

From Face-to-Face to Virtual Student Assessment: Changes in Student Assessment Practices during COVID-19 Among Filipino Teachers

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ABSTRACT

The COVID-19 pandemic has shaken all facets of society, including education. The government's motion to lock schools due to the global pandemic forced the school system to change its teaching and learning delivery approaches. Teachers were obliged to quickly shift from face-to-face to online, distance, or blended delivery modes. They were also compelled to learn new teaching, assessment, and classroom management tools. Hence, this paper explores changes during COVID-19 in the Philippines because student assessment is vital in education practice, teaching and learning. This descriptive study utilized SurveyMonkey, an online survey software, to gather data. The survey consists of a 15-item questionnaire administered to about 500 teachers using social media and email. Four hundred thirty-six responses were gathered and analyzed employing descriptive statistics. The findings highlight that 99% of teachers initiated some changes in the assessment. However, 82% were not concerned that the changes in response to COVID-19 would negatively impact assessment culture. Among the significant assessment changes reported are being more flexible, working with teachers for integrative assessments, and giving more performance-based assessments. Additionally, 72% revealed that they used both formative and summative assessments. The paper ends with some implications for conducting assessments during the pandemic and how teachers will maintain reliable and valid student assessments by providing capacity development and sustainable infrastructure.

Keywords: assessment practices, COVID-19, face-to-face assessment, student assessment, virtual assessment.

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I. INTRODUCTION

Before the outbreak of the COVID-19 pandemic, many schools and teachers were using various assessment tools and were discovering many ways to assess learning to inform teaching and learning (Daniel, 2020). However, the COVID-19 global pandemic that originated in Wuhan, China (Pan *et al.*, 2020; Phelan *et al.*, 2020) forced teachers to rethink and re-imaging assessing students when the governments worldwide, including the Philippines, to respond to the pandemic by quickly closing down or not opening schools to slow down the disease's community transmission. To adhere to the global implementation of physical distancing, the Philippine government declared no face-to-face classes starting in June 2020 for all levels. The unprecedented closure of schools forced the education system to make an unexpected change in delivery mode, including determining how students were learning (Kaden, 2020); Sarmiento *et al.* (2022). When all classes had to shift from face-to-face learning to online, distance, or blended learning modalities, schools needed more time to be ready and so did the teachers. Like most countries, many schools do not have an e-learning infrastructure to ensure the effectiveness of distance learning

during the COVID-19 pandemic (Garad *et al.*, 2021; Kaden, 2020; Sarmiento *et al.*, 2022). The abrupt shift in learning delivery required teachers to undertake speedy re-tooling in terms of online pedagogy and technology to adapt to the new learning setup—the birth of the “new normal” needed massive adjustment in the schools. Schools were also forced to explore alternatives to avoid face-to-face instruction due to mandated physical distancing (Scull *et al.*, 2020; Van *et al.*, 2020). Teachers must learn new teaching, assessment, and classroom management tools. Accordingly, Fagell (2020) argues that the abrupt change in teaching delivery modes prompted the teachers' assessment practices to change. However, Viner *et al.* (2020) observed that most teachers were not trained and equipped to conduct new assessment regimens when asked to go online or to modular learning modalities. Hence, teachers need to be creative in assessing their student's learning outcomes, both formative and summative assessments.

Student assessment plays a crucial function in teaching and learning as it offers teachers data and information essential for classroom decision-making (Clarke, 2012; Fletcher, 2022; Jones & Tanner, 2008; Lynn, 2014; Murray *et al.*, 2012). The data and information collected from assessments enable

teachers to understand better their students' performance and the suitability and effectiveness of classroom instruction (Alvarez, 2020; Gonzales & Callueng, 2014; Harlen, 2010; Lynn, 2014).

Classroom assessments provide indices of student learning (Harris *et al.*, 2022; Gonzales & Fuggan, 2012; Nitko & Brookhart, 2014; Stiggins *et al.*, 2012; Yan & Xin, 2022). It has also been employed as a specific testing activity after teachers have taught a particular lesson (Day & Gu, 2013; Sanchez & Brisk, 2004). Nonetheless, assessment and testing are different concepts. Barkley and Major (2016) and Kubiszyn and Borich (2016) strongly argue that testing is just a fraction of assessment because assessment is a comprehensive data-gathering evaluation process that is made up of many elements. They add that an extensive assessment process includes test results and influences from other measurement techniques, such as paper-and-pencil, performance assessments, portfolio assessments, products or projects, rating scales, checklists, and observations.

Conversely, Frey *et al.* (2012) and Hopfenbeck (2019) define classroom assessment as a wide-ranging approach to assist teachers in verifying what students are learning in the classroom and how well they are learning, focused on authentic learning experiences. The assessment process enables teachers to acquire helpful feedback on what, how much, and how well their students learn (Cox, 2013; Saxon & Morante, 2014). Thus, it must act directly to better learning and more effective teaching.

So, for this study, I posted five research questions. I wanted to find out the answer to the following research problems:

- 1) What changes have teachers made to student assessment in an online and blended learning modality during the COVID-19 pandemic?
- 2) Were the teachers concerned that changes in student assessment they made in response to COVID-19 would negatively impact the culture of assessment?
- 3) What and how were decisions made on students' assessments?
- 4) What changes, if any, would the teachers like to support assessment during and post-COVID-19?
- 5) What are the professional needs of teachers?

The primary rationale of this study is to determine what assessment changes took place during the COVID-19 pandemic in order for schools, teachers, and the government to address challenges cogently. Additionally, the results of this study will inform better teaching and learning during a pandemic and identify better support approaches for students, parents, and teachers.

II. ONLINE AND MODULAR LEARNING MODALITIES ARE THE "NEW NORMAL" LEARNING APPROACHES IN THE PHILIPPINES

When the Philippines government closed schools due to the COVID-19 pandemic, the Department of Education (DepEd) adapted to the new blended learning when it ordered the resumption of classes nationwide on October 5, 2020. The DepEd opted to institute this learning modality because it believed education should not be compromised even during the pandemic (Sarmiento *et al.*, 2022). Through DepEd Order No. 32, series of 2020, blended learning is defined as "face-

to-face with any or mix of online distance learning, modular distance learning, and TV/Radio-based instruction." Among the three types of blended learning, the modular distance learning modality was the most preferred system and considered the most convenient by students, teachers, and parents based on the Learning Enrolment and Form (LESF) survey conducted by DepEd before the start of the school year in 2020.

For higher education in the Philippines, the Commission on Higher Education (CHED) initially encouraged colleges and universities to conduct instruction via an online modality to contain the transmission of the COVID-19 virus. However, it issued guidelines on implementing flexible learning CHED Memorandum Order No. 4, series of 2020. The policies adopted the definition of flexible learning provided by (Cassidy *et al.*, 2016) "as a pedagogical approach allowing flexible time, place, and audience including, but not solely focused on the use of technology." The CHED above's memorandum order defined and contextualized flexible learning pragmatically to respond to the diverse needs of higher educational institutions. It also stressed that although flexible learning commonly uses the delivery method of distance education and the facilities of education technology, this may vary depending on the technology, availability of devices, internet connectivity, level of digital literacy, and approaches. The CHED en banc also emphasized that "the design and delivery of programs, courses, and learning interventions address learners' unique needs, pace, process, and products." Hence, the CHED affirmed and expanded the definition of flexible learning, which involves the use of digital and non-digital technology, covers both face-to-face and in-person learning, and out-of-classroom learning modality that addresses the diverse needs of students and the capacity of higher educational institutions.

Given the robust definition of DepEd and CHED of flexible learning, it was reported that most learners belong to printed modular, especially in rural areas, because of poor and unavailability of internet connection (Anzaldo, 2021). Given this reality, teachers were expected to guide parents to ensure their children follow a modular learning system. Learners, especially elementary school students, learn with the help of parents or guardians (Navarosa & Fernando, 2020; Sarmiento *et al.*, 2022).

In his study, Alvarez (2020) also emphasized that blended-based instruction is an appropriate learning delivery system for flexible learning and teaching and can promote learning independence. However, he also argued that while teachers and students embraced blended learning, particularly modular distance learning, they still needed to have a greater understanding of this learning delivery system, which could hamper its implementation of it. Anzaldo (2021) opined that those children at home following modular education, especially those in primary and elementary, may need closer guidance from parents or guardians.

On the other hand, a comparative analysis of the challenges of online and modular learning modalities conducted by Abante *et al.* (2021) reported that parents need help picking up modules from teachers due to financial incapacity. They also noted the unresponsiveness of both students and parents. More significantly, they indicated that learners had difficulty

coping with the modular learning system, leading to more learning losses among the students.

Lastly, Sarmiento *et al.* (2022) conducted a nationwide survey in April 2021 to determine the experiences of the sudden change of instruction and learning environment of basic education school public school teachers. Using descriptive statistics, their results suggest that most teachers used printed modules as the modality for remote teaching. They opined that this finding might be due to unstable internet access. Hence, teachers implemented less-interactive forms of activities, including student assessments.

III. DEFINING ASSESSMENT PRACTICES AND ASSESSMENT DURING COVID-19

The term “assessment” has taken on a variety of meanings within the educational milieu (Banta & Palomba, 2015; Musial *et al.*, 2009; Stiggins, 2002). It can refer to the process teachers use to grade student subject assignments (Harlen, 2010; Mertler, 2003; Schuh & Upcraft, 2001; Unal & Unal, 2019), to standardize testing imposed in schools (Morgan, 2016; Paul, 2015; Salinas & Guajardo, 2022; Stiggins & Chappuis, 2005), to any activity designed to collect information to be used as feedback to modify teaching and learning activities (Black & William, 2003; Chappuis, 2009, 2014; Hattie & Timperley, 2007;), or to improve instruction and students’ performance (Arnaiz-Sanchez *et al.*, 2020; Cohen & Hill, 2000; Dunn *et al.*, 2017; Ramberg *et al.*, 2019). These various uses have moved assessment away from its primary role in educational institutions—gathering information to improve instructional practices.

During the COVID-19 pandemic, the vital role of assessment in schooling and learning strongly suggests that teachers must ensure that the assessment process practiced adheres to the highest standards (Meccaway *et al.*, 2020; Selwa *et al.*, 2020). Learning targets must be clear (Moss & Brookhart, 2012; Shepard, 2000). Muho and Leka (2022) further pointed out that clarity in learning targets means that learning targets such as knowledge, skills, and products need to be stated in behavioral terms or denote something that can be observed through students’ behavior. When one begins to plan, design, and construct assessment based on learning targets, Harlen (2010) and Kizlik (2009) opine that it is necessary to be clear about the learning outcomes’ actual behavior. Moreover, Stiggins *et al.* (2004) strongly argue that classroom assessment must always begin with clear statements of the intended learning targets and benefits of teaching. They said that if one starts with a clear statement of learning targets, one will continue with sound assessments.

Once the learning targets are defined, the next crucial step in developing assessment measures is to determine what types of questions or tasks are included and what form of test is used. Stiggins (2002) emphasized that teachers must observe the basic principles and guidelines in constructing an assessment tool. This includes adherence to sound testing processes, objective scoring, and responsible reporting of assessment results (Oosterhof, 2001; Johnson & Johnson, 2002; Robinson-Karpus, 2006; Popham, 2008).

For this study, we define classroom assessment practices as the processes and procedures of collecting information

about students’ learning progress and development during the COVID-19 pandemic.

IV. METHODS AND PROCEDURE

A. Methodology

I used a descriptive research design to describe a population, situation, or phenomenon accurately and systematically.

1) Respondents

I included 436 teachers from the Philippines who agreed to participate in the online survey in this study. Predominantly females (82%) from government/public schools; 38% are college/tertiary teachers, 21% are secondary school teachers, 19% are elementary school teachers, and 22% are post-graduate, vocational/TVET, and teachers of other levels. 38% have master’s degrees, 20% have a doctoral degree, 36% have a bachelor’s degree with some master’s units, and the remaining 6% have indicated others. Eighty-two percent of the participants attended training on assessment during COVID-19.

B. Instruments

I developed an online questionnaire with 14 items designed using the SurveyMonkey platform. The first item asked each participant to answer their willingness to participate in the survey due diligence for ethical research practice. The other 13 items were multiple-choice (yes or no, male or female), checklists, and rating scales using a 4-point Likert-type response scale (1-Disagree to 4 Strongly Agree). Three open-ended questions were also included that asked what changes they would like to continue, if any, how they are concerned about the changes of assessment during COVID-19, and what capacity-building needs they think are needed. The survey questionnaire was pre-tested on a small group of samples before sharing it online. Additionally, I requested some colleagues to review and validate the survey questionnaire to ensure its content validity before making it live online.

C. Procedure

I used social media to share the survey questionnaire using SurveyMonkey, considered the world’s most popular free online survey tool (<https://www.surveymonkey.com>). I shared the survey link via email invitation and social media posts, particularly on Facebook and Facebook messenger. The survey link was shared for one month (March 2021). After a month, more than 460 responses were collected. However, some completed responses were eliminated because the respondents were either not teaching during COVID-19 or not teaching in the Philippines anymore. Again, as part of the informed consent, I informed the participants about the purposes of the study and how it will be used and disseminated. While the procedure was appropriate during the pandemic times, one limitation of the study was the lack of opportunity to validate the actual respondents’ responses using qualitative approaches and allow better analysis through triangulation and deeper content analysis.

D. Data Analysis

After carefully cleaning the data, the data were subjected to descriptive statistics, mainly frequency and percentages. Since the intention of this study was purely descriptive, only basic frequency counts and percentages were calculated using Excel. Qualitative responses were analyzed using content analysis. The researcher used content analysis to determine the presence of certain words, themes, or concepts within some given qualitative data, in this case, texts (Schreier, 2012). After that, I identified the meanings and relationships of the shared words, themes, or concepts. For the presentation of results, I only included the items/responses that achieved at least 20% of the research participants. The responses of less than 20% of the participants were varied and could not help further explain the results. Hence, only the top 4 to 6 responses are reported.

V. RESULTS AND DISCUSSION

A. Changes Made in Student Assessment during COVID-19

For the first set of results, I looked into the specific changes made in student assessment during COVID-19. Very significantly, 93% of the respondents introduced at least one shift in student assessment during COVID-19. Specifically:

- 1) 91% became more flexible in giving deadlines for assignments and performance tasks.
- 2) 72% changed the timing of the submission of assessment tasks.
- 3) 52% used rubrics more often to let students know how they were assessed.
- 4) 51% asked more reflective questions and performance tasks.

B. Concerns about Assessing Students during COVID-19

The second set of findings revealed that 91% of teachers indicated reservations about undertaking changes in assessment during COVID-19. More than half of the teachers noted concerns surrounding various elements and student assessment procedures given non-classroom and face-to-face settings. Specifically:

- 1) 54% were concerned about the validity of assessment results.
- 2) 53% were concerned about the additional workload.
- 3) 51% were affected by the limited options for online assessments.
- 4) 51% were worried about the lack of training and skills for formative assessments.

Despite the articulated concern and reservations, 72% of them disclosed that changes would not negatively impact the assessment culture during COVID-19 as they could adjust their practices, despite not being adequately prepared to undertake assessments in a flexible and online learning environment.

C. Motivations of Initiating Changes in Assessment During COVID-19

For Key Findings 3, I asked what motivated teachers to initiate changes in their assessment practices. The data revealed the following:

- 1) 72% strongly agreed that students' capacity to access technology was more critical during COVID-19.
- 2) 55% strongly agreed that students' learning abilities in online and blended environments were crucial.
- 3) 52% strongly agreed that assessment practices were changed based on students' needs.
- 4) 47% strongly agreed that school policies influenced the changes in student assessment practices.

D. Changes that Teachers Would Like to Continue Supporting Learning

The fourth set of findings pertains to the changes teachers would like to continue supporting learning. The data revealed that:

- 1) 43% of the respondents suggested being flexible and accommodating to students.
- 2) 41% will continue using and introducing performance-based assessments, more authentic assessments.
- 3) 39% will continue considering students' capacity and access to technology in making assessment decisions.
- 4) 31% will continue attending webinars/assessment seminars to learn new knowledge, concepts, and assessment tools.

E. Professional Needs Identified

Lastly, in this study, I also sought to determine the professional development needs of the respondents. Surprisingly, 78% of the respondents revealed that they had attended at least one webinar training program on assessment during COVID-19. However, they still felt the need for further professional development focused on assessment. Among the many responses, these are what stood out:

- 1) Teachers want more training on authentic and performance-based assessments.
- 2) They also want more online and e-assessment, indicating that they want to cope with the demands of online and blended learning.
- 3) The respondents thought schools should continue supporting and guiding them to conduct assessments properly.
- 4) Of course, given the new normal situation, they want more models and exemplars to guide them accordingly.

VI. DISCUSSION AND CONCLUSIONS

Changes in student assessment were inevitable during COVID-19 (Abante *et al.*, 2021; Selwa *et al.*, 2020). However, as Daniel (2020) argues, the actual changes in student assessment span from personal and pedagogical and embrace the existing education system. Considering the unprecedented shift, Alvarez (2020) and Sarmiento *et al.* (2022) contended that teachers were more focused on supporting students to adjust to the times rather than the usual evaluative purpose of student assessment. While the goal of assessment remained the same during COVID-19, which is to determine what and how students learn, teachers were more concerned with allowing students to learn at a different pace according to their resources. In Arnaiz-Sanchez *et al.* (2020) study, where they described the schools' teaching-learning

practices, including students, they found that schools remained firm in promoting the improvement of academic performance and the success of all students despite the pandemic. Hence, as observed in Fagell (2020), the teachers even adjusted the deadline for students to submit assessment tasks which is evident in the study, which reported that teachers supported students during the COVID-19 lockdowns. Brookhart's (2018) emphasis on using rubrics also became prominent as part of teachers' support and scaffolding measures during the pandemic. Lastly, practical lessons for value formation emphasized content knowledge. While it was evident that teachers wanted to accommodate changes in assessment during the COVID-19 pandemic, their flexibility was guided by their concerns about ensuring the validity of assessments, concurring with Drinkwater *et al.* (2017) position in measuring evidence-based teaching practices. The respondents indicated that conducting assessments in a flexible and online modality required more workload demands, aggravated by their limited options of running it online or in a modular approach. Hence, they also indicated the need for more training on assessment in a non-classroom environment, similar to Abante *et al.* (2020) and Alvarez's (2020) findings in their studies on the challenges of online and blended learning modalities.

Interestingly, the teachers also became more aware of the challenges faced by the students during the COVID-19 pandemic. They agreed and were motivated to consider that students have different capacities to access technology and home-related environments, including adults who could support them. Hence, it was critical to ensure that assessments were based on students learning pace, resources, and learning ability. The motivation to change their assessment practices was also aligned with schools' policies in evaluating and grading students, similar to earlier studies by Clark (2012) and Harry *et al.* (2022).

Even though most respondents revealed that they have attended at least one webinar training program on assessment and introduced changes in their assessment practices during COVID-19, they still indicated the vital need for further capacity development. Their needs were directed at responding to flexible and online learning requirements.

VII. CONCLUSION

Undeniably, assessment practices were hugely affected by COVID-19. Teachers needed more time to be ready to conduct student assessments in a blended, modular, and online learning environment. Assessments during the COVID-19 pandemic were done differently during regular times. Hence, they exerted much effort to introduce changes to ensure that learning levels could still be accurately determined. Still, the positive side was that teachers (and students) could adjust, learn, and be excited to learn more about student assessment. Another positive note on COVID-19 was that the new normal situation encourages the teacher to explore and use new assessment regimens and consider the student's needs and conditions in deciding what assessment tools and methods to use. Lastly, the pandemic has caught us unaware, so to ensure sound and effective assessment practices, teachers need to update their knowledge and skills to do assessments well without sacrificing the true essence of

assessment, which is to know how and what students have learned.

This study suggests essential implications for flexible and online learning policy development, capacity development, and infrastructure improvement. The study also suggests better approaches to building capacity for teachers during pandemics or emergencies. The results imply that further research could focus on the cause-and-effect relationship or further explanatory studies.

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