

# Exploring Teachers' Experiences in the Delivery of Flexible Learning Amidst COVID-19 Pandemic

Cherie Guy B. Giray\*

<sup>a</sup> cherieguy.giray@evsu.edu.ph  
Eastern Visayas State University, Tacloban City, 6500, Philippines

---

## Abstract

The State Universities and Colleges in the Philippines embrace the wide implementation of flexible learning because of the COVID-19 pandemic. This study aimed to explore the teachers' experiences in implementing and delivering flexible learning. There were 12 informants purposely chosen for this study. Data were gathered by conducting an individual in-depth interview using an interview guide containing semi-structured questions and were analyzed using Yin's (2016) thematic data analysis method. Results revealed that teachers experienced unstable internet connections, distractive learning environments, intensive preparation, and frustration in the delivery of flexible learning. It is crucial to identify and understand the teachers' various experiences in the delivery of flexible learning to address issues according to their needs and difficulties to serve their clientele better.

Keywords: Delivery of Flexible Learning; Keeping Students Engaged; Assessment; Submission of Requirments; Feedbacking

---

## 1. Introduction

COVID-19 has impacted the mobilization of the educational system around the world (Paudel, 2021). In the Philippines, flexible learning modalities replaced the traditional face-to-face classroom instruction as the primary method of delivering education. At the height of the coronavirus, Philippine State Universities and Colleges cannot return to conventional face-to-face sessions; therefore, the Commission on Higher Education (CHED) implemented a policy through the CHED Memorandum No. 4, s. 2020 to continue education.

Flexible learning is an educational strategy that enables flexibility in terms of space, place, and participants, including but not limited to the use of technology (CMO No. 4, s. 2020). This may be delivered using online or blended learning approaches, macro and micro learning pedagogy that includes online and offline tasks, and primarily offline modules that learners may answer independently (CMO No.4, s. 2020). Similarly, the design and delivery of the programs should address the diverse needs of the learners, such as place, pace, process, and products of learning.

Teachers encountered various experiences in the delivery of flexible learning. Benefits were cited in Tarrayo, Paz, and Gepila Jr.'s (2021) study on flexible learning amidst a pandemic where there was accessibility, convenience and improvement of teaching and learning among teachers. Alternatively, an investigation by Luongo, N. (2018) posited that the teachers' main concerns were time commitment and lack

---

of administrative support. Moreover, teachers claim that flexible learning is time-consuming because they have various preparations; they make PowerPoint presentations and lecture videos for their students (Aji, Ardin, & Arifin, 2020). In the study of Pham et al. (2022), poor internet connection and incomprehensible learning materials were considered barriers to the student's learning.

Over the past decades, studies related to flexible learning have been conducted (Kehrwald & McCallum, 2015; Tarrayo, Paz & Gepila Jr., 2021). However, few studies have explored the teachers' experiences in the delivery of flexible learning, especially in the context of the pandemic. It is, therefore, for this reason that this study was conceptualized. This study aimed to explore the teachers' experience in the delivery of flexible learning. Similarly, this study explored the teachers' experiences in keeping their students engaged while conducting online classes, giving them assessments, submitting requirements, and providing feedback. The findings of this study may provide a catalyst for policymakers and administrators to help teachers and students as the primary recipient of their services, thereby improving the implementation and delivery of flexible learning.

## **2. Methodology**

### **2.1. Research Design**

This study used qualitative research design, specifically the narrative inquiry in which the inquirer listens to the stories told by the informants through interviews to explore teachers' experiences in the delivery of flexible learning amidst the COVID-19 pandemic.

### **2.2. Research Participants and Sampling**

Twelve respondents from the two SUCs in Region VIII were purposefully chosen. The teachers were faculty members in the SUCs teaching general education curriculum. They had hands-on experience with flexible learning during the first semester of its implementation.

### **2.3. Research Instrument, Data Collection, and Procedure**

This study used an interview guide validated by experts before conducting an online interview. An open-ended question on the teachers' experiences in the delivery of flexible learning and their experiences in keeping their students engaged during online classes, when giving them an assessment, when submitting their requirements, and when giving feedback was asked.

In the data collection, informed consent, which articulated the study's primary purpose, the informant's voluntary participation, procedures and responsibilities of informants, risk, benefits, and confidentiality, were given to the informants before the interview. Semi-structured questions were administered to them through an individual in-depth interview. The interview was recorded with their consent. Moreover, transcription was reviewed and verified by the informants before data analysis to ensure the validity of the responses.

### **2.4. Data Analysis**

The data gathered were evaluated using Yin's (2016) thematic data analysis method, which includes compiling, disassembling, reassembling, interpreting, and concluding.

### 3. Results and Discussions

The themes focused on the teachers' experiences in the delivery of flexible learning, their experiences keeping their students engaged during online classes, when giving them an assessment, when submitting their requirements, and giving feedback.

#### 3.1. Teachers' Experiences in the Delivery of Flexible Learning

In the delivery of flexible learning, both teachers and students experience unstable internet connections and a distractive learning environment. Moreover, the teachers find it intensive or laborious to prepare the learning materials for their students, and they feel frustrated during the conduct of their online classes because they are not sure if their students are learning from the lesson since they cannot physically perceive them.

##### 3.1.1. Unstable Internet Connection

Flexible learning may be delivered using online or blended learning (CMO No. 4, s. 2020). Hence, internet connectivity is considered one crucial component (Tarrayo, Paz & Gepila Jr., 2021) to bridge the gap in education, especially during this global health crisis. The study found that the teachers in SUCs experienced unstable internet connections. Moreover, based on the teachers' narratives, the students shared the same experience with the teacher because some of them reside in an area where connection ranged from poor to no internet connection. In addition, whenever students joined their synchronous classes, they kept on getting disconnected while other students were choppy when talking.

Significant Response 1: "The internet connection is really unstable."

Significant Response 2: ... "lack of ah stable ah connectivity. And then some of them also are living in places where they really do not have access for connectivity".

Significant Response 3: "The internet connection is really my main problem, and also when it comes to my students, they're also having difficulty to access the internet connection, and they are having difficulty."

Significant Response 4: ... "napuputol because of unstable internet connection. There are students noh, na ano, ano who get in and then tapos napuputol sila" [...disconnected because of unstable internet connection. Some students get in and then get disconnected].

Significant Response 5: "Kun synchronous kasi, there are students nga diri makusog it Wi-Fi, so, naguutud-utod bisan ada hira, diri kuan, bagat magyayakan hira utod-utod" [Whenever I have synchronous there are students who do not have strong internet connection in their Wi-Fi, so, when they are talking it is choppy].

This result conforms with the study of Peñeda et al. (2022), in which teachers experienced unstable internet connectivity, which hampers the conduct of their synchronous learning. The teachers' and students' experience with the unstable internet connection is a concern that policymakers and administrators should consider.

##### 3.1.2. Distractive Learning Environment

The learning environment plays a crucial role for teachers, especially in students' learning. Teachers conducting synchronous learning in which distraction is present could not totally focus on the delivery of their lesson. Hence, students' acquisition of the subject matter is impacted. The study revealed that both teachers' and students' environments were distractive in the conduct of their synchronous learning. Distractions included chickens and students' parents who asked them to do household chores like washing the dishes and cooking for their lunch, not considering that they were attending real-time classes. Moreover, teachers who were working from home were also distracted. Family members like nephews who would enter their rooms despite having an online class could disturb them.

Significant Response 1: "Those distractions like an mga manok, an mga nanay nayakan panhugas na, di ka naghuhugas" [the chickens, the mothers saying you wash the dishes].

Significant Response 2: "There are times that the students are cooking for their lunch, while listening to the discussion. The students are working. So, the distraction is really there".

Significant Response 3: "My nephews would just come into my into my room and sometimes can distract me having classes."

According to studies, the teacher's distraction may divert their attention from conducting their online classes (Adedoyin & Soykan, 2020). Likewise, most students found online learning difficult because they had several distractions at home, which hindered their focus and comprehension of the sessions (Ag-Ahmad, 2021), thereby making their academic performance suffers (Lepp, 2019). Thus, teachers and students should maintain a conducive learning environment, even in flexible learning.

### 3.1.3. Intensive Preparations

There were digital learning resources available online. However, teachers must consider the appropriateness of choosing them. Likewise, teachers should regard its The licensing, correctness, engagement, flexibility, cultural impact and sensibility, as well as its applicability based on its substance, complexity, organization, platform, and resource structure, should also be taken into consideration by teachers (Huang et al.,2020). The data gathered from the interview revealed that the teachers experienced intensive preparation in the delivery of flexible learning, especially in the preparation of their learning resources. The teachers had to prepare their learning materials in different modes such as learning packets, PowerPoint presentations, and lecture videos to cater to the student's needs based on their capabilities. Moreover, one teacher emphasized that video recording is tasking.

Significant Response 1: "In the delivery of the lessons, the experiences that I have, I would say, it's kind of challenging and laborious, because I tell you, Ma'am, online courses really require longer and intensive preparation. Like you really have to make, you know, learning resources in different modes, just to cater the needs of your students because not everyone has what they had".

Significant Response 2: "It's quite tasking also because I have to do recording. So, recording lang yung parang- parang tasking sa pagprepare sa lesson" [Recording is tasking in preparing the lesson].

### 3.1.4. Frustrating

The study revealed that the teachers felt frustrated in the delivery of flexible learning. One teacher shared that whenever she called her students during online class for their oral participation, no one would respond because they were not seen. In an interview, she intimated, "There are experiences na frustrating kasi when you call that person, she's not responding kasi hindi mo nakita" [There are experiences that are frustrating because when you call that person, she is not responding because you cannot see them].

Moreover, teachers were also frustrated because, as shared by one teacher, he was unsure if the students were really learning despite the great effort exerted in preparation for the delivery of the lesson. He shared that:

"Frustrating, the first year that we had these online classes I cried, like the first week, because it's so frustrating like you did your best, you prepare a lot and then during the discussion, like you don't know if all the students really understand the lesson because you can't see them. So, the frustration is really high".

According to Henderson (2020), teachers experienced some level of frustration- particularly with online learning. She further posited that frustration came from her students being late in their virtual classrooms, turned-off cameras, and students' lack of technological skills.

### 3.2. Teachers' Experiences in terms of Keeping their Students' Engaged

#### 3.2.1. Oral Participation

The teachers would have oral participation during the real-time class discussion to keep the students engaged. The teachers would call their students to participate and let them share what they have learned from the lessons. Further, the teachers would ask their students to answer questions on every discussion slide as an informal assessment. This was to ensure that students were really engaged and had learned from their lessons.

Significant Response 1: "I let them participate in the discussion."

Significant Response 2: "Meron akong recitation" [I have recitation].

Significant Response 3: "Recitations, mga guintata wag ko hira" [Recitations, I call them (students)].

Significant Response 4: "I would call some of them to participate; I would be calling all of them to share their insights about what they have learned from the lesson".

Significant Response 5: ... "Asking them and as much as possible, every slide of every topic that I have, I keep on asking for their ideas about it. And perhaps do some informal assessment as well by simply asking questions to them, whether they learn or not, whether they had some questions about it".

The study of Song, Rice, and Oh (2019) on participation in online courses revealed that the student's engagement is viewed as fundamental to online learning participation, and learner involvement is a significant element impacting performance in online courses. Therefore, it is essential that teachers allow students to participate in online classes.

#### 3.2.2. Interactive Activities

Another activity that the teachers do to make their students engaged with their online classes is by having interactive activities such as puzzles, games, and icebreakers. According to Shiozawa (2017), students' academic performance can be improved and reinforced course content by using online interactive activities. Further, the study of Chigbu and Nekhwevha (2021). revealed that the learner's involvement has a more substantial impact on student academic achievement. Hence, in the conduct of flexible learning, it is imperative to provide interactive activities for students not only to keep them engaged but as well as to improve their academic performance.

Significant Response 1: "puzzles or games before the start of the class".

Significant Response 2: "games"

Significant Response 3: "icebreaker"

### 3.3. Teachers' Experiences in terms of Students' Assessment

#### 3.3.1. Dilemma in the Students' Output

The results of the study show that most of the students' outputs were plagiarized. According to one teacher, being engaged in technology stimulated students to copy answers from the different online websites without proper citations of the article's author. Students also copied answers from YouTube videos in which students transcribed their content and made it an answer. Further, teachers also warned their fellow to be cautious and vigilant because students were becoming more creative in getting answers from various websites for their assessment.

Significant Response 1: "There are a lot of plagiarism answers".

Significant Response 2: "Ma'am it's very unfortunate that since we are engaged in technology driven umm society. Some students would, plagiarized their answers from the web. They would copy their answers from the web".

Significant Response 3: "Some other students are really copying from the google as in umm 100 percent copy paste. They don't have at least umm like insertions of their own phrase or paragraph, they just copy everything like one instant copy paste".

Significant answer 4: "One of my co-teachers na experience niya, gin type an usa nga interview ha YouTube para diri mabilngan hit plagiarism but napausa na nak usa nga co-teacher kay ano familiar an words, iya na ngay an gin transcribed from YouTube. So, I don't know if students right now are being creative on how to get answers, Ahh so, yes, we have to be, bagat amo ito sthat's why kailangan talaga basahon or kailangan ig check tapos igkuan it ira attention about plagiarism" [One of my co-teachers shared his experiences, in which the output of his student was taken from YouTube interview so that it will not be detected by plagiarism detector. However, the teacher wonders because the answer was familiar, only to find out it was transcribed from YouTube. Students right now are being creative on how to get answers. So, we must read their output thoroughly and call their attention to plagiarism].

Moreover, despite being given ample time to answer activities or assessments, some students tend to cheat in order to comply with their requirements. During an interview, one teacher narrated that one of the precipitating factors she could think of why students were copying answers from the internet was because the students might face some challenges. One teacher shared that:

"Ma'am it disadvantages hini nga era, because students are really ummm, ummm, vulnerable hiton cheating is a form of academic dishonesty. Okay, Nagche-cheat hira just to comply for their requirements. And ha akon naman Ma'am kasi gintatagan ko hira hin time pag-answer, pagbasa hin module. I would usually give them one to two weeks, to accomplish the learning material. However, there are really some students, I don't know ma'am siguro nakukurian hira, karuyag la nira hin instant answers" [Ma'am, the disadvantage during this era is that students are really vulnerable in committing academic dishonesty. They cheat so they can comply with their requirements. And on my part, I give them enough time to answer, and read the module. I would usually give them one to two weeks, to accomplish the learning material. However, there are really some students, I don't know, Ma'am maybe they are facing some difficulties, and what they want is instant answers].

According to Torda et al. (in Gaur et al., 2020), faculty and students have struggled with online assessment and training for different online platforms. Consequently, students may be encouraged to engage in academic misconduct or dishonesty, such as plagiarism and cheating, if online tests are not proctored (Gaur et al., 2020). Hence, it is essential that teachers educate their students and develop authentic assessments to minimize plagiarism in their output.

### 3.4. Experiences in terms of the Submission of Students' Output

#### 3.4.1. Late Submission

In spite of giving ample time to students to answer their learning activities, some of them would submit their output late. Thus, giving their teachers a hard time. Factors affecting this, according to teachers, were students' difficulty accessing the internet, financial problems, and personal problems. Moreover, teachers try to be considerate and understanding of their student's situations, especially since not all are in the same circumstances. So, though they would submit their output late, their teachers still accepted it.

Significant Response 1: "late submission of the students".

Significant Response 2: "Amo't makuri. Pirmi late! Always late, syempre. And then, giving you reasons like, Ma'am, an amon internet super slow like that. So, nasingman ako, I- it deadline, Ma'am, for example naghatag akon lima na module or usa na, I mean usa na module an deadline hito niya, mga nayakan ako, "okay, submit that on Friday 12 Midnight pwede until twelve midnight la ako, Monday ko hiya ginha, ginhatag. Tapos it ira hito ibabaton ha akon, mgaaturday na, "Ma'am sorry, late ako makakuan kay", so

many reasons, personal problems ito nga internet connections then adi ha akon mind. That's five days. Tapos waray la gehapon ka ano. So, amo' ton problem always. [That is difficult. Always late! Always late, of course. And the, they will give you reasons such as "Ma'am, our internet connection is very slow". For example, I give them one module on Monday, its deadline is on Friday at 12 midnight. Then, they send me a message on Saturday saying, "Ma'am, sorry, I will be late in the submission", because of so many reasons such as personal problems, and internet connections].

Significant Response 3: "I understand their concern, especially that some students would tell me that "Ma'am, we have slow internet connection, so I will not be able to pass my output during this time". So, I accept it even after the deadline".

The study of Santelli, Robertson, Larson, and Humphrey (2020), suggested that students' late submission of assignments is because of procrastination. The study by Goroshit and Hen (2021) revealed that procrastination was acknowledged as a problem by almost 70% of college students. According to Mahmood (2021), students in an online context delay more on assignment submissions compared to their conventional face-to-face classes.

### 3.5. Experiences in terms of Giving Feedback to Students

#### 3.5.1. Providing Immediate Feedback

The teachers ensure that they would provide immediate feedback to their students. During their synchronous session, they gave feedback to them after their real-time discussion. Similarly, right after the reporting, the teachers would give them feedback to guide them on how they could do their tasks better in the future.

When it comes to students' modules, the teachers wrote their feedback in their module because it would be difficult for them to provide feedback to each student, according to one teacher. Further, the teachers tried their best to provide immediate feedback to their students so that they would know what was lacking in their submitted requirements. To facilitate timely feedback and immediately address students' concerns, they created a Facebook Messenger group chat.

Significant Response 1: "When it comes to feedback, I give them feedback immediately during our synchronous session, especially when I do recitation at the end of the lesson discussion".

Significant Response 2: "During the reporting nahatag man akon feedback, for example, an pagrereporting, kun anun ira mistakes and for, para gehap ha future reporting nira kay mga first year man it urog na amon *ginkakaptan...* So, amo adto, *gintatagan ko hiran pointers about how to report and feedback on how they will report properly*" [During the reporting, I gave them feedback. Informed them of their mistakes, especially since they are first-year students. I gave them pointers about how to report and feedback on how they will report properly]

Significant Response 3: "Pagnag submit hira, Ma'am, hit ira modules I have ahh mayda ako... kuan kasi it module pinakaubos mga notes ko. Dida ko ginsusurat ha ira. Kasi, makuri kasi kun tatag usa-usaon ko nga pantatawagan. Suga hadi, sugad hini an im kuan. So, an akon ginhihimo kasi ha module nala nira, dida, note, then, nagpinan nguan basta ngatanan suratan ko nga "diri amo, sugad hini, sugad hiton" [When they submit their modules, I have notes. There I write to them because, it would be difficult if I had to call them one by one].

Significant Response 4: "As much as I can um after submitting the assignment after a week, I try to give the score, the grade for this particular output. Tapos [then], I give comments yung sa [on their] outputs nila para alam nila kung san yung, yung nagkamali or kulang dun sa output na ibinigay nila [so that they know their mistakes or lacking in their submitted output]".

Significant Response 5: "I created a Facebook Messenger Group Chat, where all concerns, all announcements and updates will be given there, will be posted there. So, everything when they have questions about the activity, or they can just post it in our Facebook Messenger in there. I will be addressing it immediately".

Based on studies, immediate feedback to students is the most beneficial rather than a few days, weeks, or months later (Schmulian & Coetzee, 2019). In Wang et al., (2021) study, they discovered that individuals who got prompt feedback improved their academic performance much more than those who received delayed feedback. Similarly, Dhawan (2020), confirmed that students who received a lot of instant feedback were better able to grasp their lessons.

### 3.5.2. Feedbacking through Private Messaging

To keep the students updated on their performance, the teachers gave feedback to their students through private messages. The teachers keep their comments private to avoid shaming and bullying among students. According to Kohnke and Moorhouse (2022) educators should communicate via email, classroom messaging, the announcement section (when not providing sensitive information or highly confidential feedback), and synchronous web-bed meetings that can be documented for all those who were unable to join, audio communication, and posting online work schedule to make the best use of technology.

Significant Response 1: "We personally messaged them. We have this post conference, especially for those students who are really not that good in terms of the performance. That's how we comment or we provide feedback to their performance, more on private message."

Significant Response 2: "Personal ko ginyayakan, nag chachat, sugad. Kay gusto ko liwat, Ma'am, if ever may sayop hiya ngan diri ko kuan, nadiri ako nga ha mga classmate niya".

Significant Response 3: "I'm afraid that they will be shamed and their students will bully them because of that".

Moreover, teachers must learn how to use proper tone when giving feedback. Positive affirmations may help motivate and encourage the student to keep up the excellent work and strive to grow and succeed (Rahiem, 2021).

## 4. Conclusions

The teachers' experience such as unstable internet connection, and distractive learning environment has a great influence on how they could deliver quality education through flexible learning. Because of these experiences, facilitating the teaching-learning process has become difficult for teachers hence there should have prompt support to both teachers and students to lessen the frustration felt and address these issues. Moreover, intensive, or laborious preparation of different formats of the learning resources burdened the teachers thereby having difficulty adjusting and adapting to the instruction delivery during the pandemic. By shedding these experiences to light, policymakers and administrators would have a guide in crafting academic strategies that would alleviate the different issues encountered by the teachers and students.

## References

- Adedoyin, O. B., & Soykan, E. (2020). Covid-19 pandemic and online learning: the challenges and opportunities. *Interactive Learning Environments*, 1-13
- Ag-Ahmad, N. (2021). Open and Distance Learning (ODL): Preferences, Issues and Challenges amidst Covid-19 Pandemic. *Journal of Creative Practices in Language Learning and Teaching (CPLT)*, 8(2), 2020.

- Aji, W.K., Ardin, H., Arifin, M.A., (2020). Blended Learning During Pandemic Corona Virus: Teachers' and Students' Perceptions. *Journal of Language Teaching and Learning, Linguistics and Literature*. Volume 8, Number 2, pp. 632– 646
- Chigbu, B. I., & Nekhwevha, F. H. (2021). High school training outcome and academic performance of first-year tertiary institution learners-Taking Input-Environment-Outcomes model into account. *Heliyon*, 7(7), e07700. <https://www.sciencedirect.com/science/article/pii/S240584402101803X>
- Dhawan, S. (2020). Online learning: A panacea in the time of COVID-19 crisis. *Journal of educational technology systems*, 49(1), 5-22. <https://journals.sagepub.com/doi/full/10.1177/0047239520934018>
- Henderson, A. (2020). Teachers' huge mistake with online learning- their tone! Retrieved date April 13, 2022. <https://movingimageconsulting.com/subconscious-behavior/frustration-and-the-online-classroom/>
- Gaur U., Majumder M. A. A., Sa B., Sarkar S., Williams A., & Singh K. (2020). Challenges and Opportunities of Preclinical Medical Education: COVID-19 Crisis and Beyond. *SN Compr Clin Med*. 1-6. doi: 10.1007/s42399-020.
- Goroshit, M., & Hen, M. (2021). Academic procrastination and academic performance: Do learning disabilities matter?. *Current Psychology*, 40(5), 2490-2498. <https://link.springer.com/article/10.1007/s12144-019-00183-3>
- Guidelines on the Implementation of Flexible Learning (CHED Memorandum Order No. 4, series 2020). Retrieved date March 09, 2021. Retrieved from <https://ched.gov.ph/wp-content/uploads/CMO-No.-4-s.-2020-Guidelines-on-the-Implementation-of-Flexible-Learning.pdf>
- Huang, R.H., Liu, D.J., Guo, J., Yang, J.F., Zhao, J.H., Wei, X.F., Knyazeva, S., Li, M., Zhuang, R.X., Looi, C.K., & Chang, T.W. (2020). Guidance on Flexible Learning during Campus Closures: Ensuring course quality of higher education in COVID-19 outbreak. Beijing: Smart Learning Institute of Beijing Normal University
- Kehrwald, B. A., & McCallum, F. (2015). Degrees of Change: Understanding Academics Experiences with a Shift to Flexible Technology-Enhanced Learning in Initial Teacher Education. *Australian Journal of Teacher Education*, 40(7). <http://dx.doi.org/10.14221/ajte.2015v40n7.4>
- Kohnke, L., & Moorhouse, B. L. (2022). Facilitating synchronous online language learning through Zoom. *Relc Journal*, 53(1), 296-301. <https://journals.sagepub.com/doi/abs/10.1177/0033688220937235>
- Lepp, A., (2019). Off task during online learning: Kent state study finds student multitasking increases in online courses compared to face-to-face courses. <https://www.kent.edu/kent/news/kent-state-study-finds-student-multitasking-increases-online-courses>
- Luongo, N. (2018). An examination of distance learning faculty satisfaction levels and self-perceived barriers. *Journal of Educators Online*, 15(2), n2. <https://eric.ed.gov/?id=EJ1186012>
- Mahmood, S. (2021). Instructional strategies for online teaching in COVID-19 pandemic. *Human behavior and emerging technologies*, 3(1), 199-203. <https://onlinelibrary.wiley.com/doi/full/10.1002/hbe2.218>
- Massari, N., Saad, N.S.M., Puteh-Behak, F., Ahmad, S., Abdullah, H., Harun, H., Mahir, N.A., Selamat, S., Baharun, H., Ishak, M., (2021). 21st Century Skills in Practice: Malaysian Trainee Teachers' Experience at Managing Students' Learning during the Pandemic. *Aplikasi Kemahiran Abad Ke-21 dalam Pengurusan Pembelajaran Murid semasa Pandemik: Tinjauan Pengalaman Guru Pelatih*
- Paudel, P. (2021). Online Education: Benefits, Challenges and Strategies During and After COVID-19 in Higher Education. *International Journal on Studies in Education (IJonSE)*, 3(2), 70-85. doi:10.46328/ijonse.32.
- Peñeda, F.P., Tan, M. L. G. and Ticoy, T. A. (2021). Teacher Interns' Conquering the Barriers in a New Mode of Teaching. *International Journal of Research Publication*. 70 (1). 51-59. DOI: 10.47119/IJRP100701220211733
- Pham, M. T., Luu, T. T. U., Mai, T. H. U., Thai, T. T. T., & Ngo, T. C. T. (2022). EFL Students' Challenges of Online Courses at Van Lang University during the COVID-19 Pandemic. *International Journal of TESOL & Education*, 2(2), 1-26. <https://ijte.org/index.php/journal/article/view/155>

- Rahiem, M. D. (2021). Remaining motivated despite the limitations: University students' learning propensity during the COVID-19 pandemic. *Children and youth services review*, 120, 105802. <https://www.sciencedirect.com/science/article/pii/S0190740920322246>
- Santelli, Robertson, Larson, and Humphrey (2020). Procrastination and Delayed Assignment Submissions: Student and Faculty Perceptions of Late Point Policy and Grace within an Online Learning Environment. *Online Learning Journal – Volume 24 Issue 3 – September 2020*. <https://files.eric.ed.gov/fulltext/EJ1271877.pdf>
- Schmulian, A., & Coetzee, S. A. (2019). Students' experience of team assessment with immediate feedback in a large accounting class. *Assessment & Evaluation in Higher Education*, 44(4), 516-532. <https://www.tandfonline.com/doi/abs/10.1080/02602938.2018.1522295>
- Shiozawa, T., Butz, B., Herlan, S., Kramer, A., & Hirt, B. (2017). Interactive anatomical and surgical live stream lectures improve students' academic performance in applied clinical anatomy. *Anatomical sciences education*, 10(1), 46-52. <https://anatomypubs.onlinelibrary.wiley.com/doi/abs/10.1002/ase.1623>
- Song, D., Rice, M., & Oh, E. Y. (2019). Participation in Online Courses and Interaction With a Virtual Agent. *The International Review of Research in Open and Distributed Learning*, 20(1). <https://doi.org/10.19173/irrodl.v20i1.3998>
- Torda A.J., Velan G., Perkovic V. (2020). The impact of Covid-19 pandemic on medical education. *Med J Aust.* 2020;14:1 <https://www.mja.com.au/journal/2020/impact-covid-19-pandemic-medical-education>.
- Wang, Y., Rocabado, G. A., Lewis, J. E., & Lewis, S. E. (2021). Prompts to promote success: Evaluating utility value and growth mindset interventions on general chemistry students' attitude and academic performance. *Journal of Chemical Education*, 98(5), 1476-1488. <https://pubs.acs.org/doi/abs/10.1021/acs.jchemed.0c01497>
- Veronico N. Tarrayo, Rafael Michael O. Paz & Emejidio C. Gepila Jr. (2021): The shift to flexible learning amidst the pandemic: the case of English language teachers in a Philippine state university, *Innovation in Language Learning and Teaching*, DOI:10.1080/17501229.2021.1944163
- Yilmaz, M. B. (2017). The relation between academic procrastination of university students and their assignment and exam performances: The situation in distance and face-to-face learning environments. *Journal of Education and Training Studies*, 5(9), 146157. [https://www.researchgate.net/publication/319189539\\_The\\_Relation\\_between\\_Academic\\_Procrastination\\_of\\_University\\_Students\\_and\\_Their\\_Assignment\\_and\\_Exam\\_Performances\\_The\\_Situation\\_in\\_Distance\\_and\\_Face-to-Face\\_Learning\\_Environments](https://www.researchgate.net/publication/319189539_The_Relation_between_Academic_Procrastination_of_University_Students_and_Their_Assignment_and_Exam_Performances_The_Situation_in_Distance_and_Face-to-Face_Learning_Environments)
- You, J. W. (2015). Examining the effect of academic procrastination on achievement using LMS data in e-learning. *Educational Technology & Society*, 18(3), 64–74. <https://eric.ed.gov/?id=EJ1070043>