





# Pandemic pedagogy conceptualizations of university students during emergency remote education

Cathy Mae Dabi Toquero <sup>1\*</sup> , Joel Paco Toquero <sup>2</sup> 

<sup>1</sup>College of Education, Mindanao State University, General Santos City, PHILIPPINES

<sup>2</sup>Independent Researcher, Sultan Kudarat, PHILIPPINES

\*Corresponding Author: [cathymaetoquero@gmail.com](mailto:cathymaetoquero@gmail.com)

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## ABSTRACT

During the spike of the global health crisis, literature has conceived pandemic pedagogy in a broad sense of meaning based on pedagogical assumptions. Few studies explore the conceptualizations of students regarding pandemic pedagogy. Based on state university students' reflections and insights during emergency remote learning, this study examined pandemic pedagogy through the content analysis of 37 learning modules. The student teachers conceptualize pandemic pedagogy as encompassing six approaches to mitigate learning during emergency remote education in the context of the Philippines. Pandemic pedagogy encapsulates the pedagogical concepts of personalized learning, human centered pedagogy, pedagogy of care, active learning pedagogy, game-based learning, and contextualized online pedagogy. Through a better understanding of how students choose to learn, teachers can improve online course plans to sustain students' engagement in emergency online or remote learning.

**Keywords:** COVID-19, pandemic pedagogy, reflections, ERT, online learning, approaches

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## INTRODUCTION

As the world grappled with the pandemic, numerous educational institutions in different countries (Basilaia & Kvavadze, 2020 in Georgia; Khalil et al., 2020 in Saudi Arabia; Murphy et al., 2020 in the United States; Toquero, 2020a in Philippines; Zhu & Liu, 2020 in China, etc.) unleashed a metaphorical sense of overnight arrangements of transition to online and remote instruction. This sudden shift caused the impetus of academic experimentation to support the educational needs of their students during such critical periods (Bozkurt & Sharma, 2020; Crawford et al., 2020; Means et al., 2020; Toquero, 2020b; Zimmerman, 2020). Emergency remote education is the concept of learning through any means possible and is a temporary solution during a global health emergency (Bozkurt et al., 2020; Hodges et al., 2020).

Some studies have attempted to conceptualize emergency remote teaching pedagogy. For example, researchers focused on the conceptualizations of the students' relative to their metaphorical attitudes towards learning and instruction during emergency remote teaching using an elicited metaphorical analysis (Saglamel & Erbay Cetinkaya, 2022). Their findings show that the students have unfavorable dispositions towards ERT. Another study revealed from the survey among instructors that there is a need for pedagogical support and to redesign curriculum around existing technologies (Sheppard, 2021).

There is a rising debate between online learning and emergency remote teaching. Barbour et al. (2020) acknowledged that "this labeling of the teaching methods used when students are not attending school as online learning is highly problematic" (p. 1). As a result, the current study is an attempt to investigate students' conceptualizations of pedagogical strategies in the context of emergency remote or online learning. The students' conceptualizations of pandemic pedagogy are "associated with the processes and behaviors students decide to activate in a specific context, which potentially leads to the achievement of learning goals" (Tarchi et al., 2022, p. 1).

However, during the experimentation of course learning, where students are forced to digitalize, they confronted the harsh realities of emergency remote teaching. Recent studies have discussed many challenges that hinder students' emergency distance learning during the COVID-19 pandemic (Ferri et al., 2020; Grewenig et al., 2020; Gustiani, 2020). The experimentation of course learning forced the students to digitalize, and technology use during the pandemic created anxiety, stress, and isolation among students that hindered them from having the opportunity to interact with their peers (Daniel, 2020; Gillett-Swan, 2017). Cybersecurity, cyberbullying, online violence, exploitation, and other psychological issues caused by anxieties and uncertainties associated with online learning during the COVID-19 pandemic are present when the odd shift to online learning happens (Daniel, 2020; Yan, 2020). Other psychological issues caused by anxieties and

uncertainties associated with emergency online learning during the COVID-19 pandemic could persist beyond the pandemic.

Aside from the rapid changes of the full implementation of K-12 in 2016, students in the Philippines specifically experience the mayhem of the experimental online curriculum. Employing a pedagogy that has no lens on how students perceive relevance may add to the students' burden considering their complex circumstance during home learning in the context of the pandemic. Capturing students' cognition during this period, on the other hand, could pave the way for improving the instructional design of online courses and developing sustainable teaching frameworks (Saglamel & Erbay Cetinkaya, 2022). Such understanding could lead to sustain engagement of students in the online environments. Hence, this article explored the conceptualizations of the students regarding pandemic pedagogy.

## METHODS AND DESIGN

### Research Design

This study applied a qualitative content analysis to scrutinize the conceptualizations of the students regarding pandemic pedagogy. Every analysis needs a context in which to investigate the texts that are available (Vaismoradi et al., 2013). This design is appropriate for this study since it deals with exploring the students' perceptions, opinions, conceptualizations, and experiences during their emergency online learning or emergency remote teaching. The aim of content analysis is to conceptually explain the phenomenon (Elo & Kyngäs, 2008). Data can be understood through the use of texts, images, and expressions rather than representations of physical events (Krippendorff, 2004). Anchored from students' insights and experiences during pandemic, content analysis is supplemented with document review to make sense of the written reflections in the learning modules.

### Context and Unit of Analysis

University students served as unit of analysis in the study. They were freshmen students taking up bachelor of elementary education major in general education at a state university in the Philippines. They were chosen as participants in the study since they had not encountered face-to-face education in university settings prior to the pandemic. Hence, they can provide in-depth perspectives relative to how they have experienced dealing with classes done online through synchronous and asynchronous means and how they deal with their online classmates and teachers whom they have never met face-to-face. The students signed an ethical consent form according to their voluntary participation in this study. For the first semester of the academic year 2020-2021, there were 137 students enrolled in child and adolescent learners and learning principles (CPE 100). To choose the unit of observation for this study, inclusion and exclusion criteria were set based on the learning modules. Part of the inclusion criteria was to include those students whose answers in the modules were complete statements with clear details. Students' modules were excluded when they gave incomplete details or when their answers were incomplete. On the first screening, 40 students were included. After careful examination on the second screening, only 37 students were able to attain the inclusion criteria. Hence, there were 37 modules that were included for the data analysis. The students' names remain anonymous, and codenames are used for this study, such as S1, S2, S3, etc. The students who were part of this study were chosen regardless of their

academic performance, class standing, or cultural or social affiliations. All of the students were given equal chances of selection based on inclusion and exclusion criteria.

### Analysis Strategy

This study applied a qualitative lens to analyze the conceptualizations of the students regarding pandemic pedagogy. Content analysis and document review were applied to make sense of the written reflections in the learning modules. Student teachers under bachelor of elementary education at a state university in the Philippines served as units of observation. CPE 100 softcopy modules were used for this research. Based on the information from selection and screening, 37 modules attained the inclusion criteria needed for this study.

## RESULTS

This study delved into the students' perceptions, experiences, and learning beliefs relative to pandemic pedagogy during their exodus to home education and post-pandemic. The conceptualizations of the students about pandemic pedagogy show five dominant pedagogical approaches (Figure 1). They regard these pandemic pedagogical approaches as critical for completing the learning experiences of their academic journey.

### Modify Curriculum for Personalized Learning Considering Individual Differences

The students reinforced the concept of personalized learning to emphasize the teachers' consideration of the individual differences of their students. Students need the teachers to "focus on what the student can do rather than what he or she cannot do and build on his or her strengths" (S1). They argue for a "highly personalized education that aims for the individual goals of each student" (S25), "focusing on what the students are capable of and their interests" (S7). Consequently, teachers need to "allow multiple interpretations and expressions of learning (multiple intelligences)," allowing them to "present their learning in a creative way" (S31), so that they can help students "understand new concepts or ideas" (S10). This personalized learning is possible when teachers record relevant information about their students to discover their strengths and weaknesses. During this pandemic, students' personal situations should be looked into since "student lives really matter." "So, it is very important to know our students" (S7), including their learning situations in their respective homes. Such profiling can also allow the teachers to provide tasks according to their students' level of capacity for learning through emergency remote education.

### Demonstrate Human Centered Pedagogy and Pedagogy of Care

Due to an unstructured curriculum and the sudden shift to emergency online learning or remote learning environments, Filipino students experience the mayhem of an experimental curriculum. Consequently, Filipino students may experience the bombardment of numerous modules and online requirements amidst the complexities of having to study at home. Hence, students call for the teachers to "give more patience and understanding to the students" (S30). The students also want their teachers to "know and understand [their] students' situation in their current mode of learning by acknowledging their concerns" (S23) and "understand situations to avoid making it complicated as much as possible" (S6). Student 26 pointed out that

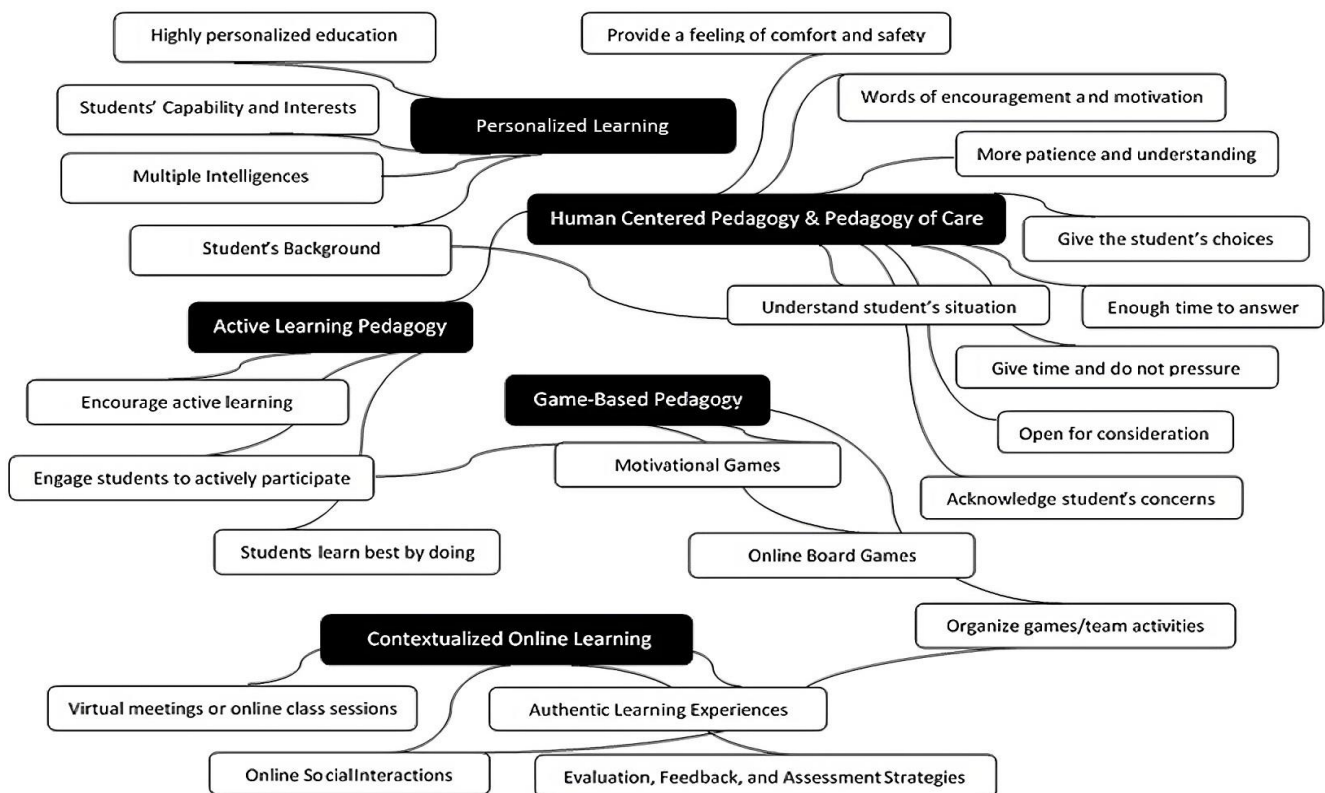


Figure 1. Conceptualizations of university students regarding pandemic pedagogy (Source: Authors)

teachers should “provide a feeling of comfort and safety, or what we call a security blanket, from family, peers, and other people that might be of great help in one’s academic journey, especially that there is an ongoing global health crisis.” Likewise, teachers should be “open for consideration in every situation that might hinder students from complying with the academic requirements because of some sort of problem, such as internet and signal issues, distractions at home, computer literacy, or struggling to cope with online-based learning” (S24). Student 13 also calls for teachers to give the students choices and options related to their learning so that they can better cope with the overwhelming activities given to them because of the unceasing distribution of modules.

#### Reinforce Active Learning Pedagogy During Synchronous and Asynchronous Classes

Creating interaction and sparking engagement are two of the prevailing challenges for teachers in online environments (Dembereldorj, 2021; Wut & Xu, 2021). The students continue to clamor for the teachers to activate student engagement in the classes done online. The students emphasized that the teachers need to “engage students to actively participate in all activities in the online classes; give credit for their efforts” (S33). “Students learn best by doing, and active teaching encourages active learning.” “In this new normal, teachers and parents should treat each student as an active participant in the learning process, providing them with skills such as how to study, how to memorize, and how to express themselves effectively” (S27). Integrating active learning pedagogy involves the process of involving pupils in activities that require them to gather knowledge, think, and solve problems while maintaining their mental and frequently physical activity in their learning (Michael, 2006). Students who actively participate in their learning have better chances of retaining what they learn, indicating effective learning during the pandemic.

#### Integrate Game-Based Pedagogy to Activate Motivation Among Students

During homeschool education of the students, they may experience many challenges related to technical, psychological, familial, and social aspects. Consequently, students may experience boredom and a lack of interest in learning. In that case, the students conceptualized that the pandemic pedagogy needs to incorporate a game-based perspective to activate the students’ motivation to learn. Student 16 asserted that motivational games motivate students to learn more about new things. “The tool to be used is social media.” Another technique to motivate the students to learn is to “create cognitive dissonance by assigning students to do 30 days of exercise plan, play chess, and other board games online” (S28). “Using strategies like organizing games and team activities will help them remember how it all went.” And “activity itself is a demonstration to help them understand how things work or what they are made of” (S9). Integrating game-based pedagogy in emergency remote teaching can motivate students to complete their off-line class requirements and engage with their peers during synchronous classes.

#### Apply Contextualized Online Learning Strategies in Meeting Students’ Educational Needs

The students in this study emphasized the importance of having virtual conferences with their teachers for consistent learning guidance. “Because of the pandemic, face-to-face learning is not possible, but a Google meet from time to time will [help us] learn” (S11). Regular virtual meetings or online class sessions between the teachers and students are vital to assess and regulate the students’ learning, as student 17 pointed out. Because the teachers utilize various software or online platforms in the college of education (such as Facebook, Google Classroom, Google Meet, Messenger, Moodle, Telegram, Zoom, etc.), Student 26 argued for a single platform for the students to use:

“One software platform for all the subjects in learning materials, in terms of the distribution of learning materials and taking summative and final examinations, to avoid missed materials or tests because sometimes it may cause confusion due to different platforms used by the instructors.”

Moreover, the students clamored for online social interactions. They want their teachers to acknowledge them during “synchronous and asynchronous sessions and have open conversations” (S18). Teachers should also “build exercises that help students illustrate their own point of view and gain knowledge from one another” (S5). The students conceptualized that incorporating pandemic pedagogy means that “a teacher may employ appropriate strategies and techniques that are possible to engage students with the material and how to push them to grow academically” (S37), despite the educational challenges that they encounter during the pandemic. The students in this study are prone to stress and anxiety because of the numerous modules and inherent problems of learning at home, so they stressed having interactions during their synchronous learning sessions. With reference to online conversations among teachers and students, one student stated that teachers should allow them to “produce activities that encourage students to peer up and co-create reviews.” Have students swap drafts of their own essays and then come up with questions and comments for each other. “Educators may provide adequate digital lessons and activities and may conduct online meetings enabling the student to actively participate and raise their concerns” (S29).

#### **Conceptualize Authentic Learning Experiences in a Flexible Online Curriculum**

The students want a pandemic pedagogy that enhances their “learning experiences through pedagogical innovations” (S8) without neglecting their need for authentic learning experiences. They pointed out that teachers should “encourage the students to share their individual experiences and help them correlate such experiences for their coursework” (S21). Even when they are learning at home, they yearn for meaningful learning. Student 27 mentioned that “students want and need to learn even if they are at their own house, as they need food, clothing, shelter, and to be healthy and safe.” As long as they have a connection or gadget, they will reach out for the module distribution. “An educator’s primary job is to fill that primary need for learning by creating engaging and relevant learning experiences every day.” The yearning for authentic learning means providing the students with the opportunity to show what they have learned through “video presentations, poetry, and reflexive papers” (S28), “scenarios or samples, where students address social reforms” (S23), or by allowing them to “formulate their own questions (inquiries)” (S31). As student 11 remarked, “I can obtain information, knowledge, and more skill by connecting every lesson to my real life.” These will help more people understand confusing lessons. Thus, a pandemic pedagogy should incorporate the value of authentic learning experiences for students post-pandemic.

Further, the students also conceptualized a pandemic pedagogy that actualizes the learning of the students through evaluation, feedback, and assessment strategies. Students 13 and 25, for example, call for evaluation of the students through products, assessments, and projects. Student 26 also asserted that teachers should “monitor and track students’ achievement or failures and performance, [and] give feedback and not judgments.” The students want their teachers to measure and

evaluate their prior knowledge through online discussions, quizzes, or pretests (S31) using “accurate rubrics and guidelines” (S13). Undoubtedly, the students conceptualize a pandemic pedagogy in which the teachers can also organize, implement, and evaluate student learning so that they can “inspire the students to push themselves to the next level even after we’ve experienced this new normal” (S27). A pandemic pedagogy should incorporate the value of authentic learning experiences.

## **DISCUSSION**

Emergency remote education is the idea that whatever means are possible for learning to occur, this is a temporary solution during the global health emergency (Bozkurt et al., 2020; Hodges et al., 2020). As students learn through emergency remote education, teachers may provide unstructured materials and lessons. The students reinforced the concept of personalized learning to emphasize the teachers’ consideration of the individual differences of their students. Students argue for a highly personalized education that aims to meet the individual goals, capabilities, and interests of each student. They reinforced the concept of personalized learning for teachers to uphold the principle of individual differences. They conceptualize that pandemic pedagogy looks at the students’ interests and skills in learning while providing tasks according to their capacity. This personalized learning is possible when teachers record relevant information about their students to discover their strengths and weaknesses. The students’ personal situations, including their learning situations at home, are important for profiling. Through emergency remote education, profiling can allow the teachers to provide tasks according to their students’ level of capacity for learning. Allowing multiple interpretations and expressions of learning can help students create their own pathways for learning (Zhao & Watterston, 2021) within a flexible curriculum.

Filipino students experience the bombardment of numerous modules and online requirements amidst the complexities of studying at home. Students encounter many challenges learning at home, and the unceasing distribution of modules might be a contributing factor. When teachers show them understanding and care, they are more resilient in the face of adversity at home. During this pandemic, the empathy and care of the teachers can help students deal better with the situation and cope with their online-based learning. Giving students the power of choices and options could help them cope with the overwhelming activities assigned to them. It is crucial for teachers to regularly encourage students to flexibly exchange viewpoints in their classes (Wut & Xu, 2021). Students emphasized that the teachers needed to engage students to actively participate in all activities in the online classes and give credit for their efforts. Students who actively participate in their learning have better chances of retaining what they learn, although this is a longstanding challenge among online educators (Wu & Teets, 2021). Treating each student as an active participant in the learning process can make the learning process more meaningful for their experience in this new normal. Students learn by doing, and active teaching encourages active learning.

On the other hand, students experience boredom and a lack of interest in learning. They asserted the use of motivational games during learning. Another technique to motivate the students to learn is to create cognitive dissonance by assigning students to engage in mental

exercise plans, play chess, and other online board games. Gamification is a creative, entertaining, and effective method of delivering curriculum materials (Nieto-Escamez & Roldán-Tapia, 2021). Pandemic pedagogy for students means incorporating a game-based perspective to activate their motivation to learn. Integrating game-based pedagogy in emergency remote teaching may motivate the students (Toquero et al., 2021) to do their offline class requirements and engage with their peers during their synchronous classes.

Moreover, the findings emphasized the value of social interaction and engagement between the teachers and students during emergency remote classes. This interaction can help the students deal with the isolation and quarantine to rid them of worries, stress, and anxieties (Wu & Xu, 2021). Such interaction and engagement might also pave the way for better learning through online modality. Likewise, a pandemic pedagogy enhances students' learning experiences through pedagogical innovations while not neglecting their need for authentic learning experiences at home. Hence, students conceptualized a pandemic pedagogy that actualizes learning through evaluation, feedback, and assessment strategies.

Incorporating pandemic pedagogy also means employing appropriate strategies and techniques that allow teachers to engage students with the material despite the educational challenges due to the pandemic. Disruptions present opportunities, and it is up to teachers to take advantage of them to develop challenging, fair, and compassionate learning opportunities that students will welcome (Schwartzman, 2020).

## CONCLUSIONS

This article highlights the students' conceptualizations of pandemic pedagogy based on their context. The six approaches students conceptualize for pandemic pedagogy are personalized learning, human-centered pedagogy, pedagogy of care, active learning pedagogy, game-based learning, and contextualized online pedagogy. Educators could maximize these approaches to enhance pedagogical environments and learning experiences for their students. Because of the study's qualitative aspect, which lacks generalization and scientific sampling, this research does not claim to produce immense findings. The study was limited to 37 participants, and the researchers only applied a document review and qualitative content analysis to the students' conceptualizations and descriptions. A focus group discussion and online interview may yield optimal results as students are free to verbally relate their conceptualizations and experiences. Nonetheless, this article offers social and academic implications to improve the students' experience during their emergency remote academic journey. Teachers could cultivate social exchanges and prioritize student participation in different online forums, where students are free to share their viewpoints and thoughts about societal issues, cultural trends, and educational experiences. Strengthening feedback mechanism that is personalized based on student's needs and context will give them better chances of success in their scholarly endeavors. Through a better understanding and conceptualization of pandemic pedagogy and how students choose to learn in a crisis, teachers improve their academic deliverables to maximize students' motivation and engagement in emergency online or remote learning.

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**Ethics declaration:** The authors declared that an institutional ethics committee approval was not required for the study. The study did not incur psychological or physical harm to adult students. The study was performed in classroom situations with no human testing or laboratory testing. Participation was entirely voluntary. The authors further declared that they have upheld the basic institutional practice which is to follow procedures of offices for the approval to conduct, obtained signed consent forms from persons involved in the study, and secured research rights and anonymity of the participants.

**Declaration of interest:** The authors declare no competing interest.

**Data availability:** Data generated or analyzed during this study are available from the authors on request.

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