



## Challenges of Teacher Educators in Assessment during the COVID-19 Pandemic

Honelly Mae S. Cascolan 

hmcascolan.asingan@psu.edu.ph

Pangasinan State University, Asingan, Pangasinan

### ABSTRACT

The COVID-19 pandemic created a major outbreak in the education system. Classes were moved online preventing teachers and students from meeting face-to-face. The unprecedented COVID-19 incident resulted in a challenge in teaching and learning especially in assessment. This study was conducted to determine the experiences and challenges of teacher educators during the COVID-19 pandemic. Fifty teacher education faculty responded to the survey. Results showed that a variety of assessment tools was used by teachers to assess students' learning during the COVID-19 pandemic. The main challenges identified were academic dishonesty and poor internet connection. To minimize academic dishonesty, teachers administered online recitation, students were asked to document their performance task through video, teachers shuffled the online test question, students were requested to turn on the video while taking the online examination and there was a time limit in taking the online examination. Now that we are in the new normal, assessment of students will never be the same during the pandemic. It is recommended to administer face-to-face examinations and quizzes in the new normal. It is also recommended to have a contingency plan to be prepared when calamity strikes.

### ARTICLE HISTORY

#### Lead Editor:

Marie Paz E. Morales, PhD

#### Guest Editor:

Adonis P. David, PhD

#### Received:

April 4, 2023

#### Revised:

March 6, 2024

#### Accepted:

April 3, 2024

### KEYWORDS:

assessment, challenges, COVID-19 pandemic, teacher educators

**Introduction**

Coronavirus also known as COVID-19 is the most serious problem that the world faced in 2020 until today. The Commission on Higher Education released CHED Memorandum Order Number 4 s 2020 that the World Health Organization (WHO) declared the outbreak of COVID-19 as a Public Health Emergency of International Concern (PHEIC) because of the increasing number of cases all over the world and the human-to-human transmission. With the implementation of community quarantine, the conduct of classes was immediately suspended. It created a big impact on the education system because of the abrupt lockdown.

Schools moved online preventing teachers and students from meeting face-to-face. The lack of preparation of the teachers and students is a big problem that higher education institutions have to face (Guangul et al., 2020). Higher education was challenged to adapt a new model of teaching which is the remote teaching for the continuity of teaching-learning (Almeida & Monteiro, 2021). In this pandemic, the complete shift from face-to-face to online learning challenged learning institutions to review and revise practices in terms of assessment and to develop an assessment to be used in a new environment which is virtual (Beleulmi, 2022). Online learning has turned out to be the new standard, replacing conventional classroom teaching (Meccawy et al., 2021). Online assessment has become a vital part of the education system.

Teachers need to adapt to the new mode of teaching during the COVID-19 pandemic and to be creative to keep the students engaged in the lesson as every household becomes a classroom. The pandemic has recalibrated how teachers divide their time between teaching, engaging with students, and administrative tasks (Barron et al., 2023). During the pandemic, student needs to be responsible for their learning, which has placed enormous expectations on students' capacity to self-regulate their learning (Sandvil et al., 2023).

The CHED issued a Memorandum Order No.4, s.2020 stating that beginning Academic Year 2020-2021, the implementation of flexible learning as a delivery mode shall be adopted. Higher Education Institutions were monitored by CHED Regional Offices. CHED Region I issued a CHED Regional Memorandum Order 16 s 2020 notifying the public that the conduct of face-to-face classes for SY 2020-2021 or any academic gathering/ activity is not yet allowed until such guidelines are issued by the commission allowing the same. With that, flexible learning was conducted in all State Universities and Colleges (SUCs) in Pangasinan. Flexible learning is a teaching strategy that allows for audience, location and time flexibility. In a flexible learning environment, students can learn anytime and attend classes anytime and anywhere they are. It provides an opportunity for the student to learn at a time or place that suits their schedule. It allows students to fit their learning around family life or work commitments and schedules. A flexible learning approach provides students with materials in which they can access anytime (CPD, 2022). Synchronous and asynchronous teaching and learning environment was adopted for flexible learning. The syllabus, course guide, instructional delivery plan and study guides was the learning materials prepared by the teacher and it was uploaded in MS Teams so

that students could access and read them anytime they wanted. Flexible assessment tools were also prepared and utilized.

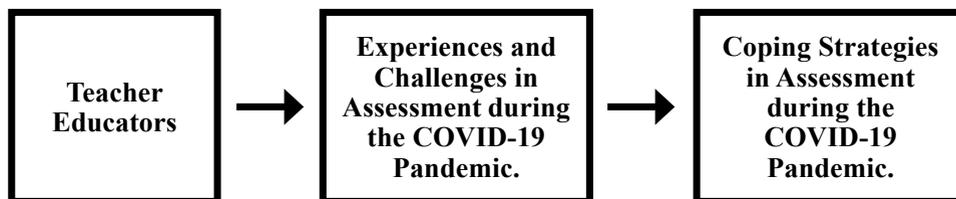
In synchronous classes, teachers and students were gathered at the same time and interacted in real time over the internet. In asynchronous classes, teacher and students engage in a course at a different time. The teacher provides student with home-based activities in which students needs to finished within the time frame. The finished activities will be uploaded in MS Teams which is the platform used in online classes in a state university in Pangasinan. The University subscribed to MS Teams to be used as the platform for conducting synchronous and asynchronous classes. Synchronous and asynchronous classes are often called as e-learning. In this teaching-learning strategy, a strong internet connection for both teacher and student is required as classrooms were totally moved online.

Teachers and students in a rural SUC in Pangasinan need to cope up with the new mode of teaching and learning that the pandemic has brought about. Since it belongs in a rural SUC, the majority of the students do not come from a well-off family. Internet connection is also a problem especially for students who reside in a far-flung area. Both teachers and students were challenged to adapt to the new normal. Teachers were challenged on how to conduct assessments in an online modality as students can easily search for the answers to the exam on the internet. Students also had a group chat wherein they can share their answers in an exam. Also, some students cannot submit the exam on time in MS Teams because of their poor internet connection. Some students search for the answers on the internet which takes them too long to take the exam so they cannot submit their answers on time.

With that, this study was conducted to determine the challenges of teacher educators in assessment during the COVID-19 pandemic. The objective of this study was to determine the experiences and challenges of teacher educators in a rural SUC in Pangasinan during the COVID-19 pandemic; and to document the coping strategies in assessment of teacher educators to address the challenges during the COVID-19 pandemic (Figure 1).

**Figure 1**

*Conceptual Framework*



Results of this study can be used as a baseline for the experiences of educators in teacher education institutions in a rural SUC in Pangasinan. The results of this study can also be used to devise strategies to cater less fortunate students in rural SUCs. There is a big difference in the type of students in the rural and urban SUCs.

## **Methodology**

### **Research Design**

A descriptive case study research design was used in this study. A descriptive case study aims to analyze the events after a certain amount of time has passed (Dudovskiy, John, 2011). A descriptive case study is a story that people or groups of people faced in a real-world situation how they addressed it. It includes an in-depth analysis of the situation in a rural SUC in Pangasinan. It is a good case as it analyzes the challenges of teacher educators in administering assessment during the COVID-19 pandemic. A descriptive case study collects qualitative data to gain insights. Qualitative data is semi-structured and non-statistical and it is intended to generate knowledge grounded in human experience (Nowell et al., 2017). Qualitative data is gathered that seeks to understand a topic more than quantify. It is a type of research that assesses views and opinions presented in a graph or chart.

### **Locale of the Study**

This study was conducted in a rural SUC in Pangasinan. It consists of nine campuses located in the different towns of Pangasinan from east to west. All the campuses offer teacher education programs. During the COVID-19 pandemic, all classes were moved online. The Learning Management System used was MS Teams.

### **Data Gathering and Data Analysis**

Fifty teacher education faculty in a rural SUC in Pangasinan were the respondents of the study. An open-ended questionnaire was distributed to the respondents via Google Form, others answer in pen and paper. Before answering the questionnaire, an Informed Consent Form was signed by the respondents to ensure voluntary participation. Indicated in the informed consent form was the purpose of the study, the expected duration of participation, and the procedure to carry out. An interview was also conducted for the elaboration of the respondents' answers. A day before the interview, an Informed Consent Form was signed by the respondents to ensure voluntary participation in the interview. To triangulate the written answers and interview of the teachers, interview with students was also conducted. An Informed Consent Form was given to the student ahead of time to ensure voluntary participation in the study. Qualitative data gathered from Google Form and interviews was analyzed using thematic analysis which is a technique of analyzing a pattern in a given data (Braun & Clarke, 2006). The answers of the respondents was analyzed to identify common themes such as ideas that was repeatedly mentioned.

### **Demographic Profile of the Respondents**

Teacher educators are the professional educators who serve as a training arm for future teachers. These are the higher education faculty that support the professional development of the new

generation of teachers. The teacher-respondents of this study were the faculty members of an SUC in Pangasinan which were chosen purposively based on the recommendation of the department chair to ensure that respondents are all from the teacher education program. There is a representative of the different academic ranks in the University (Instructor, Assistant Professor, Associate Professor and Professor) and the academic status (Permanent, Temporary, Contractual).

The teacher-respondents were asked about their demographic profile such as sex, age, the status of appointment and academic rank. The majority of the respondents were female (54%). In terms of age, most of the teacher-respondents are in between 24-28 years old (30%) followed by between 39 – 43 (24%) years old and between 29 – 33 years old (22%). The majority of the teacher-respondents were millennials. In terms of the status of appointments, most of the teacher-respondents held a permanent status in the University (58%), and some are temporary (10%) because they have not finished their masters yet. Some are contractual (32%) and waiting for the available items to be filled up. In terms of academic rank, most of the teacher-respondents are Instructor I (62%) since the majority of the teacher-respondents belong younger generations.

**Table 1**

*Profile of Teacher Respondents*

		Frequency	Percent
		N=50	
Sex	Male	23	46.0
	Female	27	54.0
Age	24 – 28	15	30
	29 – 33	11	22
	34 – 38	6	12
	39 – 43	12	24
	44 – 48	3	6
	49 – 53	1	2
	54 – 58	1	2
	59 – 63	1	2
Status of Appointment	Permanent	29	58.0
	Temporary	5	10.0
	Contractual	16	32.0
Academic Rank	Instructor I	31	62.0
	Assistant Professor II	2	4.0
	Assistant Professor IV	6	12.0
	Associate Professor II	1	2.0
	Associate Professor III	1	2.0
	Associate Professor V	8	16.0
	Professor I	1	2.0

## Result and Discussion

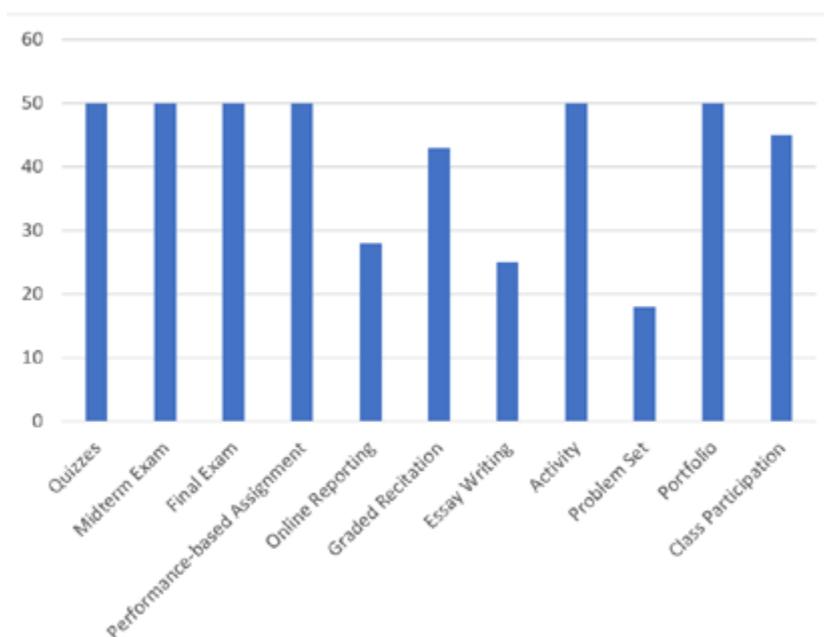
### Assessment used in Remote Teaching

Before the COVID-19 pandemic, all types of learning assessment is depended on students' physical appearance. School closure demands the development of alternative approaches to deliver the critical feedback of learning assessment (Lieberman et al., 2020). The fundamental feedback mechanism in education is learning assessment. Assessment is an evaluation of students' academic performance. Assessment is essential in every educational institution. Assessment measures the learning process and quality of education. Activities is a type of assessment that evaluates the learning of students that matches with the course learning outcomes (Ghanbari & Nowroozi, 2021). It is a crucial part of a course as it is the basis for the computation of grades of students.

Figure 2 shows the assessment tools used by the respondents during the COVID-19 pandemic. Respondents were asked to enumerate the assessments that they used in their classes. As shown in Figure 2, all the 50 respondents administer quizzes, midterm examinations, final examinations, performance-based assignments, class participation and activity. This was the basis for grading as reflected in the syllabus. Some respondents conduct online reporting, graded recitation, and essay writing. Respondents teaching mathematics and science gave problem sets to practice the problem-solving skills of students. Students were also required to submit a collection of activities, quizzes and exams which is also known as a portfolio as a requirement of the course at the end of the semester.

**Figure 2**

*Assessment tools*



Diverse assessment tools were used to guarantee that the desired learnings were assessed objectively. Students must be actively involved in the activities (Cascolan, 2020). Rubrics were prepared and utilized to assess students' performance. In the answers of the respondents in an open-ended questionnaire, the following was quoted:

Teacher 7 "I used a variety of assessment techniques during the pandemic such as online quizzes, essays, performance assessment with rubrics, projects, and presentations. I also used video conferencing tools to conduct oral assessments, such as interviews or discussions. The assessment techniques and applications that I used during the COVID-19 pandemic vary widely depending on the preferences and the needs of my students. Some assessment and preparing portfolios. I also used video conferencing tools to conduct oral assessments, such as interviews or discussions. Assessment applications may include creating quizzes, tests and assignments in MS Teams."

Teacher 36 "I used a variety of assessment technique and applications during the COVID-19 pandemic to ensure that I could effectively evaluate my student's learning like objective tests using multiple choice to assess my student's understanding of the course content. and sometimes I used subjective test like open-ended questions, essays, and short-answer texts to evaluate students' ability to synthesize and apply course content. But since I am a science instructor, I am incorporating performance assessments such as laboratory reports, research papers, and projects that allowed students to demonstrate their understanding of the course material through practical applications."

During the COVID-19 pandemic, all assessments were administered through MS Teams as this was the platform subscribed by the University for the conduct of online classes. However, some respondents used Google Forms, Quizziz, and Quizlet in some of their quizzes and exams. Google Forms, Google Documents, and Google Classroom can also be used in the conduct of classes and in assessment (Errabo et al., 2020). E-assessment strategies provide effective and efficient ways of assessing teaching-learning effectiveness as alternative assessment tools (Cajimat et al., 2020).

During the pandemic different platforms for teaching and learning were utilized by teachers to deliver the instruction and to conduct assessment. The main platform that is being used by the University is the MS Teams. Exams and quizzes were administered in MS Teams but sometimes the faculty also used Quizizz and Google Forms.

The following were the statements of the respondents in an open-ended questionnaire.

Teacher 7 said that "I use a variety of platforms during the pandemic, depending on the needs of my students and the type of lesson. Some of the platforms that I frequently use include MS teams and messenger. These platforms allow me

to conduct virtual lessons, hold class discussions, and share resources with my students in a remote setting.”

An interview with Teacher 10 revealed that “I sometimes used google forms in conducting quizzes. I also used kahoot and give gcash as a reward for the top 3 winners to motivate them because they had the feeling of anxiety”

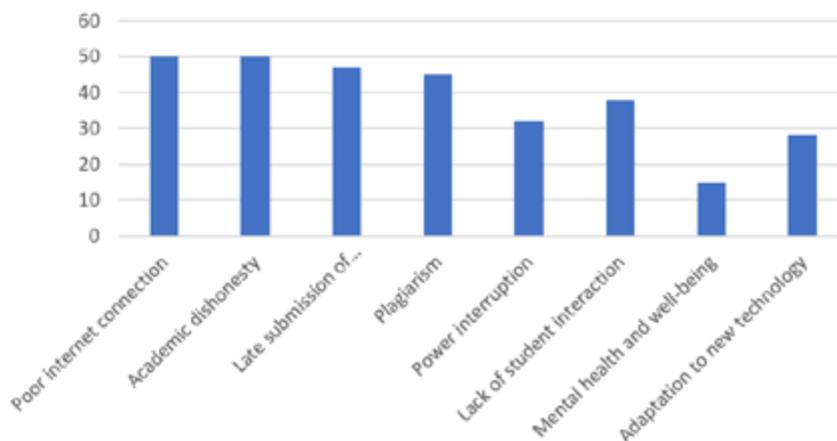
The University also exercised the leniency in giving grades to the students during the COVID-19 pandemic as there were issues of suicide and anxiety in other Universities. No failing and conditional grades but an incomplete grade was given to the student if there was a missing activity or quiz. An incomplete grade is to be completed in a year. However, if the student did not join the synchronous class in MS Teams, a drop was marked in the grade sheet.

### Assessment Challenges in the COVID-19 Pandemic

Teaching and assessment during the pandemic created numerous challenges for educators, teachers and parents. There were 50 teachers who responded to the survey. Respondents were asked to list down the assessment challenges that they encountered during the COVID-19. As shown in Figure 3, all respondents (N=50) listed poor internet connection and academic dishonesty as the main challenges that they’ve encountered as they give activities, quizzes and exams to their students. Some students submitted similar activities, others copied entirely what was written on the internet even the hyperlink was copied. Another challenge that respondents encountered was the late submission of assignments/requirements (N=47). Some of the students didn’t submit on the due date for a reason that they didn’t have an internet connection at home, they did not have a laptop/computer to do the assignment, or they were doing household chores so they did not have the time to do the assignment, and they have a job because they were a working student. Power interruption is also a challenge in the COVID-19 pandemic as there has been a rotation of power interruption until today.

**Figure 3**

*Challenges in Assessment*



Adaption to new technology is also a challenge as it is the first time for both teacher and student to have a totally online class. Students in the rural areas were also challenged as they did not have enough money to buy high-end laptop, gadget, or smartphone to be used in their synchronous classes. Even the internet connection was also a challenge for both teachers and students. Only a few students can subscribe to the postpaid internet connection like Fibr, DSL and pocket wifi. The majority of the students use mobile data, they need to buy a load and register on the internet but according to them when they join the MS Team and on their video, their prepaid load is easily consumed. Findings of the previous study concluded that online assessment is expensive because it requires internet access, a digital device or gadget and you must have a digital literacy. Teacher and student access to technology, internet access and speed are the challenges in remote teaching (Sarmiento et al., 2022). Another challenge is cheating and plagiarism (Diarsini et al., 2022). The most frequent challenges of teachers in an online learning environment were the difficulty in internet access, insufficient infrastructure at home to support distance learning and classroom management (Sari & Nayır, 2020).

The majority of the teachers revealed that ensuring academic honesty in assessment during the pandemic is very challenging because the students were free to use all available resources. Everything was at the tip of their finger through “IGM” “i-google-mo”. The majority of the answers in the assignment were lifted exactly from the internet including the hyperlinks. Some student submits the same assignments in an essay type of assessment. During quizzes and major examinations such as midterm and final examinations, students search for an answer over the internet.

In an open-ended questionnaire, Teacher 18 said that “It was hard for me to assess whether my students learn or not because classes were done online. Some of the students have poor signal so assessing them is the problem I encountered during the pandemic. The disadvantage of conducting examination during the pandemic is that they can still search the topic in the internet and they could get an idea from what they have searched even if I put a time limit on my test.”

Teacher 38 emphasized that “Sometimes in giving assessment you don’t know if your students are copying or searching for the answers. Some just copy and paste info they found in the internet.

Teacher 7 explained that “Ensuring academic honesty in assessments among my students can be challenging, especially in a remote learning environment during the COVID-19 pandemic. To promote academic honesty, I told them about my expectations and consequences for academic dishonesty, I also used plagiarism detection software, use variety of assessment techniques, and foster a culture of honesty and academic integrity in the classroom. I also encouraged my students to take responsibility for their own learning and to understand the value of academic honesty in their academic and professional careers. By promoting academic

honesty, I believe that we could maintain integrity of our assessments and ensure that students are receiving fair and accurate evaluation of their knowledge and skills.”

Teacher 50 said that “Assessing student learning and providing feedback is more challenging in a remote learning environment as teachers may not have the same opportunity to observe and interact with students as they would in a classroom. The pandemic has had a significant impact on mental health and well-being of the students, and we, teachers need to understand our students as they were experiencing stress and anxiety.

Teacher 35 revealed that “It is very difficult to ensure academic honesty using online learning because the students are free to use all available resources to them. The only way to at least ensure academic honesty is by providing the students with devices that can be controlled by the teachers which applications and websites can be access by the students during assessment.”

Interviews with the respondents also reveal that teaching-learning during the COVID-19 pandemic is challenging and exhausting because of the many problems encountered. Too many adjustments were made from time to time due to the connectivity issues especially for the students. *“Teacher 39: It is better that assessment and evaluation of student learning and progress should be done in a face to face set up.”*

Mental health and well-being was also a challenge because the anxiety level of students escalate due to issues at home like parent’s job retrenchment. The abrupt shift in the mode of learning and assessment challenged the engagement of students in the learning process (Almossa, 2021). The challenges identified in the remote assessment were academic dishonesty, infrastructure, coverage of learning outcomes, and commitment of students to submit assessments (Guangul et al., 2020). The leading challenge of online assessment was plagiarism and online cheating which resulted to the lack of trust in online assessment. Impersonation and plagiarism question the reliability and credibility of online education (Beleulmi, 2022).

Students were also interviewed for triangulation, interviews with students revealed that their learning experiences during the COVID-19 pandemic were challenging, because there were a lot of problems that arose during the pandemic- economically, emotionally physically, and socially. Adapting to distance learning is a difficult task as they need to struggle to acclimatized to the online classes and online examinations, the lack of face-to-face connections with their classmates and teachers made them feel that they were alone doing the assignments and activities. The majority of the students had difficulty in finding a comfortable workspace at home as they were frequently disturbed by family members, pets, and other household obligations. Some are unable to participate in an online class due to financial constraints. The difficulty in accessing the technology was the restricted internet

connection because the majority of the students belong to a low-income family and that creates additional barriers to their learning.

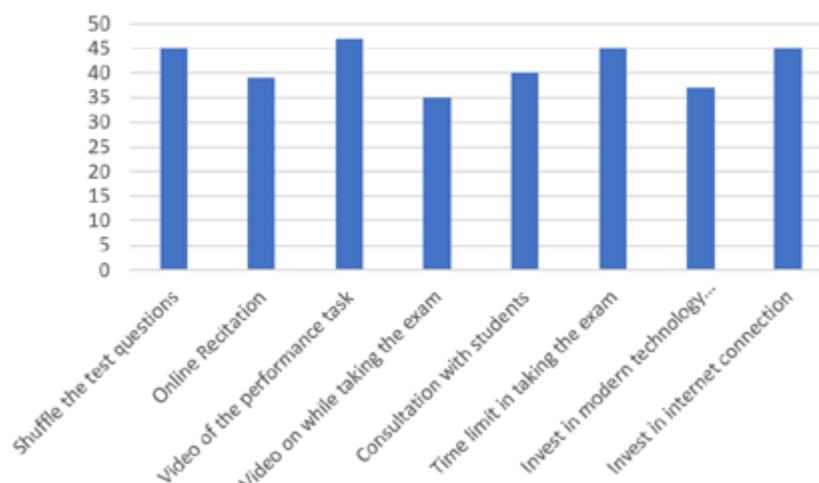
Students also feel that studying at home is isolating, they suffer anxiety as they miss the chance to connect with their friends. They also suffer emotional disturbance or burnout because of the many activities that they need to accomplish. Others experience stress in answering the activities and quizzes because of the lack of an internet connection. This problem was already raised to the top management and the teachers were advised to limit the activities given to the students and to extend the deadline if the students cannot submit on time. Factors that affect online assessment are inevitable like poor internet connection, an inconducive environment, students sharing devices with siblings, and bad weather. These factors can be controlled and solved by being lenient in the submission of activities and other requirements, and allowing more time for the students to complete the activity (Zakaria et al., 2022).

**Coping strategies in Assessment during pandemic**

Coping strategies are behavioral and cognitive approaches to manage demands, conditions, and crises to order to adjust to the changes that occur in life. The coping strategies in assessment are shown in Figure 4. Respondents were asked to enumerate their coping strategies in assessment during the COVID-19 pandemic. It can be seen from the figure that almost all of the respondents required a video while doing the performance task in order to ensure that the student was the one performing the task. Test questions were also shuffled and video was on while taking the exam to minimize cheating. However, when the video was on while taking the exam it required a lot of bandwidth. Another coping strategy that the teacher used was the preparation of different test questions, however, it is additional work for the teacher.

**Figure 4**

*Coping strategies in Assessment*



In an open-ended questionnaire, the following were the statements of the teachers as to the coping strategies in assessment. Teacher 36: “About the challenges that I’ve encountered, i have implemented various coping strategies and mechanisms to address those things mentioned above. First, i make sure to communicate regularly with my students through email, MS teams, or messenger (GC) to address their concerns and questions, provide feedback on their assignments. Moreover, I have created a structure routine also for my classes that includes specific times for teaching, grading and personal activities to maintain work-life balance. I also provided additional resources and support to my students, such as supplementary reading materials, links to online tutorials and consultation time for every students or group of students.”

Teacher 40 said that his coping strategies in assessment were “utilizing cameras, time pressure and manual checking” while Teacher 45 said that “Installation of fast internet connection and avail loan to purchase laptop and tablet for online learning was his coping strategies in assessment during the COVID-19 Pandemic. Teacher 41 said that “I have to invest in modern technology and gadget just to attend my online class to my students. Also, I have my 2nd wifi to utilized just in case the internet is slow. I also conduct research about the best practices managing online class (strategies, methods, approach etc.). In assessing my student I used different kinds of social app for me to get the best and reliable assessment result.”

Several measures such as pedagogical, technical and administrative must be taken into consideration to improve the post-COVID assessment especially the online assessment. (Ghanbari & Nowroozi, 2021). HEIs must invest in infrastructures and technologies that could support learning and assessment and make sure that quality education is delivered in different environments (Sarmiento et al., 2020).

## **Conclusion and Recommendation**

The COVID-19 pandemic has created a big impact on the education system. The abrupt closure of the schools challenged the education sector to develop and adapt a model that would guarantee the continuity of teaching-learning activity. Teachers had to engaged in an online instructional delivery in a short period. The COVID-19 pandemic has taught us to be resilient. Shifting from traditional assessment to online assessment is not easy. It requires time and effort to learn and explore the platform or application to be used. We must be flexible in adapting to the challenges of the pandemic. The pandemic taught teachers to be resilient. It also developed the creativity of teachers, to think, search and device ways on how to deliver quality education to students. The pandemic also challenged the teachers on how to assess students in an online learning environment. Teachers used different ways and platforms to assess the learning of students. Leniency in giving grades was also exercise by the teachers in the University during the COVID-19 Pandemic as there were many cases of anxiety among students during the pandemic. Now that we are in the new normal, assessment of students will never be the same during the pandemic.

It is recommended for both teachers and students to invest in an internet connection with higher bandwidth as online learning and meetings are now the trend in the new normal. Now that the schools are fully open, it is recommended to administer a face-to-face exam and quizzes to the students. Teachers should check the competencies of students if they really meet the competencies of the course required during the pandemic and to conduct remedial classes to meet the competency that was lost during the COVID-19 pandemic. It is also recommended to have a contingency plan to be prepared when calamity strikes.



## References

- 2020, C. M. (2020). *Guidelines in the Implementation of Flexible Learning*. Quezon City: Commission on Higher Education.
- Almeida, F. & Monteiro, J. (2021). The challenges of assessing and evaluating the students at distance. *Journal of Online Higher Education*, 3-10.
- Almossa, S. (2021). University students' perspectives toward learning and assessment during COVID-19. *Educational and Information Technologies*, 7163-7181.
- Barron, M., Cobo, C., Najar, A., & Ciarrusta, I.S. (19, March 2023). *World Bank Blogs*. Retrieved from Educational for Global Developments: <https://blogs.worldbank.org/education/changing-role-teachers-and-technologies-amidst-covid-19-pandemic-key-findings-cross>.
- Beleulmi, S. (2022). Challenges of online assessment during COVID-19 pandemic: An experience of study skills teachers. *Afak for Sciences Journal*, 49-62.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 77-101.
- Cajimat, R. T., Errabo, D. D. R., Cascolan, H. M. S., & Prudente, M. S. (2020). Cause analysis utilizing e-assessment on the least mastered contents of K-12 basic education curriculum. *Proceedings of the 2020 11th International Conference on E-Education, E-Business, E-Management, and E-Learning* (pp. 199-203). New York, United States: Association for Computing Machinery.
- Cascolan, H. (2020). Design, implementation and evaluation of a module on climate change. *Journal of Critical Reviews*, 2449-2456.
- CPD. (2022, August 3). *CPD Certification Service*. Retrieved from <https://cpduk.co.uk/news/what-is-flexible-learning-and-why-its-important>

- Descriptive Case Study*. (n.d.). Retrieved from [https://www.google.com/url?sa=i&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=0CAMQw7AJah-cKEwjImaLj1or-AhUAAAAAHQAAAAAQAw&url=https%3A%2F%2Fcdn.ymaws.com%2Fwww.acsp.org%2Fresource%2Fresmgr%2Ffiles%2Flincoln\\_awards%2Fnew\\_descriptive\\_case\\_templat.pdf&ps](https://www.google.com/url?sa=i&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=0CAMQw7AJah-cKEwjImaLj1or-AhUAAAAAHQAAAAAQAw&url=https%3A%2F%2Fcdn.ymaws.com%2Fwww.acsp.org%2Fresource%2Fresmgr%2Ffiles%2Flincoln_awards%2Fnew_descriptive_case_templat.pdf&ps)
- Diarsini, M.S., Artini, L.P., Padmdewi, N.N., Ratminingsih, N.M., Utami, I.G., & Marsakawati, N.P. (2022). Challenges and opportunities of online assessment implementation during COVID-19 pandemic in Indonesia based on recent studies. *European Journal of Education and Pedagogy*, 82-88.
- Dudovskiy, John. (2011). *Business Research Methodology*. Retrieved from Case Studies: [https://research-methodology.net/research-methods/qualitative-research/case-studies/#google\\_vignette](https://research-methodology.net/research-methods/qualitative-research/case-studies/#google_vignette)
- Errabo, D.D.R., Cajimat, R. T., Cascolan, H.M.S, & Prudente, M.S. (2020). Embedded Approach to Learning Exemplars Demonstration for Science Investigations. *IC4E 2020: Proceedings of the 2020 11th International Conference on E-Education, E-Business, E-Management, and E-Learning* (pp. 204-207). New York, United States: Association for Computing Machinery.
- Guangul, Fiseha M., Suhal, Adeel H., Khalit, Muhammad I, & Khidhir, Basim A. (2020). Challenges of remote assessment in higher education in the context of COVID-19: a case study of Middle East College. *Educational Assessment, Evaluation and Accountability*, 519–535.
- Ghanbari, N. & Nowroozi, S. (2021). The practice of online assessment in an EFL context amidst COVID-19 pandemic: views from teachers. *Language Testing in Asia*, 1-18.
- Liberman, J., Levin, V., & Bazaldua, D.L. (2020, April 27). *World Bank Blogs*. Retrieved from Education for Global Development: <https://blogs.worldbank.org/education/are-students-still-learning-during-covid-19-formative-assessment-can-provide-answer>
- Meccawy, Z., Meccawy, M., & Alsobhi, A. (2021). Assessment in ‘survival mode’: student and faculty perceptions of online assessment practices in HE during COVID-19 pandemic. *International Journal for Educational Integrity*, 1-24.
- Nowell, L.S., Norris, J.M., Moules, N.J. & White, D.E. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Method*.

- Sandvil, L.V., Svendsen, B., Stromme, A., Smith, K., Sommervold, O.A., & Angvik, S.A. (2023). Assessment during COVID-19: students and teachers in limbo when the classroom disappeared. *Educational Assessment*, 11-26.
- Sari, T., & Nayır, F. (2020). Challenges in distance education during the (COVID- 19) pandemic period. *Qualitative Research in Education*, 328-360.
- Sarmiento, C. P., Cajimat, R.T., Mistades, V.M., Lapinid, M.R.C, Aguja, S.E., Prudente, M.S., Cascolan, H.M.S., Lucas, R.I.G., Gonzales, R.D., Peñafiel, J.A., Ilanan, C.M., Avilla, R.A., Albania, L.A.D., Pineda, J.L.D., & Regalado, M.R.M. (2022). Emergency remote teaching experiences of Philippine basic education public school teachers. *NRCP Research Journal*, 72-95.
- Sarmiento, C. P., Morales, M. E., Elipane, L. E., & Palomar, B.C. (2020). Assessment practices in Philippine higher STEAM education. *Journal of University Teaching & Learning Practice*.
- Zakaria, Z.A., Abdullah, N. & Mahir, N.A. (2022). The perception of students towards on-line assessment during COVID-19 pandemic. *International Journal of Language and Education*, 65-73.

### **Authors' Bionote**

**Dr. Honelly Mae S. Cascolan** is an Associate Professor V at Pangasinan State University. She is the Dean of the College of Education Pangasinan State University, Asingan Campus, and the Program Adviser of Doctor of Education major in Science in the Pangasinan State University-School of Advanced Studies, Urdaneta City. She completed her Bachelor of Science in Chemistry for Teachers at Philippine Normal University, Manila. She took her Master in Chemistry at De La Salle University, Manila under the CHED Scholarship. She finished her Doctor of Philosophy in Science Education major in Chemistry at De La Salle University, Manila under the DOST Scholarship.