# Proceeding of Conference on English Language Teaching (CELTI) English Education Department, Faculty of Tarbiya and Teacher Training State Islamic University of Prof. K.H. Saifuddin Zuhri Purwokerto

# Looking Back and Looking Forward: Learners` Narratives Toward The Rapid Shift Of The Educational Landscape Due To Covid - 19 Pandemic

# Larah Rose Cerbo<sup>1\*</sup>, Abigail Bulanda<sup>2</sup>, Ana Mae Monteza<sup>3</sup>

- <sup>1</sup>Department of Teacher Education, UMDC, Philippines
- <sup>2</sup>Department of Teacher Education, UMDC, Philippines
- <sup>3</sup>Department of Teacher Education, UMDC, Philippines

Corresponding author's email: <a href="mailto:cerbolarahrose@gmail.com">cerbolarahrose@gmail.com</a>

#### **Abstract**

The COVID-19 pandemic has significantly impacted the educational system, leading to a shift towards online learning. This descriptive-qualitative study aims to reveal the learners' perception of the effectiveness of online learning during the pandemic. (15) participants were selected using the convenience sampling technique to effectively fulfill the study's objective. The researchers employed three (3) research questions and seven (7) guide questions for the data collection process by conducting in-depth interviews online through a virtual meeting platform. The findings of this research unveiled that the advantages of online learning include accessible information, cost efficiencies, choice of time and place, accommodation of learning style, and independence in learning. The challenges stated by the participants include locations, resources, lack of discipline, access to the internet, limited communication, student participation, underutilization of teaching materials, and problems with monitoring and assessment. In order to address these concerns, this study collected students' recommendations regarding a compelling blend of face-to-face and online instruction. Therefore, this research implies that the best practices stem from an awareness of technology advancements in teaching and learning and their successful integration with approaches, focusing on resolving the identified challenges, as required by education in a post-pandemic discipline.

*Keywords*: blended learning; covid-19; online class; students' satisfaction; descriptive-qualitative

#### **INTRODUCTION**

The education system has seen significant problems amid the rise in COVID-19 cases. As a response, universities and institutions did not waste time and rapidly shifted to a safer learning-teaching paradigm, which is the online and blended class modes while following the social distance policy (Baftiu & Nuci, 2021). Distance education can give environments for learning that are time and space-independent by using information and communication technologies and Web 2. 0 apps (Pokhrel,

2023). Nevertheless, as schools grow and turn into technology-dependent centers, the majority of learners and institutions are not yet ready for this transition in the delivery system of education (Aljuhani et al., 2020).

Online learning has become essential for schools and institutions around the globe due to the drastic changes that COVID-19 has brought in place. Some scholars have associated the COVID-19 pandemic outbreak with learning challenges. For instance, Xu and Chen (2023) conducted a survey in which Chinese students participated. They identified the issues related to the digital divide, access to technology, and the difficulty of moving to online learning platforms. Alternatively, research carried out in several settings, including the US, has also found an indication of the fact that the pandemic has psycho-social effects on students, worsening their levels of worry, anxiety, and loneliness (Villalobos & Rodriguez, 2021). This raises new concerns with regard to students' wellbeing since social disruptions, as well as variations in structures of ordinary school day, extracurricular activities, and social support, paired with online learning are all new issues discovered by Edeigba et al. (2024).

Studies conducted in the Philippines showed that most students and teachers encountered various and intricate challenges in engaging in education amid the COVID-19 pandemic. A study has shown that many students who engage in online learning lack access to remote learning technologies, especially students from lowincome families who cannot afford internet connection and proper devices (Aguinaldo et al., 2022). The study stressed the importance of focusing on digital inequalities to provide access and fair education during and after the COVID-19 pandemic. Also, several studies pointed out the psychosocial impact of the pandemic on learners, and the students reported higher levels of stress, anxiety, and loneliness (Tangonan et al., 2023). It has also emerged as a problem in the disruption of learning environments: The questions about how education can and should happen in these settings have also arisen, and questions have been raised on the quality and effectiveness of provided learning (Rodrigo & Ladrido, 2022). However, there have also been positive signs in the literature regarding the education system in the Philippines, including instances of resistance and creativity where necessary despite the adversities (Baloran & Hernan, 2020). Teachers in the education system have embraced technology-integrated teaching-learning methodologies and Transnational Learning Management systems to enhance learning and interaction in online learning. In addition, encouraging asynchronous methods such as anti-face-to-face instruction learning, including modular learning, blended learning, and the like, has gained popularity during the pandemic.

Just like the learners from other universities, the learners in the University of Mindanao Digos College (UM Digos) have equally gone through similar feats and fames in the processes of learning that have been brought about by the changes invoked by the pandemic in the learning environment. UM Digos students highlighted that they had some issues in terms of connecting to or participating in the online courses and tutorials over the Internet, the availability of technology gadgets and devices during the COVID-19 crisis, and their motivational levels towards the online classes. However, a study at UM Digos shows that the school have shown tenacity and innovation in adopting new technologies and strategies to

continue quality education despite the pandemic. It was stated that fostering collaboration among diverse sectors to create an inclusive environment, addressing language anxiety and promoting commitment, training, and resilience is the key to overcoming difficult situations in the education system (Anliwan et al., 2024).

The findings of this study will benefit stakeholders at different levels within the educational context, policymakers, and other researchers. As it portrays the learners' experiences at the university, it presents insights into their life situations and ways of dealing with them as they are in an educational institution where COVID-19 has significantly altered the learning environment. These findings may be helpful in the creation of more research-driven strategies for enhancing the protective factors, increasing the effectiveness of educational systems 'response to future shocks, diminishing inequalities in digital learning, and promoting equity and access. Moreover, the learner narratives contain suggestions for other improvements in education and the sharing of knowledge that would help bring about social change through students' commitment, personalization, and the application of information technologies to learning. This study also helps to fill the identified gap by providing the educational perspective of the learners' experiences of the pandemic so they can express their views and share their perceptions with researchers, practitioners, and policymakers globally. This study's theoretical framework was based on a socio-ecological framework that offers an enabling approach to capturing the individual, group, and system-level factors affecting educational undertakings during the current COVID-19 pandemic. This theoretical stance helps in the elaboration and analysis of the learner interviews. It provides more light on the various aspects and implications of this change that has been experienced in the field of education.

#### **Research Objectives**

- 1. To examine the learning experience during the implementation of online classes as a substitute for the traditional class mode.
- 2. To identify the experiences students had during traditional face-to-face classes that are no longer present in the online setup.
- 3. To gather students' suggestions for improving the blended learning system to enhance its effectiveness for them.

#### **METHOD**

#### **Participants**

The researchers sampled fifteen (15) participants from the University of Mindanao Digos College (UM Digos College). According to Creswell (2013), phenomenological studies should have five (5) to twenty-five (25) participants as part of data collection. Convenience sampling was used to enroll participants for this study based on the population of undergraduate and graduate students of UM Digos College in the academic year 2022-2023. This type of sampling was chosen because it is easy to apply and convenient: participants were selected based on their availability and willingness to participate in the study (Mahmutovic, 2022). Subjects were recruited from different faculties and departments to provide requisite

variability in views and exposures towards the drastic change in the educational model because of the COVID-19 outbreak.

The inclusion criteria for participants involve students of UM Digos who have experienced both traditional face-to-face and online learning in view of the COVID situation. The groups of people excluded are all the people who have not been described under the inclusion criteria since they can provide poor results due to their lack of experience or bias that might pose a challenge to the study.

In addition, the participants had the right to self-exclude at any time as long as they informed the researchers so that an immediate response to the situation would be determined. In any case, where this occurred, the study ensured that the participants' identities remained anonymous and their information remained confidential as per best practices in research ethics.

#### Instrument

To gather relevant data, the researchers used three (3) research questions with seven (7) guide questions to collect data. Provided that experts reviewed them, the researchers developed the semi-structured questions. The first section of the questionnaire focused on the learning experience during the implementation of the online classes as a substitute to the traditional class mode, followed by what experiences the students had during the conventional face-to-face class that is no longer given in the online setup, and finally, what are the students' suggestions to improve the blended learning system to become more effective for them.

## **Design and Procedure**

This research uses a qualitative phenomenological approach, which describes how people experience a situation. This study focuses on learners' narratives about the rapid shift of the educational landscape due to the COVID-19 pandemic; a qualitative study will, therefore, probably reveal more information about the conditions and thoughts of the students regarding the new learning modality.

In this study, virtual or online in-depth interviews were used for data collection because they involve interaction with individual participants while still following the protocols for the COVID-19 pandemic. Interviewers who conduct indepth interviews can obtain more information by following up with probing questions. Researchers wrote permission letters for data collection and gave them to the respective adviser, research coordinator, and school head. The participants were also informed that they would be recognized and given a permission letter in addition to being questioned.

The accompanying processes were followed to acquire the essential data. First, the researchers received permission from the school leaders to conduct the online interviews. After receiving the school's approval, the researchers sought willing research subjects who met the inclusion requirements and asked the selected participants for permission. After getting their consent, the researchers interviewed the research participants online. With the participant's permission, the interview was taped to give the researchers easy access to the data in written interview transcripts. The researchers transcribed the interview tapes and gave the

research analysts the transcripts to produce results. After gathering information, the analysts planned outcomes and considered the ideas and implications of the study.

#### **Ethical Considerations**

The UM Digos College ethical standards and procedures were strictly followed during this study. The researchers often requested and received correspondence from critical administrators in the institution. Permission is needed to do this research. The researcher assessed the risks and safety measures against the identified recruitment parties and verified their suitability (including social, psychological, and physical dangers). The study's sample also provides proper authorization and consent, and they are assured that all of their rights were respected, especially when processing the data, which includes but is not limited to:

**Participation of Choice.** The participants of this study are actively participating. Before participating in the study, participants are asked to supply information that is always optional and anonymous to protect their privacy and request at any time they have questions. The researcher was the only one who knew the precise responses of the subjects; their names did not appear anywhere.

**Confidentiality and Privacy.** To respect the rights of study participants, all information collected for this research is kept private and confidential.

**Procedure for Informed Consent.** By using straightforward and intelligible interview techniques, the researcher makes sure that all of the participants are aware of the potential benefits the school stands to gain from the study. Both the participating school administrations and the survey participants have given their consent.

**Risks.** This study did not include any high-risk scenarios that members of the community might face in terms of psychological, social, or physical factors. The rights of the study participants were respected and preserved.

**Benefits.** Both teachers and students can benefit from the study's findings as it will give them new information to develop and implement innovative teaching methods based on the study's recommendations. Students will also have a better understanding of how to deal with the hardships during the new-normal way of teaching and learning. Finally, since they have long sought to enhance instructors' capacity to assist students despite the changes in the learning modality, teachers and school personals can gain fresh insights from this study.

**Plagiarism.** When using the ideas of other authors and experts, the researcher makes sure that all proper and accurate citation rules are followed. With the help of Grammarly and Turnitin, the paper was examined for errors in grammar and plagiarism.

**Fabrication.** Since this study is founded on multiple earlier investigations, the researcher refrained from inventing fiction based on her research. Consequently, each fact was carefully composed and properly cited. For this research, all credible sources were considered, including scientific journals.

**Falsification.** This study has not yet involved any work that has been misrepresented or study data that has been manipulated because it follows the rules

for the APA 6th edition citation style. The data and information gathered are provided in the most accurate way feasible.

**Conflict of Interest.** The absence of any indication of a conflict of interest (COI) and the possibility of a secondary interest, such as financial or academic gains or recognition, influencing a professional decision about a primary interest, such as participant welfare or research reliability, were also present.

**Deceit.** The panel of experts examined and confirmed all of the written data in the survey, ensuring that no kind of dishonesty was utilized to jeopardize the welfare of the participants.

**Authorship.** Lastly, when conducting the study, authorship qualifications were taken into consideration. With the assistance and guidance of the research adviser, the researcher made a substantial contribution to the conception and design, data collection, or data analysis and interpretation. The essay is co-drafted by the researcher and adviser, who also critically evaluate it for noteworthy intellectual content. Contributions to published research have been made by both.

#### RESULTS AND DISCUSSION

#### Positive and Negative Experiences of Online Blended Learning

Figure 1 shows the learning experiences during the implementation of the online classes as a substitute for the traditional class mode. The study comes up with two (2) primary themes: The advantages of Online Blended Learning and the Challenges of Online Learning. The Advantages of Online Blended Learning have six (6) emergent themes: Facilitates easier access to information, reduces costs associated with transportation and other expenses, allows for flexible scheduling and time management, accommodates individual needs, promotes self-directed learning, and Improves communication skills. Furthermore, the Challenges of Online Learning have nine (9) emergent themes these are Geographical Constraints, Resource Constraints, Self-Discipline and Motivation, Uncontrollable Circumstances, Lack of Hands-on Experience, Limited Communication and Collaboration, Inadequate Monitoring and Feedback, Preference for Face-to-Face Interaction, and Technology Adaptation.

Facilitates Easier Access to Information. One of the significant advantages of online blended learning is that the students can quickly get the knowledge they want. Students can now perform their assignments from anywhere at any time with their electronic gadgets due to the availability of such information through digital platforms and resources. This removes barriers to traditional learning systems, allowing free interaction with learning materials at one's preferred pace and per one's schedule. Also, Web-based instruction often offers a variety of print and non-print media, including movies, interactive modules, and discussion forums. This supports the learning process and caters to the learner's modalities. Through online, blended learning, students' access to the material is eased while ensuring they take charge by improving their knowledge acquisition.

#### One participant said that:

"For me, as a student of criminology the advantages of having an online setup includes being able to research more information about the lessons and I can read some more information too". [Line 1, Participant 1]

# Other participants revealed that:

"For me, for instance there are homework that you don't understand well, you can easily use google because almost all the information is there". [Line 1, Participant 5]

#### Other participants revealed that:

"Having an online class is indeed a challenging situation. We needed to adapt the new online learning environment but the good thing is we can multi-task. We can dive in into the depths of our courses and subjects. We can be able to search information through different online websites". [Line 1, Participant 11]

# Also, other participants revealed that:

"A lot of advantages of having an online setup for learning in past years are it was very easy to access google because in every assignment or oral recitation we can easily search through google". [Line 1, Participant 14]

# And other participants revealed that:

"The advantages of having an online setup for learning is reduces stress, more free time and students can search additional information in any website". [Line 1, Participant 15]

A study of Zitha, Mokganya and Manyage (2023) entails a positive perception of teachers with the notion of ICT integration using blended learning instruction. With the rapid development of technology-based teaching delivery, the study's findings showed teachers' satisfaction in experiencing professional development training through a blended learning approach. In the virtual classroom context, learners can access the learning materials regardless of time and space, providing them with a convenient and supportive learning environment. Thus, the literature discusses that teachers and students are being mediated with ICT through blended-based instruction. This implies that blended learning teachers and students are part of the virtual classroom, irrespective of geographical separation and face-to-face classroom meetings.

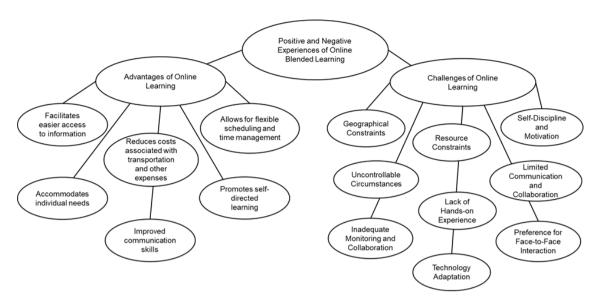


Figure 1. Thematic Diagram on Positive and Negative Experiences of Online Blended Learning

Reduces Costs Associated with Transportation and other Expenses. One benefit distinguishing online blended learning easily is that no transport or other incidental expenses are usually incurred. In joining technology into education delivery, students do not need to move or commute to attend their classes due to online classes. This also reduces costs such as the cost of fuel or the cost of using other means of transport such as buses and eliminates costs such as parking fees and expenses incurred on car maintenance.

#### One participant said that:

"The advantages of having an online setup for learning is that, you can save money because compared to face-to-face classes where we spend a lot of money on food, transportation and shelter especially for those who are far from home, online classes only require us the internet connection which is we can only download a little then it's good for one month. Another advantage is the accessibility and mobility because we can attend classes anywhere". [Line 1, Participant 4]

#### Other participants revealed that:

"So the advantage of the online teaching setup is that you have time to search for the lesson and another advantage is that you can save money". [Line 1, Participant 3]

#### And other participants revealed that:

"The advantage of the online setup of learning is that parents can spend less on transportation fees". [Line 1, Participant 2]

Online blended learning also means there is no need to transport students or any other related expenses. Thus, there are vast financial benefits to the absorption of this form of learning from students and educational establishments. Since the ideas of online classrooms are blended with traditional face-to-face classrooms, the students can save the amount they spend on fuel, fares, transport systems, and parking charges. These savings may accumulate to quite a sizeable figure within a given time frame (Seaman, Allen & Seaman, 2018). This means the reduced travel opportunities also present themselves as reduced financial struggles and long, tiring drives, which can be relieved by spending more time on academic and other related tasks (Lederman, 2019). In addition, educational institutions will benefit from financial gains attained concerning physical structure management, including utilities and other campus services, making online blended learning cheaper (Seaman et al., 2018).

Allows for Flexible Scheduling and Time Management. By adopting online blended learning, it becomes more accessible to attend to other onward duties and good time management. This must be further hailed as endurance and resilience by students, who can shift the study timetables to the traditional face-to-face models. This convenience is more appreciated due to its flexibility in working, bearing children, or other activities. It also means that students can control their capacity to learn autonomously whenever they want and to discuss in the forum whenever they wish; in other words, it enables them to moderate education and the remaining life. Hence, by practicing what was taught in the topic through blended learning and implementing online learning, individuals will have their time management knowledge boosted and subsequently improve their self-control.

#### One participant said that:

"The advantages of having an online setup for learning are having access to the lessons 24/7 and we can control our time when to study". [Line 1, Participant 6]

# Other participants revealed that:

"In my own perception, the advantage of having an online setup for learning is that we can have better time management, especially for people like me who are full-time mothers. It also provides a somehow flexible and comfortable environment. Also, the online class modality is less expensive". [Line 1, Participant 7]

# And other participants revealed that:

"The advantages of having an online setup of learning, so first of all it is accessible, the sites that are needed to be used by the students are all freely organized and we can easily access them. The information and topics we needed to know are already provided online, making it easy for us to cope with the class discussion. Aside from accessibility, it also provides us with more free time and freedom of space". [Line 1, Participant 9]

One of the most significant advantages of online blended learning is the ability to determine one's schedule and, thus, to be in charge of time management. This is particularly useful for students as they can have a lot on their plate to deal with. Moreover, Bakia and Murphy (2018) said this was possible since the students could access course materials freely, engage in the classroom and online discussions, and complete their assignments in line with their personal and working schedules. The blended learning approach involves online studying, which is suitable because the students are free to be in class without restrictions on special timetables, as with face-to-face classes. Hence, students can communicate with the contents of the course at any place and at any time they prefer, thus minimizing limitations such as inflexible schedules and accommodating individual learning (Garrison & Vaughan, 2018).

Accommodates Individual Needs. The other benefit of online blended learning is versatility, which makes it possible to address particular requirements. This learning model is flexible in terms of the learners' learning disposition, interest, and ability since it offers many learning patterns and various instruments. Students can also learn from this conveniently by reviewing the lessons in their own time should they wish to understand a specific topic and participating in structured activities depending on the individual student's learning ability. Furthermore, internet platforms may include such possibilities as closed captions, reading aloud, and changing the size of the scripts. These attributes make education accessible to individuals of all sorts as they address persons with disabilities. Online blended learning enhances academic performance through flexibility and customization of teaching and learning to accommodate every student's strength and weakness and enhance the learners' success.

#### One participant said that:

"As a working student, online setup for learning helps me to manage my time very well. This new mode of learning still served as a guide especially in language learning acquisition because it does not remove the learning process and students are still in an interactive class during online discussions". [Line 1, Participant 10]

A further benefit of the online blended learning system is that the inherent learners' needs, learning styles, preferences, interests, and learning capacities are identified. That way, one can only select the delivery mode they require, thus enabling the incorporation of 'Web-based' elements into 'face-to-face' information transfer. It also enables the students to introduce themselves to the course content effectively and comfortably, review the material that may be sensitive or controversial again, and obtain other material as necessary within the same screen (Graham et al., 2018). In addition, it is essential to underline that there is a variety of coverages of adaptive learning technologies nowadays implemented within online platforms; it implies that depending on the results of specific learners, the system offers definite

suggestions on how the latter can improve its outcome (Boelens et al., 2018). Interactive computer-based learning positively affects equity as it addresses the needs of every learner; everyone is allowed to succeed.

**Promotes Self-Directed Learning.** Blended learning enables the learners to practice skills they require for un-tutored learning while online. Online platforms make students more independent or self-regulatory in their learning activities so that they are more involved in taking responsibility for their learning activities. Students can study subjects more independently in their own time and extent. They would be able to find all sorts of information in moderated newsgroups and other forms of multimedia. Consequently, students can get acquainted with such fundamental skills as time management, critical thinking, and problem-solving, which directly contribute to the formation of the student's responsibility and an adequate level of activity. Besides, the delivery of online courses allows students to accomplish their educational goals with other responsibilities; the participants embrace lifelong learning by designing a mindset that exceeds the blackboard and classroom walls.

#### One participant said that:

"Having an online setup learning fully developed my self-esteem that leads to self-directed learning which is I do not rely on what the teachers' lessons are given to us. I have to search on some online websites to gather information and also to add something new". [Line 1, Participant 12]

#### One participant said that:

"Having an online class is indeed a challenging situation. We needed to adapt the new online learning environment but the good thing is we can multi-task. We can dive in into the depths of our courses and subjects. We can be able to search information's through different online websites". [Line 1, Participant 11]

Online blended learning enhances aspects of autonomy as it prepares students to take responsibility for their learning endeavors and personal development, which facilitates lifelong learning. Working in an online and face-to-face environment, students can manage the revealed content's pace, explore exciting subjects in more detail, and use the identified learning paths for independent learning (Garrison & Vaughan, 2018). Self-directed learners can freely assume the roles of drivers in charge of what they want to learn and how they want to accomplish this (Hrastinski, 2019). Furthermore, internet platforms offer many materials, including interactive programs, lessons with audiovisual aid, and forums. These resources keep students engaged in the content presented in class and enable them to go further than conventional classroom instructions. Blended learning, as implemented in online learning, fosters self-learning. Over time, students develop critical skills such as

critical thinking, creative thinking, time management skills, and discipline—skills that are valuable in today's information society.

**Improved Communication Skills**. Another advantage of online, blended learning is that it is individual-oriented. This method enhances interaction, practical skills, interest, and participation of the learners due to the variety of interest areas and how information is presented since they get different learning resources and learning streams. They get to learn at their own pace, and if they need to repeat the content, they can do so and then go for more practices that suit them. Also, Webbased conditions are frequently characterized by the availability of features such as text-to-speech conversion, closed captions, and resizable fonts. These qualities foster inclusion in a classroom by ensuring that people with disabilities and different people gain access to education.

# One participant said that:

"The advantage of having an online setup for learning is you can Enhance your communications skill". [Line 1, Participant 13]

This modality has advantages due to flexibility and the ability to be adapted for specific needs, preferred learning styles, and the dreams of more excellent subject knowledge and competency mastery for numerous online blended learning benefits. Still, learners can set themselves to achieve some outcomes that cannot be reached through traditional face-to-face training when participating in the blended learning models; at the same time, learners can manage to shape themselves according to their requirements and preferences and choose the components they find interesting or helpful, such as face-to-face training and online training. It provides the learners with the freedom to participate and master the course and the concepts and materials being offered in the process in a way that influences the order, pace, and method in which they take the course to revisit concepts that have been challenging to them and even avail more resource if possible. Furthermore, dynamics are practiced concerning learning technologies with adaptivity characteristics integrated into the web environment. These technologies DO provide the required response and solutions regarding the extent of the performance demonstrated by a given learner and the specific training and support that needs to be provided to specific learners if required (Boelens et al., 2018). So, through online, blended learning, every student is benefitted, and justice is also maintained between them; each one gets an equal opportunity to succeed.

**Geographical Constraints.** Geographical restrictions are also significant constraints that hinder distance education. Online learning has enormous advantages of flexibility and ease, but it is a challenge for those who reside in areas with poor internet connectivity or these technologies. Learning environments that are virtually attended by fewer students may prove difficult for the learners who otherwise would like to engage in online courses because of frequent or constant

spotty internet connection. This is worse because it erodes the accessibility of devices such as tablets and laptops essential for online classes and robs disadvantaged groups of the chance to learn online. The quest to improve internet connectivity availability and ensure that the proper infrastructure gets to areas of poor internet accessibility is crucial if we extend operations past these geographical limitations.

One participant said that:

"One of the struggles I faced during online class was when I lose internet connection. It is very difficult for me to attend class when the connection is unstable". [Line 2, Participant 2]

Other participants revealed that:

"As a student, actually sometimes, I live in the mountains, there is almost no signal there. For example, we have online classes sometimes we can't attend and will cause absences absent". [Line 2, Participant 5]

Other participants revealed that:

"My major problem with the online setup is the lack of technological devices like laptops which are essential for this kind of teaching and learning medium. Another problem is the place where I live does not have a stable internet connection. In order to attend class, we rely on piso-net which is costly and limited.". [Line 2, Participant 8]

Other participants revealed that:

"The common struggle that the students are facing during online classes is the stability of the internet connection specifically at times when I'm in rural areas and not in the city. Sometimes, I had trouble getting to class and submitting requirements on time". [Line 2, Participant 9]

Other participants revealed that:

"I struggled a lot when it came to the slow internet connection. Sometimes due to this problem, I couldn't hear the teacher's voice and sometimes I don't understand the lessons well". [Line 2, Participant 12]

Other participants revealed that:

"The struggles and difficulties I faced during online classes is my internet connection and also the lesson that I can't understand easily". [Line 2, Participant 13]

Also, other participants revealed that:

"It is not easy for me because in the past years I don't have a stable signal or internet connection, so sometimes it was difficult to enter our classes". [Line 2, Participant 14]

And other participants revealed that:

"The struggles and difficulties during online class are unstable to access internet connection, destruction of social media and lack of proper instruction". [Line 2, Participant 15]

Conditions in rural contexts may also constrain the amount and standard of education resources and services available to learners (Seaman & Allen, 2018). Specific components in rural areas can be scarce, for instance, academic advising and libraries, and thus, it may be difficult for the students to engage in practical learning, and they may lack the support that they need to succeed in their studies, as pointed out by (Graham et al., 2018). Even the students who live in different areas require assistance because of distance, transport, timing differences, and class shifts. The following factors can even make the condition of the participants involved in e-learning more unfavorable because schools have to overcome such geographical limitations as new schools, expanding broadband connections, or mobile learning technologies, the solutions take much work to implement.

**Resource Constraints.** The problem of scarcity of materials, which can be found on the internet, is also a worthy mention of a challenge associated with online learning. Not all learners have equal opportunities to use various materials and resources available through digital media and technologies. Due to the absence of laptops or tablets, which are crucial in online learning classes, some students may not have the handsets yet. Students willing to utilize the opportunities of the internet connection to their maximum potential and participate in the classes via the net fully will experience some difficulties due to the lack of equal access to a stable internet connection. However, the cost deters participants since, besides the internet connection, paying for software to participate in online classes and memberships that persons in the lower strata of society may need help to afford is often mandatory.

One participant said that:

"The disadvantage of the online class is that there are other students who take a long time to catch up because of the lack of materials". [Line 2, Participant 2]

Resource shortage is another common factor that weighs equally on the students and institutions involved in online learning. They adopt that because of inadequate technology, it may become difficult to offer an online course, and the students may need help accessing the course material. Some of the infrastructure that Galovan et al. (2021) mentioned includes old hardware, few licenses for software, and slow Internet connection. Moreover, other financial constraints could also hinder the capacitation of a school to fund the creation of online learning facilities, designing and developing limited and practical online courses and faculty development, reducing the effectiveness of the online learning programs being offered. However, the learning curve is steeper as there are resources that students require to get the best of online learning, such as academic and personal advice, tutoring, and consultation, amongst others (Altbach & de Wit, 2020). Another limiting factor is when the resources are scarce; eliminating this spending on professional development, technological assets, and student services is inevitable. This will help augment the opportunity for the students, especially those who have to get quality virtual learning as per his/her preferred choice.

**Self-Discipline And Motivation.** Availability of online courses implies that one has to sit down, which is a problem when considering commitment and self-discipline. Online learning is a further step than distance learning regarding students' activity, autonomy, and management of timetables and meetings with tutors. There are issues of motivation and concentration here. Learners can be concerned about personal contact with tutors and classmates, which may lead to lethargy and evasion regarding the tasks at hand. However, the downside or aspect of learning online is convenience, which in turn creates carriers in which people have to learn how to manage their time and be on time for their classes. There should be enough self-control, objectives, and plans for time management and taking responsibility to overcome these issues.

# One participant said that:

"For me, the struggles and difficulties that I faced during online class were that it created isolation for me because online learning means there is more screen time, and it is somehow challenging for students in terms of collaboration with others. Hence, self-discipline is essential in this modality because we just learn in our own manner". [Line 2, Participant 7]

Other participants revealed that:

"During online classes, I faced struggles and difficulties in my confidence, motivation in learning and studying, and coping up with those lessons that should be taught in school or in face-to-face interaction". [Line 2, Participant 10]

Academic responsibilities that may be situational, financial pressures, family responsibilities, and work demands will likely influence the students' motivation and ability to practice self-discipline in online learning environments (Galoyan et al., 2021). Students' enormous responsibilities and commitments may make it difficult for online learners to dedicate sufficient time and focus on their studies (Seaman & Allen, 2018). However, there is also a disadvantage of not being disciplined and organized about the assignments when using online learning, which is evident in most learners, especially those who do not have organizational skills. Realizing these issues, educational institutions should ensure sufficient service-learning services: academic coaching and time management course consultation. The rationale behind such programs is to foster motivation and discipline in the students since mastery of these aspects is critical to success in online learning (Halverson et al., 2018).

**Uncontrollable Circumstances.** One major challenge with online classes is the extent to which other circumstances may prevent learners from attaining knowledge. As we know, online environments, in particular, face several unpredictable emergencies that differ from more conventional classrooms and must address issues like infrastructure stability and exterior interferences. Problems like internet disconnection, power failure, or disturbances in their surrounding environment affect students' ability to access the courses and participate in virtual classrooms. Thus, sudden personal or family issues may happen, enhancing students' challenges in actively engaging in online learning processes. Hence, flexibility should come from the two sides of the learning process, the students and the educators, to cope with such situations. Also, it is necessary to explore ways of communicating and providing support to prevent interruptions and ensure the child can learn constantly.

#### One participant said that:

"The only struggle I've experienced during the online classes is having a slow internet connection and I really can't fully understand what our teacher is talking about". [Line 2, Participant 1]

Other participants revealed that:

"The internet connection is slow; you will be disconnected frequently during the Google Meet class". [Line 2, Participant 3]

And other participants revealed that:

"In an online learning environment there's also an uncontrollable circumstance, just like; having an unstable Internet connection, no data and many distractions (noises, sleepy, etc.)". [Line 2, Participant 11]

Unforeseeable ensembles, such as technical issues, individual problems, and natural disasters, are significant challenges for online learning. An additional advantage of virtual education is that learners can study flexibly, whether online or at their own pace. However, because it mostly depends on technology, it exposes students to potential disruptions from things like software bugs, device malfunctions, or network outages (Altbach & Wit, 2020). Furthermore, students might encounter personal challenges, including health complications, family issues, or lack of funding to participate fully in online classes (Hodges, 2020). Furthermore, the necessity may appear to educational establishments and students to immediately transition to online learning due to natural disasters such as pandemics like COVID-19. There is potential for more disruption and challenges that may lead to such a change. Situations may arise that are not planned for and may severely affect the student population's learning and performance. As Simpson (2018) suggested, policies should be flexible, support services should be provided, and contingents should be developed to mitigate the disruptions' impacts.

Lack of Hands-On Experience. One challenge that learners are bound to face while undertaking online classes is the need for body contact, especially if one is learning a practical course that requires applying skills by handling something or conducting experiments. While we have several resources online, some subjects, such as physics, engineering, or healthcare, should involve real-life experiences to fit into an acquired number of hours before being deemed competent. When the program requires students to participate in virtual worlds, as is the case of distance education, where students have to go through hands-on activities or laboratory experiments virtually, many problems affect the ability of students to obtain the best experience in the course and to apply bookish content in practice. To overcome this challenge, it is essential to use concepts like virtual simulation, the blend of interactive modules, and remote practical experiences. In addition, it is pertinent to provide field, apprenticeship, and hands-on learning opportunities as much as possible.

One participant said that:

"For me, honestly, no. Because as a future teacher, I think that in order for me to gain knowledge effectively, I need to experience the hands-on activities that I need to learn which the online setup could not satisfy. I need to experience an actual learning environment for the teaching and learning process". [Line 3, Participant 9]

Other participants revealed that:

"I don't think so, because for me there is still a lot to be learned especially in my chosen profession. There must be a hands-on experience aside from online learning and nothing beats personal experiences". [Line 3, Participant 11]

This remains a clear drawback concerning online education since it is hard to grasp tactile skills for specific professions requiring practical skills and knowledge application. Described as the scholarly teach-learning model, internet-based instruction courses are instrumental in conveying theory in our courses. At times, they offer limited ways for students to engage in practical related events, for instance, practical exercises, lab experiments, or actual projects. The limitation may present problems in academics, technical, medical, or occupational areas that prove a person needs the ability to acquire and develop practical skills (Phetla et al., 2020). Physical lab equipment or clinical facilities may not be available for use, which hinders the student's ability to practice theoretical knowledge in real-life situations and, therefore, limits their practice and mastery of skills and abilities (Altbach & Wit, 2020). Moreover, this may be a problem in that little 'real-life' related experience could hinder students from retaining careers or continuing their studies in advanced academic programs since most employers or graduate schools consider the honing of skills and actual exposure to real-life assignments as among the top priorities (Galoyan et al., 2021).

**Limited Communication and Collaboration.** Another concern highlighted is that more access to modes of communication and interaction is required compared to the face-to-face class setting. However, where the interaction and resulting outputs are with and concerning other people and are not achievable through face-to-face interaction technologies like the CMC technologies, the style and content of interaction may be restricted in other ways, this may slow down the communication channel and bring some hindrances in the working of the team and give and take from the peers which are very significant in the education sectors. However, suppose social media involves using such an environment with asynchronous communication as e-mail or forums. In that case, it will not be as close as a face-toface conversation. As such, what may take one day to respond to in other companies may take two weeks or even a month to respond to in this company. In order to solve such problems, the following measures should be implemented: instant video conferences, virtual student groups in properly selected ITP, and the pedagogical and andrological regulations for engagement and interactivity in online learning and teaching.

One participant said that:

"Partly yes and partly no because when it comes to my chosen profession which is education, we have to be exposed to people and get used to talking in public. During

the online setup, we rarely interact with anyone physically. It actually helped me express myself without having stage fright, but it actually never let us go out of our comfort zone which is why the goal of being able to confidently speak around people is not addressed.". [Line 3, Participant 8]

Other participants revealed that:

"I think I don't because some of the activities given online didn't satisfy my needs in developing my skills. It's just that I feel something was missing. For me, online setup didn't fully prepare myself for my chosen profession". [Line 3, Participant 12]

The undeveloped communication and collaboration components of online learning systems become significant barriers, challenging students and their ability to engage with others in as desirable a way as possible, including teachers, students, and peers. Furthermore, Online learning approaches generally cannot simulate face-to-face learning as much as structure and organization interactions, which happen on the fly; hence, there is limited real-time interactivity. The author's discussion below is applicable: Asynchronous communication tools could help enhance collaboration using channels such as discussion boards and emails; however, they may lead to delays in the response and interruption in the flow of communication (Simpson, 2018). However, the absence of non-verbal signals, including gestures, facial expressions, and gestures, could help students in a way that can make it rather challenging to have a meaningful rapport with their peers (Seaman & Allen, 2018). The limited interactions and discussions can limit students' ability to foster relationships, concept sharing, and robust discussions that might be essential to their learning (Hodges et al., 2020).

**Inadequate Monitoring and Feedback.** One of the challenges in distance learning is that more than face-to-face classroom monitoring and feedback is required for any student to participate in any learning activity effectively. Some of the challenges that may be encountered with the virtual environment delivery include -Determining the levels of development of the students and providing feedback on the assignments or the assessments since, most often, the students will post their assignments late at night and therefore, the teacher will have to get back to them at their convenience. The most challenging task educators face when using technologies is the ability to gauge the level of understanding of the learners, diagnose areas that the learners find most challenging, and offer help where needed, bearing in mind that there is limited physical contact with the actual clients. Furthermore, because of moving to the online learning environment, feedback can be delivered asynchronously, or it may not be delivered alongside other informative stimuli, affecting the students negatively and their progress and motivation. In order to mitigate this challenge, one is required to install proper monitoring systems, evaluate the level of students' interactivity in the online classes, and apply instructional communication to provide feedback to the students and assist them in their online classes.

#### One participant said that:

"I don't think so, because even in an online class, the prof can't monitor well if everyone understands the discussion because it's running out of time, and you can't see the reaction of the students. Sometimes it's not easy to understand so I just search for the lesson on google and then we just rely there. Another reason is that if the discussion is face-to-face, you will learn the lesson more unlike online because students might not listen and just search it on google". [Line 3, Participant 4]

#### Other participants revealed that:

"For me, no because online learning is inadequate in other aspects because in fact, we are just learning in isolation. In online learning, we have less collaboration thus it definitely cannot promote teamwork with one so it cannot promote socialization which is essential in the profession that I chose". [Line 3, Participant 7]

Feedback and monitoring should be more effective in maintaining students' progress, motivation, and performance in the online learning environment. However, unlike the traditional classroom, where the instructor can see the students' attitude, interaction, participation, or even understanding in the classroom session in real life, tenants of online learning spaces reduce occupant interaction and follow-up time (Simpson, 2018). The use of email and discussion forums for such forms of communication may lead to the teachers' reply to the students' messages and posts after some time; thus, the students will feel insecure about their achievements and learning progress (Graham et al., 2018). Additionally, working in a fully online course with students erases an instructor's ability to closely assess students' understanding of the content, apperceive errors, and correspond in a more efficient accommodation when needed (Halverson et al., 2018). How exactly there must be more monitoring and evaluation can be explained as follows: Therefore, the learner may feel disinterested and develop irritation signals and boredom to the extent of poor learning and child dropping out of school (Hodges et al., 2020).

**Preference for Face-To-Face Interaction**. Another issue that stands in the way of efficient online learning is that some students consider face-to-face communication preferable. However, there are certain disadvantages to learning through an online platform. Firstly, the social dimension of the learning process, as opposed to the traditional class size, may be simulated. The freedom to speak and engage with other students and be assessed by teachers right on the spot is helpful to some students in order to record their best outcome. This is so because the virtual learning environment fails to allow students to have direct physical communication with fellow students or lecturers, and sometimes, this may result in student frustration

and low performance, particularly among those students who strongly believe in physical interaction and communication during learning. This can be overcome by strengthening students' connectedness in online classes, encouraging collaboration, providing an opportunity to meet them via video conferencing, and permitting instructors to offer face-to-face office hours. These metrics will enhance the students' engagement and satisfaction with the online learning systems.

One participant said that:

"For me, it's a no. because it couldn't improve our communication skills and we can't have confidence to show our ideas". [Line 3, Participant 1]

Other participants revealed that:

"I did have a hard time; it is necessary to focus especially on my course because it is difficult". [Line 3, Participant 2]

Other participants revealed that:

"As a student who's major is Physical Education, I am not satisfied with the online class. I need to do face to face because there are many physical activities, and the videos don't provide enough experience and knowledge". [Line 3, Participant 3]

And other participants revealed that:

"No, as a Criminology Student we must need have a face-to-face class because we have different things need to do and to learn". [Line 3, Participant 13]

While no significant difficulty is associated with online learning, one of the challenges experienced is the contact problem; children who do well in class desire face-to-face interaction. As for the advantages, it has been stated that online learning is flexible and manageable; however, it is informative as well. There may be difficulties in identifying the needs of students, who require the bodily interactions inherent to virtual classes (Graham et al., 2018). Face-to-face communication increased reassurance, informal interaction, and timely interactive communication, which helped all students actively participate, gain interest, and improve their communication skills (Simpson, 2018). This means amplifying sentiments of seclusion, alienation, and estrangement from peers and the faculty, which is to the detriment of the learning process of a learner (Henriksen & Groundwater-Smith, 2020).

**Technology Adaptation.** One of the challenges that cannot be overlooked is the student's call for technical accommodation, as most of them might need more knowledge or devices to access and use technology for learning online. Though engaging in educational services through digital platforms is good because it allows one to access educational materials regardless of location, it requires some level of technological skills to maneuver through the service. Some people can need help with challenges regarding adaptation to different interfaces, troubleshooting technologies, or gaining a consistent internet connection. These can hinder their ability to engage in online classes fully. Also, technological gaps such as having or not having a digital device or access to the internet might reduce or further amplify the gap in educational opportunities for learners of vulnerable backgrounds. The urgency of the situation calls for immediate intervention, support, and instructional programs that help the young population learn safe and secure ways of using computers and the internet. Also, it is possible to identify the measures that must be taken to fight against such a digital divide and offer equal opportunities for children to be engaged in online educational processes.

#### One participant said that:

"Yes, I need to adjust the new learning set up by learning the technology because nowadays technology has a great impact in teachers. The skills that I need to know how to access technology or any platform in the website for my learnings/teaching process". [Line 3, Participant 15]

The challenges of transition to technology extend far beyond the individual student's capacity since the question arises over the readiness and capacity of institutions to integrate technology into their pedagogy and curricula (Altbach & Wit, 2020). To support effective technology use and accessibility of online information for learning, education centers should require resources to enhance their structures, provide technical support, and develop professional learning experiences (Galoyan et al., 2021). Teachers also require being supported and trained regarding how to use technology to teach, assess, or even communicate in the context of online education (Halverson et al., 2018). Furthermore, it is critical to understand that the management of the challenges associated with technology integration cannot be achieved in isolation from each other but with the help of a range of like-minded individuals, including administrators, teachers, instructional designers, and IT professionals.

# **Blended Learning Unique Experiences**

Figure 2 shows the learning experiences during the implementation of online classes as a substitute for traditional class mode. The study identifies five (5) major themes: Lack of Communication and Interaction, Lack of Learning Engagement, Insufficiency of Instructional Materials, Challenges with Technology and Connection, Inadequate Instruction, and Assessment.

Lack of Communication and Interaction. One of the issues experienced in the Distance Learning Program is low interactivity compared to the F2F instruction. Lecturers and students meet and engage in face-to-face discussions; since education is an interactive process that provides feedback, the interaction between the persons would be restricted through a virtual environment. This may hamper interpersonal communication, appeals to cooperation, and collaborative work involving group and peer discussions that are central to learning processes in the education system. Moreover, concerning asynchronous communication media, including e-mail, bulletin boards, and the like, complainants and inquirers may experience delays and impersonal contact as several days may elapse before their complaints or inquiries are responded to. It is crucial to utilize real-time capabilities such as video conferencing to address these concerns while establishing a virtual student presence and making learning and collaboration in an online setting meaningful. The issues affecting online learning include addressing the need for students to have means through which they can have an immediate interaction in the learning process, such as video conferencing, creating virtual relationships among learners, and ensuring the learners are active participants in online learning students in the course.

# One participant said that:

"Connection, more learning, and confidence. A lack of any kind of face-to-face communication with the instructor inhibits student feedback, causes social isolation, and could cause students to feel a lack of pressure". [Line 4, Participant 1]

#### Other participants revealed that:

"I believe that the online teaching and learning setup lacks motivation for students to focus on listening to the discussion. There is a lack of interaction which could be a reason for the students to be bored or sleepy". [Line 4, Participant 4]

#### Other participants revealed that:

"I believe each school would need to implement some activities, especially interactive ones to give the students the chance to work with their classmates and interact with each other". [Line 5, Participant 4]

#### Other participants revealed that:

"Online classes lack communication and interaction with your teachers and classmates and solving technical issues like the stability of the internet connection". [Line 4, Participant 6]

Other participants revealed that:

"In an online learning setup, socialization and teamwork cannot be promoted in this type of modality and it marginalizes the students' interaction and collaboration with their classmates and teachers". [Line 4, Participant 7]

Other participants revealed that:

"I think, cooperative or interactive way of teaching and learning is lacking in online set up". [Line 4, Participant 10]

And other participants revealed that:

"I think the Interaction is because it seems that the others are not very active. In short, there is a lack of face-to-face communication. Then miss the online class. Aside from that, this toon is not the same as face-to-face which can be peered. Then, sometimes one of the obstacles online is the connection that can cause not being able to deliver a proper lesson to the students". [Line 4, Participant 14]

Since most online learning platforms need more aspects of discussion and communication, it is evident that they pose specific challenges and interfere with the student's or the learner's capacity to interact with others or the instructors. It is acknowledged that factors associated with teaching and learning via the online platform are ineligible to the sort of interactions and group debates in real-time, like face-to-face classes, and thus, the absence of real-time communication is apparent (Graham et al., 2018). The technological aspects of communication, such as discussion forums and e-mails, are commonly used for collaboration. Unfortunately, these modes delay response and may disrupt turn-taking rules (Simpson, 2018). Additionally, students struggle with the lack of visible signals, which are evident in face-to-face interaction such as face or gestures, and with ensuing difficulties in the way they interpret the messages they get from other people, including their student's partners in group projects as well as they may find it challenging to establish a close interpersonal relationship with their peers, as pointed out by Seaman & Allen in their 2018 research. The limited interactions and interchanges can even lead to deficiencies in students' ability to connect, communicate, and get involved in meaningful dialogue, which may consequently affect their comprehensive learning cycle throughout their academic life, as Hodges et al. (2020) outlines.

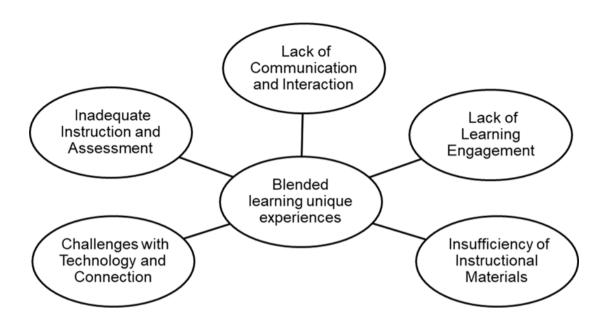


Figure 2. Thematic Diagram on Blended Learning Unique
Experiences

Lack of Learning Engagement. Some of the challenges that the paradigm practices may face include the following ones: Sometimes, there may be no active participation of the learner, which is essential in improving the education process in blended learning environments. This one is disengagement, which manifests itself when the child is detached or shows no interest in the lessons. Some factors include continuity fatigue as the delivery of courses is continuous in the respective institutions, some online courses attract minimal enrollment, and operational difficulties in integrating online and face-to-face teaching. Finally, this brings the debate about blended learning's lack of structure; students' levels of motivation and participation can fluctuate; the students and the class, where students could switch schedules and responsibilities and cannot give full time to class, are flexible. Thus, addressing this issue requires that the faculty members ensure all possible stimuli presented in online and face-to-face learning modes are practical and more salient to provide excellent learning stimuli to the students.

#### One participant said that:

"In my own opinion, the school should promote engagement activities to students to meet the desired lessons that the students should be knowledgeable with. And also, schools should encourage students to be vaccinated and teach them proper hygiene for the preparations for the resume of the face-to-face classes". [Line 5, Participant 7]

Therefore, this typical lack of active student participation in mixed-learning environments becomes a barrier that must be addressed. Studies show that students' interactivity decreases in instructional activities when they do not interest them or match the students' learning styles (Garrison & Vaughan, 2018). Sometimes,

the structuring of the learning elements could be in a way that a part of the course is online and the other part is F2F; however, this choice might lead to a fragmented learning experience that is not enough to maintain students' interest and engagement (Jin, 2019). Furthermore, this flexibility in incorporating online learning components proves to be a disadvantage because students will be inclined to delay or lose interest in their studies because of issues with time management or lack of self-discipline (Bliuc et al., 2021). This approach may affect students' concentration, information retention, and overall learning results, especially in a blended learning context.

However, learning engagement needs to be understood in terms of instructional engagement – as the absence of engagement in the context of course-related tasks, ineffective instructional engagement, or limited learning engagement opportunities. Some studies have found that activities that do not activate the students' higher-order thinking and other related capabilities, such as watching recorded lectures or reading content on the internet in a tote, can be less effective (Vaughan et al., 2019). Another learning model called blended learning implies that some learning occurs online while the rest is done in classes. Therefore, teachers need to develop learning activities that integrate technology in the classroom to help address goals such as learning, socialization, and other related pertinent problems. Educational technologies can also be integrated in a way that the students be made to fully participate in the lessons depending on their interests through the use of multimedia materials, group discussions, and creating classroom entertainment from instructional content that forms part of students' learning that reinforces knowledge acquired from the lessons taught in class.

Insufficiency of Instructional Materials. Learning engagement can be defined as no engagement in course activities, ineffective instructional engagement, or inadequate learning opportunities. Some studies have found that activities that do not activate the students' higher-order thinking and other related capabilities, such as watching recorded lectures or reading content on the internet in a tote, can be less effective (Vaughan et al., 2019). Another learning model is blended learning, meaning that part of the learning takes place online and is face-to-face. Thus, educators must design their lesson plans and engage technologies to promote learning, social relations, and problem-solving skills. Educational technologies can also be integrated in a way that the students be made to fully participate in the lessons depending on their interests through the use of multimedia materials, group discussions, and creating classroom entertainment from instructional content that forms part of students' learning that reinforces knowledge acquired from the lessons taught in class.

#### One participant said that:

"Maybe the way the teachers deliver their discussions. Some are so fast that we can't catch up and some lack interaction, so the students are sleepy". [Line 4, Participant 5]

## Other participants revealed that:

"I think based on my experience the use of instructional materials that students need to enhance their skills and abilities and to prove their knowledge. We need actual experiences, not just merely listening. We need more instructional materials, especially interactive ones. Aside from that, I think online classes limit the teachers' ability to monitor his/her students. Cheating in exams is almost not noticeable". [Line 4, Participant 9]

#### Other participants revealed that:

"For me, in terms of instructional materials, there is a need to modify them to make sure that the students will get benefit from them, especially in effective learning. And also, there is a need for a more effective monitoring strategy. Teachers must not only focus on giving exams and quizzes but also on encouraging performance-based activities so that the teachers will know what to address in the student's performance". [Line 5, Participant 9]

## And other participants revealed that:

"The school need to address all the problem. The school will provide enough instructional materials no changes, of instructions and the assessing appropriate assessment". [Line 5, Participant 15]

One of the biggest challenges faced in the case of applying blended learning is the unavailability of proper instructional materials that will adequately support student learning processes since blended learning integrates virtual and face-to-face instruction, meaning there is a high demand for many diversified learning resources that can address the needs of the target students. Research indicates that students may develop boredom and disinterest when the learning materials are limited or need to meet their learning objectives (Garrison & Vaughan, 2018). Blended learning thus supports that the qualification and accessibility of educational materials significantly affect the students' learning in the educational environment. For this reason, students rely on technology to a large extent in acquiring the lesson content and submitting assignments (Jin, 2019). Scarce or outdated materials may hinder the understanding of critical ideas students, the ability of students to apply theory to practice, and meaningful education activities (Bliuc et al., 2021). Consequently, educators must ensure that instructional materials are relevant, upto-date, and available through various means so that the learners' learning process increases within a blended learning environment.

Challenges with Technology and Connection. Technology and connection remain the two factors that sometimes hinder learning, even though blended learning affords learners exciting experiences. Automated reliance and interconnectivity with the internet create other vulnerabilities, such as technical hitches, system failure, or slow internet connectivity, which will likely hinder the conduct of course kits and virtual classes. However, students' access to technology and stable internet connections could enhance inequality in learning, academic achievements, and outcomes for persons from disadvantaged groups. In this case, to address these challenges, educators must employ preventive measures to deal with technical difficulties. This can be done by offering IT assistance, suggesting backup methods of delivering lectures to learners with connection problems, and ensuring that the contents are downloadable on different gadgets and weaker connections. With this strategy, teachers can incorporate typical learning, which will be handier and more reasonable.

# One participant said that:

"Manage the students' attitude and behavior towards learning and also be mindful of the usage of technology, especially considering students who can't afford gadgets or those living in areas with connection problems". [Line 5, Participant 6]

Other participants revealed that:

"I think it's the teaching strategies and maximizing the technology used". [Line 4, Participant 11]

And other participants revealed that:

"A lack of financial resources can result in lower academic performance and less attraction to certain education subjects". [Line 4, Participant 13]

The practicality of technology and the availability of connections present the unique features of particular geographical areas as enormous obstacles in blended learning environments. In the case of blended learning, an exploration points to the paramount importance of technology in enabling connectivity between online and face-to-face modes. However, students may face technological challenges, which include the currency of networks, compatible device issues, and software breakdowns that limit students' accessibility to learning resources and thus limit their participation (Garrison & Vaughan, 2018). In the same way, this raised concerns that the blended learning modality could increase disparities in students' access to technology and that the internet would hinder students, particularly from marginalized or rural areas, from fully benefiting from the system (Jin, 2019). Such technological and connectivity elements underline the significance of leveraging intentional strategies for deducing technical problems. It can entail providing

technical support and other means of access, indicating appropriate access channels to online resources in a hybrid setting, and fighting for change that pushes for equal accommodation of people with disabilities in technology-intense learning.

Inadequate Instruction and Assessment. Blended learning has some unique advantages that require additional training and issue different challenges concerning training and assessment methods. When entering online and offline teaching experiences, educators must design curricula and class assignments that promote students' interactions with both forms of communication. Thus, it is likely that students can easily get lost and disoriented, even in the case of explicit instruction or guidance on approaching different online resources and activities. However, much more importance should be given to guaranteeing that various assessment forums match the educational goals and curriculum in equal measure to facilitate students' proper facilitation and assessment. Factors like improper tests, lack of proper assessments, failure to encourage students to come up with their best results through delayed punishments and rewards, and lack of proper feedback are some of how students are not encouraged to impress in their educational endeavors.

#### One participant said that:

"The lacking was proper instruction from the teachers' instructional materials and of course proper explanation form the subject matter and in appropriate assessment of the students". [Line 4, Participant 15]

# Other participants revealed that:

"I remember some professors, but I won't mention their names. Some conduct their classes plainly by just discussing and letting the students just listen every day. That kind of teaching does not actually help us improve our communication skills. I admire those teachers who engage the class in discussions and gave us the chance to express our ideas. I think that kind of teaching is needed to be explained to teachers when conducting online classes. As to experience, since we are no longer in lockdown and were currently under the blended learning system, I think the schools should use the schedule for face-to-face classes for interactive activities and performance tasks". [Line 5, Participant 8]

Several challenges are experienced in mixed learning situations, mainly due to inadequate training and assessment. Lack of proper instructional design, such as setting learning objectives that are not well defined, structuring the learning activities improperly, or having limited guidance from the educators, can cause setbacks to the student's learning process and lesser effectiveness of blended learning (Jin, 2019). Furthermore, a unique aspect of the blended delivery mode in the current study is the effective management and coordination between the online and face-to-face components of the blended courses to enhance student's learning effectiveness (Bliuc et al., 2021). Inadequate or uneven training procedures present

problems students encounter while transitioning between online and face-to-face encounters. This can lead to cognitive dissonance, social apathy, and below-expected educational results.

# Students' Suggestions to Enhance Blended Learning

Figure 3 shows the learning experiences during the implementation of online classes as a substitute for traditional class mode. The study has five (5) primary themes: Integration of In-Person and Online Learning, Enhancing Students Engagement and Motivation, Utilization of Technology and Online Tools, Communication and Explanation, and Transition Computer-Based Learning.

**Integration of In-Person and Online Learning.** During the pandemic the face-to-face classes has shifted to online class. But today that everyone of us facing the new normal the institutions used to combine the face-to-face interaction and the online learning to those who took there covid-19 vaccine so that the students can now meet their classmates and can have their interaction face-to-face.

One participant said that:

"By making in-person and online learning complementary, blended learning creates a truly integrated classroom where the needs of all types of learners can be met. Keeping students engaged, stimulated, and motivated also helps teachers to be more effective and make greater gains with their students". [Line 7, Participant 1]

Other participants revealed that:

"By making in-person and online learning the teacher is more on reporting in the blended learning system". [Line 7, Participant 3]

Other participants revealed that:

"Well, I think there are no changes in teachers' teaching strategies in this blended learning. As I have observed teachers are still using their IMs for effective learning and yet the difference is that it is online, not actual". [Line 7, Participant 12]

As a form of integrating face-to-face and online learning, blended learning uses both modalities to enhance the students' learning through the advantages of each. Combining face-to-face with online learning, the effectiveness of Blended learning lies in flexibility, the individualized approach, and increased student engagement, as noted by Vaughan et al., 2019. Some benefits students highlighted about online resources include flexibility of time and location in accessing the resources, access

to the course works, and the interactive nature of the material in the self-paced learning environment (Jin, 2019). However, face-to-face communication from teachers' and classmates' perspectives is also beneficial as it allows the students to ask questions and get immediate feedback or to have collaborative discussions. Thus, by designing the learning approach in a way that embraces both face-to-face and online components, one may create the most focused and preferable environment for the individual learner (Bliuc et al., 2021).

Also, in their learning activities, students outline how blended learning may be improved by integrating and synchronizing face-to-face and online activities and resources to offer the learner continuity and richness of the learning process (Garrison & Vaughan, 2018). For example, students are very vocal in complaining that it becomes crucial for professors to communicate to their learners what they expect from them, the sort of activities they will be dealing with, and the timelines within which they should complete it regardless of whether the lessons are online or face-to-face (Mupinga et al., 2021). They also agree with using technologies to mediate face-to-face learning to transform loose-tightly coupled interactions when using multimedia, interactive, or virtual resources to support enhanced learners' participation and interactions (Gikandi et al., 2019). Furthermore, students state that the ability and opportunity to be active and to learn is highly valued, and they are most engaged in both settings. This demonstrates that it is possible to harness the potential of the flipped classroom approach to increase understanding and appreciation of ideas and concepts inside and outside the classroom, enhanced using tangible group assignments, collaborative projects, and peer-led discussions (Hrastinski, 2019).

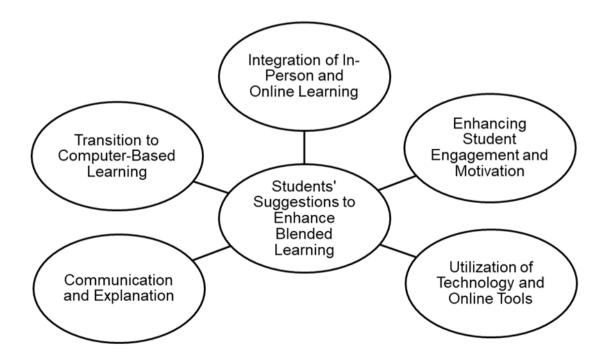


Figure 3. Thematic Diagram on Students' Suggestions to Enhance Blended Learning

Enhancing Student Engagement and Motivation. Students have described blended learning as helpful in promoting learning, but students' engagement and motivation rank among the areas that need to be improved according to the students' recommendations. Many learners underline the importance of activities that can be described as engaging and active, as they actively interact with the course material. It combines real multimedia, likevies, and interaction simulators to make the lessons more alive and engaging. Students also recommend adding collaborative assignments and peer-to-peer discussions and talks dimensions, which promote students' effective participation and foster group cohesiveness and knowledge-sharing. Additionally, giving the students timely feedback and recognition of their work will help boost their motivation and create a perception of progress and achievement. However, techniques that increase learners' interaction and interest levels in blended learning activities are of more importance. The program can be delivered more effectively to the target end-users in that case.

# One participant said that:

"Having a computer or laptop. Because its comfier to use and it can easily compile our learnings. Through the use of technology in blended learning, many of those tasks can be automated, allowing instructors to spend more time helping students comprehend the material and develop their skills, in addition to creating more bandwidth to prepare strong lessons". [Line 6, Participant 1]

Other participants revealed that:

"When using other applications, it must be interesting in order to get the students' attention". [Line 6, Participant 2]

Other participants revealed that:

"What has changed in the teachers is their teaching, they should make a strategy to get the attention of the students so that they will be willing to learn". [Line 7, Participant 2]

Other participants revealed that:

"There are changes in the teacher's teaching strategy with this blended learning system, like interactive discussion, exchanging of ideas, implementing challenging activities, and many more". [Line 7, Participant 10]

Garrison and Vaughan (2018) note that students crave participation and engagement activities that foster learners' active engagement and the development of their self-organized learning processes. According to the authors, it could be beneficial to adopt several instructional strategies and media resources based on familiar learners' preferences and learning types; examples of such approaches include interactive simulations, multimedia information, and game-based learning activities. In addition, students emphasize the importance of creating opportunities for students' interaction and collaboration offline and online to enhance social learning and the formation of community. By creating an encouraging and all-embracing learning environment, the teachers can increase the learners' engagement and motivation in the blended learning contexts, realizing the students' worth and feeling valued and connected to their peers and tutors.

**Utilization of Technology and Online Tools.** Students approve the deliberate implementation of technology and online tools to complement the delivery of the teaching-learning resources. They stress the role of, for instance, the learning activities in web-based formats, the roles of the instructional sinusoids, and multimedia-based course deliverance in increasing participation and access to the coursework. In the same regard, the students recommend adopting instant messaging and collaboration tools to enhance the interaction between the instructors and students and boost the sense of togetherness and support in online classes. In addition, educational technologies such as adaptive learning and personalized learning platforms might address the learners' needs in terms of learning preferences and speed and afford different learning experiences to various learners. Technology-integrated and internet-based learning environments offer learners rich and compelling educational environments and help them achieve educational goals.

# One participant said that:

"The learning materials to be used for a more effective blended learning system are to maximize the use of technology like providing softcopies of the discussions to fill the shortcomings of this rapid shift of educational modality". [Line 6, Participant 4]

Other participants revealed that:

"Gadgets like laptops and internet access because we can't deny that even if the covid is gone, our technology is still evolving". [Line 6, Participant 5]

Other participants revealed that:

"Blended learning can be effective as much as possible with the use of videos and online services, social groups for lectures, and could provide tutorials on the new technology to be used". [Line 6, Participant 7]

Other participants revealed that:

"Online Apps, updated teaching strategies, and learning modules". [Line 6, Participant 11]

Other participants revealed that:

"It really takes time because the blended system is not deep, everyone is confused when it comes to the pandemic. There are many things to consider, from face to face down to virtual classes, modules, video recordings of some explanations on different topics using student's USB and uploading fun and interesting class demos on YouTube". [Line 7, Participant 14]

And other participants revealed that:

"Adaptation, flexibility and passion of a teacher makes them so admirable. They utilize apps like Google classroom, quipper, Google meet, and etc., just to provide for the needs of every student". [Line 7, Participant 11]

Students also advocate for opportunities to advance information and communication technologies by having an escalated interaction between students and professors and being more involved in students' communion and collaboration (Vaughan et al., 2019). They support discussion as a board, class, and social network that will support both asynchronous and synchronized communications among the learners, peer interdependence, and information exchange. Moreover, the identified benefits of activity and content-sharing tools like Wikis, blogs, and group project management tools are well appreciated in the organization and immensely preferred by students, as Gikandi et al. (2019). Next, it is crucial to pay attention to what students have to say about the need for teachers and instructional designers to help and scaffold students and instructors and to provide training, resources, and support when implementing these tools appropriately in a blended learning context (Halverson et al., 2018). Students should be allowed to participate in the process and gain mastery alongside the technology since it shows the best strategy to augment student learning and adapt the technology to embrace blended learning for the learners.

**Communication and Explanation.** Thus, students have also noted the need for proper communication and explanation when improving blending learning

solutions. They stress such aspects of their work as giving clear instructions, educational goals, and specifications for the tasks and assessments for students and teachers. In addition, students recommend improving effective communication through features such as e-mail, forums, and office-hour communications to discuss any issues immediately. Also, employing video lectures or screencasts contributes to clarifying concepts through media writing that enriches concept understanding compared to using write-ups alone. To enhance the blended learning experience, instructors should have good communication skills and be good at explaining things. This unfolds the notion that leads to students' engagement and interaction and, last but not least, enhances their achievement.

## Other participants revealed that:

"I think, changes should be the continuous use of quipper for disseminating information but still encourage to have interactive activities and face-to-face exams for more effective monitoring given that we are following the safety protocols for covid 19". [Line 7, Participant 4]

# Other participants revealed that:

"By teaching and learning resources textbooks, digital learning resources including video, audio, text, animations and images and also lectures. - For me, YouTube. Because today's kids are so good at YouTube then the teachers can just upload a video of their class. That's one of the strategies for teachers during the pandemic. Give them a module and then upload the explanation to YouTube". [Line 6, Participant 14]

# Other participants revealed that:

"The changes in the teaching strategy for this blended learning setup is it requires sensitivity on how the students could learn effectively while following safety protocols. And also how the technology can support". [Line 7, Participant 6]

The students pay much attention to how the delivery process, with the help of technology, is being implemented and how the teachers explain the processes. It must be emphasized that the student, at the same time, must be made accountable for his actions while, on the other hand, the student must be appropriately guided by the institute; it, therefore, becomes the responsibility of the teacher to see to it that the students understand all this well (Anderson, 2011). The students want detailed lessons and task descriptions to be informed about goals, relevance, and task expectations (Jin, 2019). In addition, the students' qualitative feedback demonstrated that it is helpful to notify them about the results and progress to be aware of their strengths and difficulties (Bliuc et al., 2021). Many things can be done using the regularly provided encompassing explanations and clear patterns of

communication if educators wish to see their students as more engaged, motivated, and flourishing within the blended learning process.

Transition to Computer-Based Learning. According to the students, computer-based learning can improve blended learning. From the student's perspective, the importance of submitting practical training and support options is highlighted for students who can face challenges adjusting to learning with the help of digital tools and technologies. This will give the kids confidence as well as adequate skills in the use of technology. This may include providing tutorials and workshops and a friendly handout that the students can use to become more acquainted with the LMS and other technologies that will be used throughout the course. In addition, students request an understandable and convenient design and structure of online platforms to eliminate the given difficulties and facilitate access to the materials. By prioritizing integrating computer-based learning, instructors can enable students to manage such courses more efficiently and improve participation levels in blended coursework.

## One participant said that:

"The changes of the teacher in blended is switching into computers -based learning/teaching process because teachers are no longer the main source of information. Through the use of technology teacher access their students and to collaborate". [Line 7, Participant 15]

# Other participants revealed that:

"For me, it must be the combination of utilizing technology and cooperation or understanding the situation. The teacher must be sensitive to the needs and struggles of the students and also the students must be cooperative with what the teacher required them to do". [Line 6, Participant 8]

#### Other participants revealed that:

"I think the students are not the only ones who are struggling with this rapid shift in the learning system but also the teachers or instructors. They actually doubled their effort in order to satisfy the needs of the students. I think the necessary changes depend on the situation of the teacher and the students. Teachers may understand the situation in order to address what needs to be addressed. That way, their efforts will not go to waste". [Line 7, Participant 8]

Other participants revealed that:

"The materials that use for blended learning system are instructional learning materials, virtual classes, videos, short film. These resources can help the learners for the learning process for having effective blended learning". [Line 6, Participant 15]

The students themselves provide ideas on how to improve blended learning, which covers methods to transition easily to computer-mediated instruction gracefully. Based on Gardon and Vaughan (2018), the authors underlined the need for the intensity of the orientation and training sessions so that the students could gain insight into the instruments and platforms used in the blended courses. To divide the influence of potential barriers to the use of technology, educators can use proper onboarding techniques combined with support mechanisms to facilitate the students' and effectively integrate technology for educational purposes.

#### **SUMMARY**

The result of this study identifies numerous benefits of online learning: the openness of information, exclusion of the expenses connected with transportation and other needs, non-fixed timetables, and time management. Distance learning allows students to meet individual needs, encourages independent learning, and benefits the communication system through forums, emails, and chats. Nevertheless, there are several inherent difficulties in the learning process while receiving all the necessary material through the Internet. Most challenges include geographical restrictions, scarcity of resources, lack of internet connection, and possession of technology. Reducing distractions and procrastination is not easy in the context of having more free time, and the overall organization of learning is challenging enough, let alone combined with factors such as electrical power failures and technology malfunctions.

Furthermore, it is typical for online learning that specific disciplines require more practice. Few interactions or collaborative efforts occur between students and teachers, so establishing teamwork might be challenging. Other factors that make it even harder include difficulties in monitoring and providing feedback provided by some educators to the learners to ensure their understanding of the lessons. Also, it is more challenging to cultivate students' interest in the course and provide them with enough necessary tutorial materials, especially when using high-quality instruction designed for online classes. Changing the technological tools and platforms used in teaching requires many adjustments from the teacher and the students. The need for a fast internet connection and sufficient technical help add to the challenges of online learning to guarantee effective learning.

Students provided suggestions to address these challenges, such as adopting the teaching and learning experience that incorporates the face-to-face and online approach because of this mode's advantages. Improving innovative strategies to motivate and engage the students and integrating technology and online tools in the education process is essential. A key learning component is understanding, facilitated by clear and effective communication when disseminating concepts and instructions, especially in an online environment, which depicts smooth transition strategies in a computer-based learning environment. Thus, identifying these benefits and limitations helps reveal the opportunities and threats of applying the online learning model, or, in other words, continually expanding the framework of the educational system to provide more students with the opportunity to benefit from it.

#### **IMPLICATIONS**

This study bears meaningful insights on the future education movement, which has considerable connotations to the change that future education will witness shortly. The positive aspects of online learning defined by the participants include increased availability of information, expense reduction, the possibility of individual learning at any time, and encouragement of self-motivated learning; that is why the usage of these elements in future educational models could be helpful in order to increase the access and individualization of the learning process. However, these challenges, which range from geographical limitations and limitations in the availability of resources and technology, suggest that tailored efforts for inclusive education and quality results must be sought.

Such restrictions as limited communication and cooperation prove the need to work on new models that include face-to-face and distance learning components. Also, the need for instructional materials and inadequacies in the technology structure must be adequately met to reduce interference and enhance learning participation. To build a more effective educational delivery system, one must pursue improving students' appreciation of learning, using information communications technology and online media, and effective communication and feedback. Consequently, this research suggests that the best practice arises from understanding technological advances in learning and teaching and their effective integration with other methods, with particular emphasis on solving the identified issues, as education in a post-pandemic discipline requires.

#### REFERENCES

Aguinaldo, J. C., Cobar, A. G. C., Dimarucot, H. C., & Dimarucot, H. C. (2022). Learning effectiveness and satisfaction self-report of college online physical education (OLPE) students in the Philippines in time of COVID-19 pandemic. *Sport Mont, 20*(3), 67-73. DOI: 10.26773/smj.221011

Aljuhani, N., Aljohani, E., Alharbi, R., Almutairi, R., & Meccawy, M. (2020). Investigating the lack of utilization of information and communication technologies in Saudi schools. In 2020 21st International Arab Conference on

- Information Technology (ACIT). IEEE. DOI: 10.1109/ACIT50332.2020.9300058
- Altbach, P. G., & de Wit, H. (2020). *Trends and issues in doctoral education: A global perspective* (1st ed.). SAGE Publications Pvt Ltd. DOI: 10.4135/9789353885991
- Anliwan, R., Mangulon, G., & Monteza, A. M. M. (2024). The level of the language learning anxiety of students during the new normal. *International Journal of Innovative Research in Multidisciplinary Education*, *3*(4). DOI: 10.58806/ijirme.2024.v3i4n13
- Baftiu, E., & Pireva Nuci, K. (2021). The transformation process from in-campus classes into online classes due to COVID-19 pandemic situation. In 2021 International Conference on Computational Science and Computational Intelligence (CSCI) DOI: 10.1109/CSCI54926.2021.00054
- Bakia, M., & Murphy, R. (2018). Learning online: What research tells us about whether, when and how (1st ed., p. 232). Routledge. DOI: 10.4324/9780203095959
- Baloran, E. T., & Hernan, J. T. (2020). Emotions, stressors, coping strategies, and motivational factors in private higher education institutions amid COVID-19 pandemic. *Journal of Critical Reviews*, 7(4), 1004-1010. DOI: 10.46619/joccr.2020.3.s4-1004
- Bliuc, A.-M., & Han, F. (2021). Challenges in assessing the nature of effective collaboration in blended university courses. *Australasian Journal of Educational Technology*, *37*(1), 1–14. DOI: 10.14742/ajet.5576
- Boelens, R., De Wever, B., & McKenney, S. (2020). Conjecture mapping to support vocationally educated adult learners in open-ended tasks. *The Journal of the Learning Sciences*, 29(3-4), 430-470. DOI: 10.1080/10508406.2020.1759605
- Bozkurt, A., & Sharma, R. C. (2020). Emergency remote teaching in a time of global crisis due to CoronaVirus pandemic. *Asian Journal of Distance Education*, 15(1), 1-6. DOI: 10.5281/zenodo.3778082
- Dziuban, C. D., & Picciano, A. G. (2021). Education and blended learning: Some possible futures. In *Blended learning* (1st ed., p. 38). Routledge. DOI: 10.4324/9781003037736-30
- Edeigba, J., Opare, S., & Laswad, F. (2024). Accounting students' performance in proctored online exams: Early evidence from COVID-19 disrupted tertiary education learning. *Accounting Education*, Advance online publication. DOI:10.1080/09639284.2024.2346318
- Galoyan, T., Betts, K., Delaney, B., & Fourie, M. (2021). Exploring online pedagogical practices for enhancing transfer of learning in higher education. *Online Learning*, 25(4), Article 2887. DOI: 10.24059/olj.v25i4.2887
- Garrison, D. R., & Vaughan, N. D. (2018). Blended Learning in Higher Education: Framework, Principles, and Guidelines. John Wiley & Sons. DOI: 10.1002/9781118269558

- Geer, R. (2009). Strategies for blended approaches in teacher education. In Effective blended learning practices: Evidence-based perspectives in ICT-facilitated education (p. 23). IGI Global. DOI: 10.4018/978-1-60566-296-1.ch003
- Gikandi, J. W., Morrow, D., & Davis, N. E. (2019). Online formative assessment in higher education: A review of the literature. Computers & Education, 57(4), 2333-2351. DOI: 10.1016/j.compedu.2011.06.004
- Graham, C. R., Woodfield, W., & Harrison, J. B. (2018). A Framework for Institutional Adoption and Implementation of Blended Learning in Higher Education. Internet and Higher Education, 18, 4-14. DOI: 10.1016/j.iheduc.2012.09.003
- Halverson, L. R., Graham, C. R., Spring, K. J., & Drysdale, J. S. (2018). An Analysis of High Impact Scholarship and Publication Trends in Blended Learning. Distance Education, 39(3), 339-356. DOI: 10.1080/01587919.2018.1476840
- Hodges, D. Z. (2020). Teaching is a critical issue in 21st-century higher education. *New Directions for Teaching and Learning*, 2020(161), 7-15. DOI: 10.1002/dap.30696
- Hrastinski, S. (2019). What Do We Mean by Blended Learning? TechTrends, 63(5), 564-569. DOI: 10.1007/s11528-019-00375-5
- Jin, N. (2019). The impact of education informationization on college education. In *Proceedings of the 2018 8th International Conference on Education and Management (ICEM 2018)*. DOI: 10.2991/icem-18.2019.143
- Kaplan-Rakowski, R. (2020). Addressing students' emotional needs during the COVID-19 pandemic: a perspective on text versus video feedback in online environments. Education Tech Research Dev. DOI: <a href="https://doi.org/10.1007/s11423-020-09897-9">10.1007/s11423-020-09897-9</a>
- Karakaya, K. (2021). Design considerations in emergency remote teaching during the COVID-19 pandemic: A human-centered approach. Education Tech Research Dev., 69, 295-299. DOI: <a href="https://doi.org/10.1007/s11423-020-09884-0">10.1007/s11423-020-09884-0</a>
- Ko, S., & Rossen, S. (2017). Preparing students for online learning. In *Teaching online* (4th ed., p. 15). Routledge. DOI: <u>10.4324/9780203427354-10</u>
- Lederman, D. (2019). Online Education Ascends. Inside Higher Ed. Retrieved from insidehighered.com. DOI: <u>10.1002/he.20296</u>
- Mahmutovic, J. (2022). What is Convenience Sampling? Pros, Cons, and Examples. Retrieved from <a href="https://www.surveylegend.com/sampling/convenience-sampling/">https://www.surveylegend.com/sampling/convenience-sampling/</a>
- Means, B., Toyama, Y., Murphy, R., Bakia, M., & Jones, K. (2020). Evaluation of Evidence-Based Practices in Online Learning: A Meta-Analysis and Review of Online Learning Studies. U.S. Department of Education. DOI: 10.1177/016146811311500307
- Mupinga, D. M., Nora, R. T., & Yaw, D. C. (2021). The learning styles, expectations, and needs of online students. College Teaching, 54(1), 185-189. DOI: 10.3200/CTCH.54.1.185-189

- Pokhrel, R., & Pokhrel, A. (2023). Information and Communication Technology (ICT) for online classes in economics education in TU, Nepal. *Surkhet Journal of Science and Technology*, 2(1). DOI: 10.3126/surkhetj.v2i1.58745
- Rodrigo, M. M. T., & Ladrido, E. M. M. (2022). Promoting equity and assuring teaching and learning quality: Magisterial lectures in a Philippine university during the COVID-19 pandemic. *Education Sciences*, 12(2), 146. DOI: 10.3390/educsci12020146
- Seaman, J. E., Allen, I. E., & Seaman, J. (2018). Grade Increase: Tracking Distance Education in the United States. Babson Survey Research Group. DOI: 10.18666/JOREL-2017-V9-I2-8264
- Simpson, O. (2018). Supporting Students for Success in Online and Distance Education. Routledge. DOI: 10.4324/9780203417003
- Smith, P., & Hill, J. (2019). Digital Textbooks: The Shift to E-Learning Resources. Educational Technology Research and Development, 67(4), 867-883. DOI: 10.14742/apubs.2017.772
- Tangonan, M. E., Alivia, H. D. C., Mercado, R., & Toledo, E. (2023). The effects of virtual learning on the mental health and academic performance of the tourism students of Wesleyan University Philippines. *International Journal of Multidisciplinary Research and Analysis*, 6(1), 40-45. DOI: 10.47191/ijmra/v6-i1-40
- Vaughan, N. D., Cleveland-Innes, M., & Garrison, D. R. (2019). Teaching in blended learning environments: Creating and sustaining communities of inquiry. Athabasca University Press. DOI: 10.15215/aupress/9781927356470.01
- Villalobos, B. T., & Hernandez Rodriguez, J. (2021). The mental health of Latinx adults in the United States during the coronavirus pandemic: A snapshot of anxiety, depression, and posttraumatic stress symptoms. DOI: 10.31234/osf.io/uq5y2
- Washington, T. (2012). Lack of technology in urban schools. In *Cases on Educational Technology Integration in Urban Schools* (pp. 3). IGI Global. DOI: <u>10.4018/978-1-61350-492-5.ch006</u>
- Xu, K., & Chen, J. (2023). Disciplining the online class: Control and resistance of rural students in China during the COVID-19 pandemic. *Journal of Contemporary China*, 16(2), 1-22. DOI: 10.1177/17577438231187130
- Zitha, I., Mokganya, M. G., & Manyage, T. (2023). Integration of blended learning in the advent of COVID-19: Online learning experiences of the science foundation students. *Education Sciences*, *13*(7), 704. DOI: <a href="https://doi.org/10.3390/educsci13070704">10.3390/educsci13070704</a>