learning, the freshmen exhibited a more favorable attitude than the other year levels. The sophomores and juniors have the same attitude and mindset.

Table 5

Comparison of Participants Level of Attitude in terms of Profile Variables

Variables	t-test/F-test	p-Value
Age	.91	.36
Gender	2.21	.11
Year Level	9.79	0.00*
TUKEY HSD Post Hoc Test Result		
First Year vs Second year		.01*
First Year vs. Third Year		.00*

*significant @ $p < .05$

Table 6

Comparison of Respondents' Level of Achievement in terms of Profile Variables

Variables	t-test/F-test	P-Value
Age	-1.703	.090
Gender	.263	.769
Year Level	.77	.47

*significant @ $p\text{-value} < .05$

Table 6 shows the results of a test of significant difference in achievement when participants are grouped according to profile variables. Obtained values show that there is no significant difference in age, gender, and year level on their achievement as reflected by one-way ANOVA, F-test and t-test values.

This result means that younger and older participants, male, female, and those that prefer not to state their gender, and year level performed equally well during the remote learning. It further implies that they are happy and confident in learning. This further indicates that profile variables are not determiners of participants' level of achievement during the implementation of remote teaching and learning. This result is in contrast to the findings of Islam et al. (2011), who found that age, program of study, and level of education have significant effects on the effectiveness of e-learning.

Table 7

Common Issues and Challenges Experienced by the Respondents in Remote Teaching and Learning

Emerging Themes on Common Issues and Challenges	Frequency
1. Technology and Related Tools	21
2. Learning Environment	5
3. Activity/Time related	7
4. Psychological-Related	8

Table 7 discloses that respondents experienced technology-related issues particularly internet access, lagging equipment, gadgets, and financial constraints. Learning environment and activity/time issues include distractions and non-participative members during group work, overlapping schedules and deadlines, correspondingly. Psychological-related issues and challenges are few but encountered significantly.

The findings confirm that the greatest problem are gadget and internet connectivity (Hamid et al., 2020; Mahfouz & Salam, 2021) as well as restrictions and modifications in lifestyle (Maison et al., 2021).

Table 8 reveals that respondents have varied learning experiences. Due to the modality utilized, the respondents have had tough experiences on poor internet connection, hostile learning environment, lack of study time, and personal-psychological experiences such as stress, shyness, sadness, coping skills, and saturation. Volunteering in group work, managing and balancing time; being independent, observant with different platforms to avoid being left behind and responsible; and compromising with the teacher and exploring applications and other media for learning are the students' ways of coping with the challenges of learning. The findings confirm the following types

Table 8*Learning Experiences Encountered by the Respondents in Remote Teaching and Learning*

Challenging Experiences	Coping Experiences
Hard, needed extra effort	Try to volunteer (in group work)
Online modality is not that easy for me	It is not easy but I managed to deal with it
Physical absence of teachers affects learning.	It requires me to study harder, be responsible and manage time
Experiences on weak internet	Challenging and one must know what to prioritize
Limited time to study everything	Self-learning
“Limited”, not everything is taught online	Learned to be not dependent
Sometimes can't focus	I learned to be observant about the constant updates on different platforms in order to not be left behind.
Feel shy to interact	All in all, it is okay
Non-conducive learning environment	Balance and manage time wisely
Academic stress	Have a give and take relationship with the teacher
Having a hard time coping with the lesson	Have fair compromise
Activities are not well-explained	Work smarter on your own

Table 9*Recommendations to Improve Remote Teaching and Learning*

Teacher-Related	Activity-Related	Online and Material-Related
Teachers should be flexible and considerate.	Group activities to be lessened.	Online instruction is sufficient.
Add more time to instruction and lessen time for giving activities.	Arrange schedules especially if there are makeup classes.	Improve internet connectivity.
Be interesting to catch students' attention	<i>Ligtas balik eskwela</i>	Online classes to be recorded
Manage implementation of course brief or syllabus	Lessen workloads of students	To have one mandatory and organized platform in delivering the materials for learning.
Understand the capacity and differences of students	Longer time and slower pace	Utilize all technology options and consider the new learning modality
Utilize more technology options	Give activities that prioritize quality than quantity	The availability of hard copy (materials)
The profs should talk with one another and fix their schedule whenever they want to give a task to avoid an outpour of tasks		

of remote learning challenges: Unstable internet access; insufficient learning materials; power outages; imprecise learning contents, overloaded lesson activities, limited teacher scaffolding, poor peer communication, and conflicting home duties; a bad learning environment; financial issues; physical health compromises, and mental health difficulties (Rotas & Cahapay, 2020).

Table 9 presents the respondents' recommendations to further improve remote teaching and learning. The recommendations relate to teachers, activity, and online/material. Respondents emphasize

that teachers should exercise flexibility and courtesy, increase instructional time, hold students' attention, strictly execute the syllabus, use other technology and coordinate delivery of tasks among themselves. The recommendations also include internet connectivity, recorded online classes, platform for delivering learning materials, technology, learning modalities, and learning materials.

The recommendations can be categorized into teacher-related, activity-related, and online or material-related recommendations. This implies that the respondents wish to improve their remote

learning experience by ensuring that instructors are sensitive to their needs, thoughtful of their time, and accommodating those with connectivity challenges. According to Wang (2020), improvements in communication, engagement, and collaboration will raise student engagement, rebuild the relationship between teacher and student, and optimize the benefits students gain from a remote class.

Conclusion and Recommendations

This study investigated how remote teaching and learning affected students' academic life during the COVID - 19 pandemic. Since no study was conducted yet describing the students' experiences in the pandemic context in the current locale, the findings of the current study provide a data-base for recommending relevant intervention programs.

Respondents are predominantly females, below 21, and mostly enrolled in general education courses. They find remote instruction effective and beneficial. Respondents' performance and attitudes are very good and unfavorable, respectively.

Accordingly, there is no significant relationship between achievement and attitude in terms of trust in remote teaching and learning. Motivation and enjoyment influence performance and attitude. Respondents exhibit the same degree of achievement. The respondents' attitudes on remote teaching and learning when grouped by age and gender are comparable, but when grouped by year their sentiments differ. Remote teaching and learning positively impact achievement but negatively impact students' attitude on specific learning platforms.

The present study is limited on population, context and variables. Faculty members should know and understand students' concerns in remote learning and handle them efficiently and effectively. Quality must prevail over quantity on activities, tasks and resources be utilized efficiently. Institutions may implement interventions to help students manage their emotions to promote a good learning environment. It may be replicated to pre-service education students in rural, rurban and urban settings in Southeast Asian areas in a post-pandemic setting to compare results.

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