



Analysis of Online Learning Challenges of Students at De La Salle Medical and Health Science Institute Amidst Pandemic

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Analysis of Online Learning Challenges of Students at De La Salle Medical and Health Science Institute amidst Pandemic

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Abstract

In the midst of a pandemic, difficulties in distant learning were anticipated. Additionally, the students' struggles with the demands of distance learning in terms of pedagogical practice, logistics, socioeconomic constraints, technical literacy, and psychosocial aspects were exacerbated and clearly visible. The cross sectional analysis was conducted to identify challenges and experience of students amidst pandemic. The study involved 200 senior high school and colleges students, with ages ranging from 16-26 years old. As the result implies, the pandemic has also been found to make their issues worse, particularly in terms of the quality of their educational opportunities, their mental health, their ability to communicate with others, and their technical illiteracy. The greatest challenge specifically related to their learning environment. As a result, while participating in online learning, students may feel inadequate, uncomfortable, and unsafe at home. As per strength of distance learning, online learning helped ensure remote learning manageable, convenient, mobility and provide greater flexibility. With this understanding, flipped learning and HyFlex model were suggested strategies to incorporate foundational information and flexibility to students and teachers amidst pandemic.

Keywords: online learning, distance education, technology enhanced learning, continuing education, flexible learning

Introduction

The COVID-19 Pandemic has disrupted and altered the entire educational system. As a result, it influences the teaching and learning process. It has widened disparities and exacerbated an already-existing educational crisis. The learner must adjust to new communication and information gathering methods, as well as technological advancements used in the educational process, which have an impact on learning processes that rely on interpersonal relationships and interaction (UNESCO, 2020). Schools and other learning institutions had to make the transition to online learning, which can be both an opportunity and a challenge (Toquero, 2020). In this manner, Online learning has acquired a reputation as temporary remote teaching that responds to an emergency in the context of the COVID-19 pandemic. The transition to a new learning environment has, however, been hampered by significant issues with policy, pedagogy, logistics, socioeconomic considerations, technology, and psychosocial (Barrot, et al., 2021). Additionally, despite their lack of computer literacy, teachers who are accustomed to traditional teaching methods were forced to adopt technology. Online learning seminars and peer assistance systems have been launched to address this issue.

Despite the difficulties the educational system faces, there are research that support online learning and the difficulties encountered there. However, Abbasi et al. (2020) hypothesized that when students were unable to attend class due to the pandemic, they preferred face-to-face instruction over online learning. Similar to this, Owusu-Fordjour et al. (2020) found that because many of them were unaccustomed to learning effectively on their own, the pandemic had a negative impact on their learning.

The learning platforms that were employed presented difficulties for the majority of the students in this area since they lacked technical knowledge of Internet devices and were unable to access the Internet. However, Hayat et al., (2021) also emphasize the fact that students valued being in charge of their own learning processes, which led to improved performance results. This was accomplished by giving the students the chance to review the online lectures that were recorded and saved and so evaluate new knowledge and abilities. The capacity of students to engage in meaningful multimodal communication, assume agency in their learning, and build conceptual and epistemic understanding through active use of digital resources are all crucial components of online learning (Hartnett, 2016). The importance of students' self-control, motivation, and favorable learning characteristics are highlighted in such online

environments (Chiu & Hew, 2018). Similar to this, Sugino (2021) identified three primary factors—mutuality emerging from interaction, the impact of COVID-19 on their lives and learning, and individual circumstances—related to the students' motivation in their synchronous online learning. Their contact greatly influenced how much they enjoyed the classes and inspired them to participate actively. As a result, their participation, cooperation, and active engagement in the synchronous environment increased their motivation. As a result, students were intrinsically motivated by the desire to learn new things and their interest in trying out novel teaching techniques. Santos (2020) found that remote learning is polarizing for Filipino students in this Philippine context. Such a situation in remote learning has the potential to exacerbate existing disparities and create hurdles for online learning.

Objectives of the Study

As a foundation for a development strategy that can be suggested in the institution, the current study will identify the difficulties and investigate the experiences of students in online education at De La Salle Medical and Health Science Institute. To identify issues and offer a unique solution in the new face of education, the study will also include student experiences in addition to student perception. Since sequential research produces specific challenges and outcomes significant for the improvement of Home-Based Alternative Learning Modality (HBALM), initiated by the institution in times of pandemic, reflection, analysis, and discussion will be presented. This makes sequential research reliable, relevant, and of high importance. This will reveal the students' challenges with online learning and, second, the difficulties they had with the HBALM. Finding out how motivation and tenacity play a part in online learning is the third step. Finally, by offering ideas or recommendations to enhance the institution's performance, provide a developmental approach. Additionally, methodological triangulation will offer more thorough data, confirmatory analysis, and improve comprehension of the phenomenon.

Relevant Studies or Review of Related Studies

In a cross-sectional study done across the country, Baticulon et al. (2020) found that the majority of the 3, 670 Filipino medical students polled had unreliable internet connectivity, and 32% and 22% of them had trouble adjusting to the new way of learning. Purchasing a learning gadget to conveniently take part in online classes and instantly complete tasks in the online system may be difficult for certain people (Santos, 2020). Despite efforts to make education accessible to all, Filipino university students still face several obstacles in embracing the new approach of online learning. The study of Basar et. al. (2021) shows that COVID-19 does have an impact on how academic learning is taught around the world because it compels universities, colleges, and institutions to offer lectures and classes online as a substitute for maintaining traditional classroom settings. Although it has been shown to enhance students' health during a pandemic, online learning is not as efficient as the old-fashioned approach.

The study will be built on the self-determination theory in accordance with this conception. According to the theory, all people have three psychological demands that influence whether or not they take action: relatedness (feeling linked, loved, and interacted with), competence (feeling competent and effective), and autonomy (feeling self-governed and self-endorsed). When these three psychological requirements are met, people feel more psychologically healthy and, on the other hand, when their needs are not met, they feel very fragmented, alone, and receptive. Students are actively motivated to engage in learning tasks when these psychological demands are satisfactorily met by pedagogical design (Hsu et al., 2019). The likelihood that children will be engaged in learning in classrooms that satisfy these three psychological demands is higher (Reeve, 2013). The impact of needs-based support on student motivation, engagement, and learning can thus be explained by this idea. Future SDT research, according to Ryan and Deci (2020), should focus more on how e-learning and remote classroom technologies encourage student involvement and learning. It makes a contribution to SDT by demonstrating how teachers use technology to meet students' needs for better engagement in the classroom. It also makes a contribution to teaching practice by offering more ways for getting students interested in online learning.

Discussion

Profile of the Participants

This section presents the frequency and percentage distribution of the profile of the one hundred fifty (150) students who experiences challenges in online learning. It includes the age, sex, year level and college.

Table 1 – Distribution of the Students in terms of age.

Age range	Frequency	Percentage
Below 18 years old	79	52.67%
19-23 years old	67	44.67%
24 and above	3	2.66%
Total	150	100%

The table shows that out of 150 participants, 79 belongs to the age range of below 18 years old, 67 belongs to 19-23 years old, and 3 belongs 24 and above. It shows that majority of the participants belong to the age range between below 18 years old.

Table 2 – Distribution of the Students in terms of sex

Sex	Frequency	Percentage
Male	38	25.33%
Female	112	74.67%
Total	150	100%

The table shows that 38 participants were male, and 112 students were female. It shows that females have a larger number compared to males.

Table 3 – Distribution of the Students in terms of year level

Year Level	Frequency	Percentage
Senior High School	87	58%
1 st year college	44	29.33%
2 nd year college	13	8.67%
4 th year college	6	4%
Total	150	100%

The table shows that out of 150 participants, 87 are senior high school students, 44 are 1st year college, 13 are 2nd year college, and 6 are 4th year college. It shows that majority of the participants are senior high school students.

Table 4 – Distribution of the Students in terms of Colleges.

Colleges	Frequency	Percentage
Senior High School	87	58%
College of Nursing	25	16.67%
College of Medical Laboratory Science	9	6%
College of Allied Science	6	4%
College of Pharmacy	10	6.73%
College of Imaging and Therapy	5	3.3%
College of Rehabilitation Science	8	5.3%
Total	150	100%

The table shows that out of 150 participants, 87 are from senior high school, 25 are from college of nursing, 9 are from college of medical and laboratory science, 6 are from college of allied science, 10 are from college of pharmacy, 5 from college of imaging and therapy and 8 from college of rehabilitation and sciences. It shows that majority of the participants are from senior high school.

Online Learning Challenges

This study investigated students' online learning experiences in senior and college level within the context of the pandemic. Specifically, we identified the extent of challenges that students experienced, how the COVID-19 pandemic impacted their online learning experience which focusing on learner's, technological, personal, lecturer and social domains.

Table 5: Online Learning Challenges Scale

A. Student Engagement Challenges	Mean	SD	Verbal Interpretation
1. There is a low level of comfortability in communicating with my classmates and teachers through an online platform.	2.85	1.03	As expected
2. I am able to spend significant time and energy to engage in online learning class.	3.44	1.06	Least Challenging
3. There is comfort and ease in expressing thoughts in an online discussion.	3.05	1.03	As expected
4. Online learning reduces the time I spend on unproductive activities.	2.80	1.17	As expected
5. Online learning worsens my written communication and analytical thinking skills.	3.23	1.22	As expected
6. I am able to organize my time well so that work and tasks do not build up.	3.09	1.15	As expected
7. I cannot maximize my time because of the heavy workload of online task.	2.46	1.07	Least Challenging
Total	2.99	1.11	As expected

B. Technological Literacy and Competency Challenges	Mean	SD	
8. I have access to a stable internet connection at home.	3.80	0.98	Least Challenging
9. I repeated the online instructional materials based on my needs.	3.92	0.78	Least Challenging

10. The course materials are not accessible after the completion of each class	3.57	1.05	Challenging
11. I am easily distracted of social media platforms while I'm in class	1.90	0.92	Least Challenging
12. I am satisfied with the system support and educational technologies during the classes	3.55	0.95	Least Challenging
13. There is a sufficient knowledge and skill in using computers to create learning materials/task.	3.82	0.87	Least Challenging
14. I lack confidence in using online resources from the library database	2.92	1.22	As expected
Total	3.35	0.97	As expected

C. Online Classroom Management Challenges	Mean	SD	
15. I feel that my lecturers have good content knowledge in applying new teaching techniques	4.07	0.78	Least Challenging
16. I feel that my lecturers do not understood my learning needs	3.40	1.04	Challenging
17. I feel that my lecturers made the subject as interesting as possible	3.87	0.84	Least Challenging
18. I think laboratory skills were compromised during online learning	2.21	1.27	Least Challenging
19. I am not satisfied with the lecturers' pace of punctuality	3.40	1.03	Challenging
20. There is room for adequate instructions and feedback with questions and discussions.	3.74	0.91	Least Challenging
21. I am satisfied with the quality of graphic aids and educational technology used by lecturers	3.90	0.91	Least Challenging
Total	3.51	0.97	Least Challenging

D. Learning Environment Challenges	Mean	SD	
22. I experience difficulty in concentrating during online learning	1.81	0.90	Least Challenging
23. Online learning is a positive experience because of the connection we have in online classroom	3.05	0.97	As expected
24. I feel that I am unsafe in my home during online class	4.02	0.96	Challenging
25. I feel that I'm alone most of the time during online learning.	2.61	1.26	As expected
26. I am being motivated by my family and friend during online learning	3.56	1.14	Least Challenging
27. I easily trust people even it is remote learning	3.11	1.04	As expected
28. I'm having difficulty in separating my personal and social life during online learning	2.51	1.22	Least Challenging
Total	2.95	1.08	As expected

E. Self-Regulation Challenges	Mean	SD	
29. I feel that there is an intense work for self-direction.	2.15	0.80	Least Challenging
30. I put so much pressure on myself during online learning	1.91	0.95	Least Challenging
31. I feel stressed due to deadlines, unexpected disruptions and higher workloads	2.96	1.10	As expected
32. I prioritize self-care during remote learning.	3.25	1.15	As expected
33. I have more time for self-reflection.	2.95	1.09	As expected
34. I am more anxious in distance learning approach	1.75	1.05	Not Challenging
35. I am not confident on my skills for me not to interact with my classmates during online learning.	2.25	1.12	Least Challenging
Total	2.46	1.04	Least Challenging
Overall Score	3.05	1.06	As expected

Table 5 presents the mean scores and standard deviation for the domains of challenges that students' experienced during online learning. Overall, the students experienced the identified challenges to a moderate extent ($\bar{x} = 3.05$, $SD = 1.06$). More specifically, the greatest challenge that students experienced was related to TLCC, OCMS and LEC, predominantly on technological literacy specially to no accessibility of the course material after the completion of each class ($\bar{x} = 3.57$, $SD = 1.05$). In the aspect of Online Classroom Management, particularly on understanding the learning needs ($\bar{x} = 3.40$, $SD = 1.04$) and students were not satisfied with the lecturers' pace of punctuality ($\bar{x} = 3.40$, $SD = 1.03$). Also, in learning environment challenges, students feel that they are unsafe in their homes during online class ($\bar{x} = 4.02$, $SD = 0.96$).

It is, however, found that the least challenge was on self-regulation ($\bar{x} = 2.46$, $SD = 1.04$), specifically on students feeling of not being anxious in distance learning approach and putting pressure during online learning ($\bar{x} = 1.91$, $SD = 0.95$). Other areas that students experienced the least challenge are distraction of social media platforms during online class ($\bar{x} = 1.90$, $SD = 0.92$), experiencing difficulty in concentrating during online learning ($\bar{x} = 1.81$, $SD = 0.90$). Overall, 150 responded to the question about other challenges that they experienced. Most of their responses were already covered by the five predetermined categories.

The results showed that students faced a variety of types and degrees of online learning problems. Surprisingly, the idea that students are at ease

and allowed to do as they like with less monitoring due of the setup of an online learning class was their greatest issue. According to the survey, the pandemic has also been found to make their issues worse, particularly in terms of the quality of their educational opportunities, their mental health, their ability to communicate with others, and their technical illiteracy. As cited by Barrot et al., (2021) the current study has complemented their findings on the pedagogical, logistical, socioeconomic, technological, and psychosocial online learning challenges that students experience within the context of the COVID-19 pandemic. In addition, by concentrating on learning environment difficulties, the study will be able to investigate why student safety and security received the highest marks in comparison to other challenges.

Challenges/problems encountered in Home Based Alternative Learning Modalities

In this aspect, the researcher interview five (5) selected students who participated in the survey in identifying the challenges they experienced in online learning setup. It has been identified that difficulty in home setup and academic difficulties were the primary themes that was identified in the study.

Table 6. Difficulty in Home Setup

<i>Themes</i>	<i>Descriptive Text</i>
<i>Beset with Difficulties</i>	<p><i>Jenny: "I think that students "feeling unsafe" in our own homes stems from personal, emotional, or familial conflict po, which makes us uncomfortable or "unsafe" at times po. There is always the possibility of corporal punishment and/or abuse."</i></p> <p><i>Rica: ..."pero ang tingin ko po is hindi po sila komportable gumalaw sa sarili nilang bahay it's possible po they experience abuse, emotionally or physically po family problems po sir ganon po"</i></p>
<i>Escape from Reality</i>	<p><i>Rica: "figuratively po kasi part of the reason why I go to school is because of my friends, parang escape po sila from all the problems that is going on sa bahay".</i></p>

<p><i>Psychological Distress</i></p>	<p><i>Joana: "On a daily basis nasasabihan ako ng masasakit na salita sa mga magulang ko"...katulad ng nag oonline class ka na nga lang di mo pa ##\$!!!</i></p> <p><i>Jenny: "I experience abuse with my relatives emotional and other abuse that is sensitive.</i></p>
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Beset with Difficulties. In some ways, the fact that parents work from home while their kids learn from home has strengthened their bond. Parents demand more of and are more accountable for their children's at-home online education even when the effort increases. However, the outcome is different in this study. As mentioned by one of the participants who testifies that it happens to their home and to her other friends, Rica: *"pero ang tingin ko po is hindi po sila komportable gumalaw sa sarili nilang bahay it's possible po they experience abuse, emotionally or physically po family problems po sir ganon po"*. In addition, jenny stated that her observation with her classmate's dilemma | social media make this phenomenon happening in real situations, Jenny: "I think that students "feeling unsafe" in our own homes stems from personal, emotional, or familial conflict po, which makes us uncomfortable or "unsafe" at times po. Additionally, this study exposes the incidence of emotional violence against children by parents during online learning owing to the impact of the COVID-19 pandemic.

This study also reveals the probability of corporal punishment and/or abuse. Without a doubt, the pandemic has psychologically harmed both parents and children. Additionally, not being prepared to adopt new habits increases emotional stress and some associated attitudes. During the pandemic, studying while playing online games and consuming non-educational stuff is inevitable. As a result, this is likely to cause a mood of rage and irritation, or the spontaneous act of yelling and shouting as a reaction to psychological trauma. This is in line with Abdullah's argument from 2020 that marital violence is further exacerbated by psychological trauma caused by the pandemic (Abdullah et al., 2020). This verbal abuse originated from parents who expressed their unhappiness by disparaging their children's academic performance. As a result, students may experience feelings of inadequacy, discomfort, and unsafeness in their families. Their capacity to learn effectively online is impacted by their emotional instability. On the other hand, this implies that parents are also having difficulty juggling their twin responsibilities as instructors and parents to their kids. Parents are also unprepared and do not understand the teaching materials that are provided by teachers. This suggests that

the pandemic has given parents a new responsibility: homeschooling their children.

In this way, parents experience stress while they raise children and do demanding domestic tasks. They therefore exploit children while learning online during the COVID-19 pandemic. According to Scarpellini et al. (2021), 72.2% of Italian parents, particularly women, oppose shifting their position to become teachers in online learning (Scarpellini et al., 2021). In the context of at-home online learning, children could misinterpret their parents in this way.

Escape from Reality. As a participant in the home-learning program, I found it difficult to transition to online education because we had not done any simulations or practice sessions prior. The home-learning program, according to students, is even more onerous than conventional classes. Some of the common reasons for this went along the lines of: "Normal classes may have been difficult, but having friends makes it so much more manageable and less stressful. As cited by Rica: *"figuratively po kasi part of the reason why I go to school is because of my friends, parang escape po sila from all the problems that is going on sa bahay"*. This notion suggests that students may improve their socio-emotional health during face to face classes. Schools instill in us more than just academic knowledge; they also mark the beginning of our sense of purpose and community. The greatest way to gain communication and social skills is through social engagement, which online class participants were unable to do with their classmates or individuals with whom they had minimal social ties. The mental health and wellbeing of students in online classes serve as obvious indicators that there are psychosocial requirements that must be met via psychosocial support.

Psychological Distress. The Covid-19 epidemic hinders people's ability to socialize and learn, which has a severe impact on both. Online learning's lack of social interaction fosters emotions of isolation, demotivation, and loneliness. In fact, a recent web-based cross-sectional research of college students in Jordan found that lacking motivation for online distance learning could be a significant risk factor for greater levels of psychological discomfort. As stated by Joana: *"On a daily basis nasasabihan ako ng masasakit na salita sa mga magulang ko" ...katulad ng nag oonline class ka na nga lang di mo pa \$\$\$!* This will result to low self-esteem and low confidence of student.

Table 7: Academic Difficulties at Home

Themes	Descriptive Text
<i>Heavy Workload</i>	<p><i>Honey: Ahm to be honest nakapagod talaga siya like yung ibibigay sayo ng teachers na task</i></p> <p><i>Leo: yung pagbibigay nila ng continuous work nakapagod po talaga...</i></p> <p><i>Joana: Yung pressure sa school works kasi andami po and stress sa paggawa kasi minsan di nagcocontribute ang classmates.</i></p>
<i>Lack of Focus</i>	<p><i>Honey: and yung attention span mo to grasp the ideas mejo mahirap kasi maraming distraction around you like cellphone and noises....</i></p> <p><i>Joana: Mas nakapagod yung pagsabayin yung household chores and classes like may part na you should interact with your classmates.</i></p> <p><i>Joana: usually yung phone ko natetempt akong buksan siya at bahala na ko kung anung social media ang mapuntahan ako madidistract ako.....</i></p>
<i>Deterioration of Learning</i>	<p><i>Rica: Kapag may demonstration.... Parang nanunuod ka lang ng video sa youtube hindi ko po siya mafully grasp.....</i></p> <p><i>Jenny: I'm not really sure kung may napasok pa sa utak ko na may magagamit pa ko sa future</i></p>

Heavy Workload. One of the main concerns and sources of stress for students is a heavy workload. Due to inadequate planning, the effectiveness of online learning and the capacity to educate digitally may vary depending on a wide range of learning goals that direct instructional/educational goals and priorities (Adnan & Anwar, 2020; Liguori & Winkler, 2020). Additionally, the teacher and student's vocal and nonverbal body language. The abilities, confidence, and motivation of the students differ, and as a result, some do not feel comfortable learning online, which increases irritation and misunderstanding. Additionally, it might be challenging to adapt the learning process to each student's needs when learning online. This may lead to an unfair relationship with students and impede learning (Dhawan, 2020). As stated by Honey: “Ahm

to be honest nakakapagod talaga siya like yung ibibigay sayo ng teachers na task". This report suggests that the level of stress of students may arise because of the difficulties and workload. As per Joana: *Yung pressure sa school works kasi andami po and stress sa paggawa kasi minsan di nagcocontribute ang classmates*. The productivity of the prescribed activity may be hampered by the presence of more students and less resources. However, one area that needs to be addressed to properly assist learning is student participation. A well-designed course that encourages interaction and social presence, creates a clear, purposeful learning journey, makes efficient use of students' limited time, links learning activities to goals, builds on prior knowledge while filling in knowledge gaps, and offers immersive, real-world simulations or experiences can all support online student engagement (Buck, 2016; Frey, 2015).

Lack of Focus. Online learning presents many difficulties, especially for students. Students argue that the ineffectiveness of online learning is due to a lack of interest on their part, as well as other factors interfering with their ability to concentrate. Some students choose to ignore their online classes and tasks due to the abundance of entertainment and distractions available today. Schools are having difficulty keeping their students focused on their studies due to the abundance of entertainment options, frequent distractions, and lack of motivation that comes with attending a school in person. These was mentioned by Honey: *"and yung attention span mo to grasp the ideas mejo mahirap kasi maraming distraction around you like cellphone and noises"*. Also, Joana: *Mas nakakapagod yung pagsabayin yung household chores and classes like may part na you should interact with your classmates*. Even though the issues with the connection, pedagogy, and online engagement have been resolved, there are still certain things that could prevent individuals from putting out much effort to study and engage in class activities.

Deterioration of Learning. The main issues in this regard were the students' observed lack of motivation and interest, as well as their observed lack of practical skills. The more time students spend learning online, the more likely it is that their performance will be lower than it would have been in a traditional classroom. This was conveyed by Rica: *Kapag may demonstration.... Parang nanunuod ka lang ng video sa youtube hindi ko po siya mafully grasp*. These talk about the gaps in learning environment support, the gaps in information and communications technology resources, some parents are not well prepared and not able to manage or cope with their children learning at home. In addition, as cited by Jenny: *"I'm not really sure kung may napasok pa sa utak ko na*

may magagamit pa ko sa future". This result is alarming for the fact the online learning has not lived up to its potential which may result to underprepared and underperform students in the future.

Determination and Motivation in Online Learning

According to participant replies, convenience of online learning is one aspect that sticks out. This aspect highlights how students remain

motivated and steadfast in their pursuit of online learning despite the difficulties or issues encountered due to the epidemic.

Table 8: Convenience in Online Learning

Themes	Descriptive Text
<i>Handiness</i>	<i>Jenny: Its convenient po klasi nasa bahay ka lang then pagbangon mo pwede ka pang pumasok. Rica: A lot of time management is the skill that I develop during online learning...</i>
<i>Availability of resources</i>	<i>Honey: yung recordings na binibigay nila sainyo sa asynchronous classes are accessible anytime instead of grind notes na pwede mo siyang ulitin at para mas maunderstand mo siya better..... Leo: wala naman siyang pagkakaiba sa school andun kasi yung time management</i>
<i>Self-expression</i>	<i>Rica: I like writings and essays which you can express yourself. Jenny: More engaging and manageable in time. Yung knowledge ko mababahagi ko sa iba .Leo: yung parang neengaege ang mga students sa activities like open ups, questions sa iba na naiibsan yung mga problema</i>

Handiness. According to its advantages, online education made remote learning possible, was manageable, and allowed students to easily access instructors and course materials. Additionally, it decreased the need for travel resources and other costs. As cited by Jenny: Its convenient po klasi nasa bahay ka lang then pagbangon mo pwede ka pang pumasok. This indicates that the student was able to use their time wisely and complete their assignment quickly. Additionally, it made administrative jobs easier, including noting lectures and documenting attendance, easier.

Availability of Resources. Online classes give students more freedom because they can do their assignments whenever they are most productive, not just when the session is scheduled. In particular, kids with mobility challenges might access it more easily during the pandemic. As stated by Honey: yung recordings na binibigay nila sainyo sa asynchronous classes are accessible anytime instead of grind notes na pwede mo siyang ulitin at para mas maunderstand mo siya better”. This was maybe byproduct of faculty members being prepared by modifying the course materials to guarantee that students could still learn the competencies even without face-to-face interaction.

Self-Expression. Students have the chance to express their emotions, limit their understanding, and foster a sense of community by using online clues. Students who make the most of mediated technologies and learning applications express themselves online. As cited by *Leo: yung parang neengaege ang mga students sa activities like open ups, questions sa iba na naiibsan yung mga problema*". As a teaching tool, pragmatic functions supported the creation of a solid foundation for students to be responsive to academic learning in virtual situations by re-engaging them and communicating deeper meaning.

Conclusions

This study examines five categories with an emphasis on self-regulation, technical literacy and competency, student engagement, learning environment, and online classroom administration to examine the difficulties students face when learning online. The study used interpretive analysis with an emphasis on the outcomes of quantitative measurements. According to the IPA, there are advantages to online learning that will shape its future, particularly in terms of convenience and accessibility. However, there are drawbacks that pupils might not be aware of since they don't grasp nonverbal indications. This demonstrates that the state of students' emotional and social health in online classes is a glaring indication of the need for them to form relationships with others and feel a sense of belonging in the institution. With this understanding, flip learning and HyFlex model were suggested strategies to incorporate foundational information and flexibility to students and teachers amidst pandemic.

Recommendations

The absence of a strong internet infrastructure hinders the effectiveness of online learning methods. In order to embrace the new standard of the educational system, teachers should create new pedagogical strategies that will improve the experience of online learning. The government must simultaneously assume responsibility and upgrade the current online infrastructure and resources for both students and teachers. Having said that, the support of school communities, parents, school administrators, and government intervention by taking responsibility to improve circumstances in the infrastructure and facilities are also essential to the success of online learning (Basar et. al., 2021). However, the findings of the Syed and Hussein (2020) study demonstrate that online learning was a successful strategy to meet students' academic demands during the

COVID-19 epidemic. It has been discovered that implementing an online learning system would be advantageous during a pandemic like COVID-19, meeting the pupils' educational demands while they were at home. Additionally, it has been discovered that online education is quite beneficial for improving English language learners' all-around linguistic abilities.

On the other hand, this new method of learning presents difficulties for the pupils in adjusting to it. Even though the participants saw the lack of online learning resources as a barrier to distant learning, especially in rural locations, the overall conclusions called attention to the usefulness and efficiency of the online learning system. Despite all the advantages of this new learning method, due to some of its limitations, it will never be able to completely replace traditional learning. The ideal replacement for a traditional learning system during a pandemic, however, would be an online learning system (Syed & Hussein, 2020). Students now have new experiences with the conversion of an academic task from a traditional format to an online format thanks to the distant learning model. Based on the circumstances brought about by the COVID-19 crisis, it is anticipated that this new structure will be transitory. The format of educational/instructional activities will return to its previous style once the crisis is over. The current situation's goal is to provide temporary access to the material of mandatory training programs for the current academic year, not to establish a new educational system (Butnaru et. al., 2021). In this way, as the results suggest, these guidelines and/or strategies will be useful in delivering high-quality learning that is both effective and efficient.

Flipped Classroom. In this model, students are introduced to material or concepts outside of the core classroom, including at home (usually through audio recordings or videos), and then complete practice exercises and individual learning with the teacher and peers inside the core classroom. As a result, this method will provide students adequate time to study the concepts, practice and apply the new concept learnt, and engage with peers and the teacher to gain a better understanding.

Figure 1: Flipped Classroom as recommended strategy in the Institution

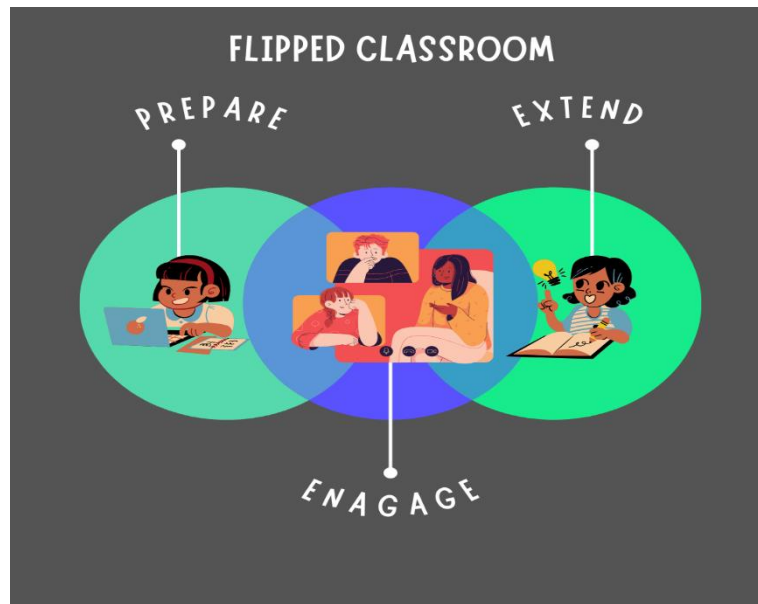
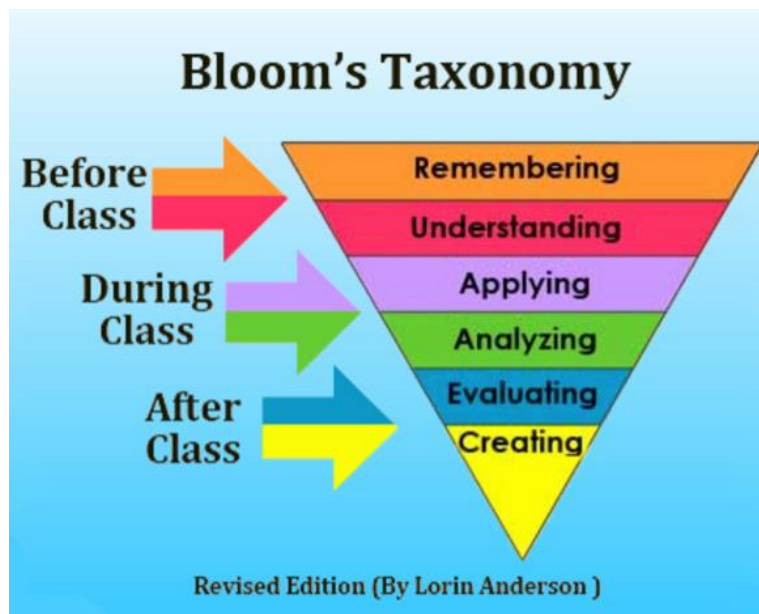
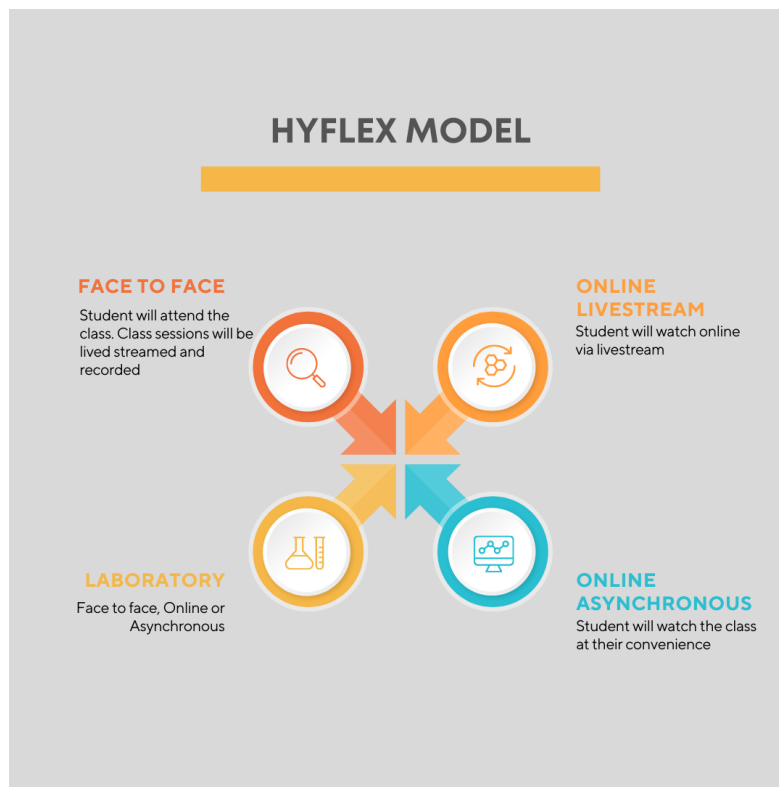


Figure 2: Application of Blooms taxonomy in Flipped Classroom



Students can now finish the lower level of cognitive work before class by using the Bloom's taxonomy paradigm. Additionally, with peers and the teacher present in class, students can participate in higher cognitive levels of learning. According to certain research, students who used flipped classrooms reported more work value, decreased boredom, and enhanced enjoyment. Additionally, due to the accessibility of materials for self-paced learning, students were generally delighted with the strategy, notably the usefulness of the online modules (CTICU, 2017).

Figure 3: HYFLEX Model as recommended strategy in the Institution



HYFLEX Model. The hybrid flexible, or HyFlex, course format is an instructional approach that combines face-to-face (F2F) and online learning. Each class session and learning activity is offered in-person, synchronously online, and asynchronously online. Students can decide how to participate. The flexibility of the HyFlex model demonstrates a commitment to student success, and that flexibility can also enable institutions to maintain educational and research activities during a disruption (EDUCAUSE, 2020).

References

Abbasi, S., Ayoob, T., Malik, A., and Memon, S. I. (2020). Perceptions of Students Regarding E-Learning during Covid-19 at a Private Medical College. *Pak J. Med. Sci.* 36, S57–S61.

Abdullah, A., Cudjoe, E., Ryu, W., & Emery, C. R. (2021). During and beyond the frequent lockdowns: Addressing the pandemic (COVID-19)–

related family violence through informal social control. *Developmental Child Welfare*, 3(3), 225–234. Retrieved from <https://doi.org/10.1177/25161032211046409>

Adnan, M., & Anwar, K. (2020). Online learning amid the COVID-19 pandemic: Students' perspectives. *Online Submission*, 2(1), 45–51. Retrieved from <http://www.doi.org/10.33902/JPSP.2020261309>

Barrot, Jessie & Llenares, Ian & Rosario, Leo. (2021). Students' online learning challenges during the pandemic and how they cope with them: The case of the Philippines. *Education and Information Technologies*.

Basar, Z. M., Mansor, A. N., Jamaludin, K. A., Alias, B. S. (2021) The Effectiveness and Challenges of Online Learning for Secondary School Students – A Case Study. *Universiti Kebangsaan Malaysia*

Baticulon, R. E., Alberto, N. R., Baron, M. B., Mabulay, R. E., Rizada, L. G., Sy, J. J., Tiu, C. J., Clarion, C. A. & Reyes, J. C. (2020). Barriers to online learning in the time of COVID-19: A national survey of medical students in the Philippines. Retrieved from: medRxiv. Retrieved from <https://doi.org/10.1101/2020.07.16.20155747>

Bhat, A. (2018, August 27). Snowball Sampling: Definition, Method, Advantages and Disadvantages. *Question Pro*.

Educause Horizon Report Teaching and Learning Edition (2020). Louisville, CO: EDUCAUSE.

Buck, S. (2016). In their own voices: Study habits of distance education students. *Journal of Library & Information Services in Distance Learning*, 10(3–4), 137–173. <https://doi.org/10.1080/1533290X.2016.1206781>.

Butnaru, I. G., Nita, V., Anichiti, A., brinza, G. (2021) The Effectiveness of Online Education during Covid 19 Pandemic—A Comparative Analysis between the Perceptions of Academic Students and High School Students from Romania. <https://www.mdpi.com/2071-1050/13/9/5311/pdf>

Center for Teaching Innovation at Cornell University. (2017). Flipping the classroom. <https://www.cte.cornell.edu/teaching-ideas/designing-your-course/flipping-the-classroom.html>.

Chiu, T. K. F., & Hew, T. K. F. (2018). Factors influencing peer learning and performance in MOOC asynchronous online discussion forum.

Australasian Journal of Educational Technology, 34(4), 16–28. Retrieved from <https://doi.org/10.14742/ajet.3240>.

Dhawan, S. (2020). Online learning: A panacea in the time of COVID-19 crisis. *Journal of Educational Technology Systems*, 49(1), 5–22. <https://doi.org/10.1177/0047239520934018>

Etikan I, Alkassim R, Abubakar S (2015) Comparison of Snowball Sampling and Sequential Sampling Technique. *Biom Biostat Int J*, 3(1). DOI: 10.15406/bbij.2015.03.0005

Flipped Learning Network (FLN). (2014) *The Four Pillars of F-L-I-P™*

Frey, J. (2015). The importance of learning experience design for higher education. Retrieved from <http://www.gettingsmart.com/2015/04/the-importance-of-learning-experience-design-for-higher-education/>

Hartnett, M. (2016). The importance of motivation in online learning. (pp. 5–32). Springer.

Hayat, A.A., Shateri, K., Amini, M. et al. Relationships between academic self-efficacy, learning-related emotions, and metacognitive learning strategies with academic performance in medical students: a structural equation model. *BMC Med Educ* 20, 76 (2020). <https://doi.org/10.1186/s12909-020-01995-9>

Heckathorn, D. D. (2011). Comment: Snowball versus Respondent-Driven Sampling. *Sociological Methodology*, 41(1), 355–366. <https://doi.org/10.1111/j.1467-9531.2011.01244.x>

Hsu, H. C. K., Wang, C. V., & Levesque-Bristol, C. (2019). Reexamining the impact of self-determination theory on learning outcomes in the online learning environment. *Education and Information Technologies*, 24(3), 2159–2174.

Jamshed S. Qualitative research method-interviewing and observation. *J Basic Clin Pharm*. 2014 Sep;5(4):87-8.

Johnson, T. P. (2014). *Snowball Sampling: Introduction*. Wiley Stats Ref: Statistics Reference Online.

Liguori, E., & Winkler, C. (2020). From offline to online: Challenges and opportunities for entrepreneurship education following the COVID-19

pandemic. SAGE Publications Sage CA of agentic engagement. *Journal of Educational Psychology*, 105(3), 579–595.

Owusu-Fordjour, C., Koomson, C. K., and Hanson, D. (2020). The Impact of Covid-19 on Learning-The Perspective of the Ghanaian Student. *Eur. J. Educ. Stud.* doi:10.5281/zenodo.3753

Reeve, J. (2013). How students create motivationally supportive learning environments for themselves: The concept of agentic engagement. *Journal of Educational Psychology*, 105(3), 579–595.

Ryan, R. M., & Deci, E. L. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective. Definitions, theory, practices, and future directions. *Contemporary Educational Psychology*, 61, 101860.

Santos, A. P. (2020). In the Philippines, distance learning reveals the digital divide. Retrieved from: <https://eu.boell.org/en/2020/10/06/philippines-distance-learning-reveals-digital-divide>

Scarpellini, F., Segre, G., Cartabia, M. et al. Distance learning in Italian primary and middle school children during the COVID-19 pandemic: a national survey. *BMC Public Health* 21, 1035 (2021). Retrieved from <https://doi.org/10.1186/s12889-021-11026-x>

Sugino, C. (2021) Student perceptions of a synchronous online cooperative learning course in a Japanese Women's University during the COVID-19 pandemic. *Educ. Sci.* 2021, 11, 231.

Syed, A. F. & Hussein, L. (2020). A study on effectiveness of online learning system during the COVID-19 Pandemic in Sargodha.

Toquero, C. M. D. (2020). Emergency remote teaching amid COVID-19: The turning point. *Asian Journal of Distance Education*, 15(1), 185-188. <https://doi.org/10.5281/zenodo.3881748>

UNESCO (2020). COVID-19 Educational Disruption and Response; UNESCO: Paris, France, 2020 Available online: <https://en.unesco.org/covid19/education-response> (accessed on 1 July 2021).