Exploring pedagogical leadership opportunities for a hybrid classroom from the experiences and perspectives of selected college deans and administrators in Manila

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Abstract

This study is an exploration of how the hybrid classroom model influenced teaching and learning in higher education institutions in Manila using the perspectives and experiences of Deans and Administrators who were selected via snowball sampling. Through phenomenography, a qualitative research approach that could represent variations of individuals' experience of a common phenomenon while at the same time, capturing the essence of the need to improve or reform the response towards the phenomenon, opportunities for pedagogical leadership were undermined. Ambiguity in terms of the extent of student participation and engagement, disparity in online and on-site student test scores, weak self-directedness, and time management were identified to be learning gaps. On the other hand, the complexity of doing both online and on-site tasks, lack of digital training, alongside available technical support was culled to be teaching gaps. Outcome spaces drawn from these findings were: conceptual clarity, academic integrity, digital equity, and digital inclusion. From these aforesaid outcome spaces, the following pedagogical leadership opportunities are mapped: 1) the Creation of a standard hybrid syllabus template alongside policies concerning academic integrity, and 2) the Application of the Plan-Do-Study-Act (PDSA) cycle as a baseline method for constantly identifying the weak digital skills of teachers and consequently, mapping retooling and upskilling activities for them, thereby promoting digital equity and inclusion.

Keywords: hybrid classroom, phenomenography, new normal in education, pedagogical leadership, higher education institutions

Background of the Study

A quality curriculum is marked by the quality of learning of students and how they effectively use that learning for their development (UNESDOC digital library, n.d.). Regardless of circumstances, the United Nation's SDG 4 elucidates that inclusive and equitable education that provides lifelong opportunities to students should be made available to all (UNICEF, n.d.).

As schools' worldwide transition to the new normal in education, pedagogical practices and learning performances continue to be uncertain. UNESCO, as cited by Hew, et al. (2020) identified that as of 2020, 188 countries have implemented nationwide school and university closures, impacting more than 91% of the world's student population. Lederman (2020) posits that schools therefore ought to have more robust plans in place in the event of interruptions in campus operations.

In the Philippines, the year 2021 marked the positive adaptation of many academic communities towards the new normal as synthesized by Paragas (2021) in his national review of Higher Education Interventions During and Beyond the COVID-19 Pandemic. This included the practice of flexible learning, an approach that prioritizes the resources available to students. In the middle of 2021, in-person classes have been piloted all over the country but only for those who are willing and with adequate resources as approved by either the Department of Education or the Commission on Higher Education. Schools were given the leeway to design learning delivery systems that would work best for all their internal stakeholders but most especially, for students.

Hybrid learning seems to be the most practical and convenient way to deliver learning as it can combine traditional face-to-face classroom instruction with online learning (PennState, n.d.). This approach is perceived to reduce the amount of seat time in a traditional face-to-face course as it moves more of the course delivery online, a set-up that will prevent the spread of the pandemic but will nonetheless, still promote the learning outcomes set for each course. During in-person classes, students can be engaged in authentic, collaborative learning experiences while the online components of teaching could include technology-enhanced content and channels for discussions between and among students and teachers.

The Commission on Higher Education has been adamant about the adoption of blended learning in colleges and universities nationwide as is contained in the CMOs No. 4 Series of 2020 and No. 6 Series of 2022. These memoranda presented provisions and guidelines on how flexible learning could be sustained in higher education institutions nationwide with school resources and student needs as the main priorities in its design and development.

Henceforth, this study was proposed to determine and analyze the perspectives and experiences of selected College Deans and Administrators in Manila as they navigate the new normal in education by implementing hybrid learning. From this exercise, pedagogical leadership opportunities were drawn which could be of use as a reference for this University.

Statement of Research Problem:

To ascertain the perspectives and experiences of selected College Deans and Administrators in Manila in terms of their implementation of hybrid learning, the following research questions were mapped:

- 1. What are the gaps in student learning in a hybrid class as perceived by Deans and Administrators?
- 2. What are the gaps in teaching a hybrid class as perceived by Deans and Administrators?
- 3. What pedagogical leadership opportunities could be drawn from the learning and teaching gaps in a hybrid class as perceived by Deans and Administrators

Statement of Specific Objectives:

Complementing the above- mentioned research questions, these were the mapped research objectives:

- 1. Determine the gaps in student learning in a hybrid class as perceived by Deans and Administrators.
- 2. Identify teaching gaps in a hybrid class as perceived by Deans and Administrators.

 Recommend pedagogical leadership opportunities from identified learning and teaching gaps in hybrid classes as perceived by Deans and Administrators

Review of Related Literature:

There has been a myriad of literature magnifying the necessity for schools to adapt ever since the COVID-19 pandemic brought the world to a standstill in late 2019. This action, which Hodges et al. (2020) have termed "emergency remote education", poses both challenges and opportunities for growth. The drastic shift from in-person to remote classes introduced unexpected expenses and the necessity for additional resources and training for school administrators and faculty while on the other end, gave students more autonomy as it increased the need for taking control of their learning process (Barrot, et al, 2021). While the "emergency part" of emergency remote learning may not be as emergent anymore considering the current low COVID-19 cases in the country, online education, and remote education are likely to remain part of future educational formats.

Flexible Learning

Beatty (2019) defines Flexible Learning as a set of educational philosophies and systems, concerned with providing learners with increased choice, convenience, and personalization that suit the learner. Its approaches are suggested to be designed with consideration to the full range of teaching and learning theories, philosophies and methods that shall maximize the opportunities of students to learn. Internet-based tools, learning management systems, discussion boards, which may or may not be complemented by face-to-face classroom tutorials and lectures, could be designed as a "blended" instruction approach.

The Commission on Higher Education (CHED) clarifies the guidelines and policies in the implementation of flexible learning in the country via an addendum to its CMO No.4 Series of 2020, named as the CMO No. 6, Series of 2022. To quote Item 6 of Section 2 of the aforesaid CMO: HEIs shall submit, for information, their respective teaching and learning institutional plans to sustain flexible learning, at least one (1) month prior to their schedule of opening classes, to the CHED Regional offices containing only the following parts:

- a. Learning design framework
- b. Description of learning delivery modalities and instructional approaches
- c. Roster of essential learning resources employed, including technology-aided provisions
- d. Illustration of class schedule, including applicable shifting system
- e. Brief discussion on class size for lecture and laboratory classes
- f. Student support services
- g. Updated crisis management plan

Hyflex Learning

Hyflex, a combination of hybrid and flexible, is a course design method and teaching approach with the intent to better accommodate student needs by combining online and classroom-based components (University of Florida, n.d.). It was introduced by the Instructional Technologies (ITEC) graduate program at San Francisco State University through Dr. Brian Beatty (2010; Beatty 2019). The concept is to create class content and material that could be accessed either in the classroom or online thereby allowing students the flexibility to choose their learning path. It is somewhat different from a hybrid class as students in this set-up participate alternately in-person and online. The teacher, in this set-up, teaches face-to-face and online at different times.

Hyflex learning allows students to participate in-person OR online where teachers teach face-to-face and online students at the same time which could be very much likened to a live streaming simultaneous activity with both live and online audiences. It could be surmised from this context, the necessity for the school to be equipped with the necessary audio and video conferencing equipment alongside a strong internet connection for the implementation of Hyflex Instruction to be successful.

In the Philippines, De La Salle University, Ateneo de Manila University and UST Angelicum College have started transitioning to Hyflex Instruction as of 2021. DLSU Manila has released a primer in October 2021 thru its University website (2021) identifying its four (4) phases of transition: phase 1 (laboratory), phase 2 (hyflex period), phase 3 (blendflex period) and phase 4 (post-pandemic) while Ateneo de Manila University have spearheaded Hyflex Instruction trainings for school administrators (Ngo et al., 2022).

The principles of Hyflex Learning Design are learner choice, equivalence, reusability and accessibility (Beatty, n.d.). These four pillars are further clarified by this same author/designer as pertaining to:

- 1. Learner Choice: Provide meaningful alternative participation modes and enable students to choose between participation modes daily, weekly, or topically.
- 2. Equivalency: Provide learning activities in all participation modes which lead to equivalent learning outcomes.
- 3. Reusability: Utilize artifacts from learning activities in each participation mode as "learning objects' for all students.
- 4. Accessibility: Equip students with technology skills and equitable access to all participation modes.

Figure 1.

Principles of Hyflex Instruction (Ceccolini et al., n.d.)



Hybrid Learning

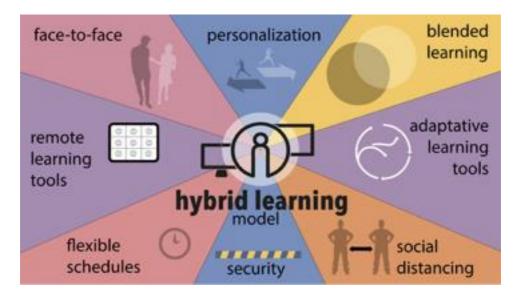
Hybrid learning uses online components for teaching and learning that replaces face-to-face classroom time (EdTech, Focus on K-12, 2021). It is often confused with the term blended learning, but they are not identical (Bonderud, 2021). In practice, blended learning accommodates new initiatives such as project-based learning that add multimedia resources to common coursework. It allows students to self-direct some of their learning to explore the holistic results of different educational disciplines. Hybrid classes, on the other end, take these online tools and provide them to students through remote learning portals and online learning management systems for use outside of the traditional school environment. An easy way to distinguish one from the other would be this: If online tools are used to augment face-to-face frameworks, then it is blended learning, if it is replacing in-person instruction, it is hybrid learning.

Lamport and Hill (2012) as cited by Koo (2021) explored the impact of hybrid instruction on student achievement in post- secondary institutions via a systematic review of literature. It presented three important insights on hybrid learning: a) improved achievement for students in hybrid classes is relative to those taking traditional classes, (b) there is no significant difference between hybrid and online classes suggesting that classroom interaction may not be necessary to achieve desired outcomes, and c) Achievement is connected towards more than just the method of content delivery; student motivation, experiences, and time management abilities are also factors in how well students perform in a particular course, despite how it is delivered. Hybrid classes, therefore, as projected from the results of this study, have the potential to maximize both the student and teaching potential.

However, there are some negative perceptions associated with its use, primarily centering on problems with technology and not always having immediate technological help available. Senn (2008) as cited by Pratiwi et al. (2018) demonstrated that a course that requires a great deal of hands-on instruction and technological skills, such as educational technology in this case, was perceived as more difficult by the students in the hybrid format while faculty inexperience and ineffectiveness can create negative attitudes toward hybrid format (Young, 2002; Abugre et al., 2017).

Figure 2.

Hybrid Classroom Model (Adalia Institute, School of Business and Management, n.d.)



These are important findings requiring administrators to carefully consider all aspects in order to decide which classes should transition to hybrid-based content and how faculty could be trained to teach these courses.

Most schools and universities in the Philippines have started adopting hybrid learning as it presents the most practical and feasible alternatives and actions toward maximizing student potential. It is for this very reason that this study was proposed.

Methodological Framework

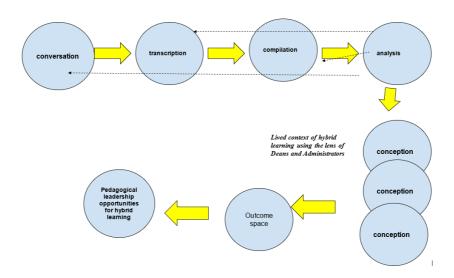
The focal point of this study was to articulate how learning and teaching were influenced by Hybrid Learning using the perspectives and experiences of selected College Deans and Administrators in Manila. Herodotou et al. (2019) saw the need for an evidence-based leadership pedagogy that can bridge the gap between leadership theory and student and teacher practices both in the classroom and beyond its boundaries. Identifying learning and teaching gaps, alongside opportunities for sustained or improved practices in Hybrid Learning as perceived by Deans and administrators provided evidence leading to suggested reforms in pedagogy for hybrid learning.

In the attempt to systematically craft research questions that will lead to a learned understanding of hybrid learning as it is being implemented in higher education, the work of Taylor (2018) as cited by Ayub (2022) was considered not only in the crafting of the research questions but also, in the formulation of interview protocol guides. Taylor University introduced the unique hybrid "Borderless Learning" approach which is a concurrent inperson and online class approach that aims to ensure that no student gets left behind. This approach focuses on three important components: (i) population, (ii) learning delivery platform, classroom communication channel. Using these three (3) components, gaps in learning alongside gaps in teaching have been identified. These same gaps were eventually interpreted, thematically analyzed and converted into outcome spaces, a fundamental feature of a phenomenographic study, to be able to put into fore pedagogical leadership opportunities.

Phenomenography, in the "lived" context of hybrid learning, was chosen to be the most apt research approach for this study as it can represent variations of individuals' experience of a common phenomenon while at the same time, capturing the essence of the need to improve or reform the response towards the phenomenon (outcome spaces).

The figure below showcases how phenomenography was contextualized to achieve the objectives set in this study.

Figure 3. *Methodological Framework*



Methodology

Through employing qualitative research design, phenomenography, opportunities for pedagogical leadership were identified. Phenomenography is an approach that describes the different ways a group of people understands a phenomenon (Zhao, 2016; Stolz, 2020). Go et al. (2021) sees this aforesaid research approach as an avenue to bring "different meanings" to a "collective level," with an outcome space as the result. The outcome space is seen by Alsop and Tompsett (2006) as a hierarchically structured, multidimensional super-set of descriptions, where each subcomponent is a multi-faceted issue or aspect bounded by a finite range of values. As used in educational research, such "outcome space" becomes now the interpreted super-set of descriptions that are used to plan for reform.

The stages of thematic analysis performed in this research was principally based on Marton and Booth (1997), with Marton and Säljö's (1984) work providing additional clarification. These are the following:

- Stage 1. structured reading: reading and re-reading all the experiences several times to identify the key aspects/issues of a phenomenon.
- Stage 2. identifying variation for each aspect/issue: reading the relevant cases to identify the possible variation in the way this is experienced; and
- Stage 3. structuring experiences: (a) separating into levels if possible, and (b) clustering into an outcome space that is hierarchically structured.

The thematic analysis of the interviews and focus group discussion conducted on five (5) College Deans and Administrators in Manila afforded the researchers to cull opportunities for improving pedagogical leadership in hybrid classes.

Sampling Design

As data gathering remains to be a challenge in the new normal, the researchers chose to employ the voluntary snowball sampling design. Murairwa (2015) defines voluntary sampling as a non-probability sampling design that accords prospective respondents or participants with sufficient time to decide whether they want to volunteer or take part in a study. Snowball sampling, on the other end, allows the first key informant-volunteer to recruit other informants (MacLeod, 2023).

It is a given fact that the schedules of Deans and administrators are hectic and most often erratic as they are expected to attend to emergent school issues. The initial plan was to involve ten (10) participants, but this was reduced to five (5) as they were the only ones who consented, accomplished the initial questionnaire, and agreed to be interviewed at least twice and to participate in a focus group discussion. All the five (5) administrators are personal acquaintances of the researchers, and at the same time, acquaintances of each other.

The key informants of this study were five (5) current Deans and administrators of selected Colleges and Universities in Manila. The inclusion criteria considered were:

- 1. He/ she must be a school administrator in Manila.
- 2. He/ she must have served in the same capacity for at least 3 years in a Higher Education Institution in Manila.
- 3. The school where he/she is serving as a school administrator should be implementing hybrid learning.

Mira Crouch and Heather McKenzie (2006) noted that using fewer than 20 participants in a qualitative research study will result in better data. With a smaller group, it was easier for the researchers to build strong close relationships with the participants, which in turn, led to more natural conversations and rich data.

Although the key informants were limited to five (5), utmost rigor was observed. A semi- structured interview protocol guide was designed by the researchers which were then assessed by a qualitative research expert in terms of alignment to the research questions and approach used. Initial and follow- up interviews, alongside a focus group discussion were also

conducted in order to clarify and validate the truthfulness of the initially coded data and identified themes. Coding is a process where concepts and relations between words are analyzed (Gibbs, 2007). Data saturation is reached when there were no more emerging themes identified.

A transcriptionist also helped in the transfer of recorded audio into textual data. As identifying variation from reading and re-reading is a key feature of a phenomenographic study, raw text data must be accurately transcribed first for it to be correctly interpreted. It also eliminated bias as a threat to the validity of the data gathered.

The three (3) participants were interviewed via Zoom, while inperson meetings were at the request of the other two (2). One (1) focus group discussion where all participants were present, and it was conducted via Zoom. This is for cross- validating the responses they made during individual interviews. The interview protocol guide and letter of the request were sent to the participants in advance of the scheduled interviews and focus group discussion.

The content of the abovementioned interview protocol guide is presented on the next page.

Table 1. *Interview Protocol Guide*

Research Questions	Interview Protocol Guide
1. What are the gaps in student learning in a hybrid class as perceived by Deans and Administrators?	 a. How is your College monitoring both virtual and physical classroom student attendance? b. How is your College monitoring and managing student learning in both physical and online classes? c. What do you s27ee as communication channel barriers in hybrid classes that are affecting student learning? d. How is your College managing these communication channel barriers in hybrid classes that are affecting student learning? e. What do you see as opportunities for improvement in your College in terms of the conduct of hybrid classes that will essentially improve student learning?

Table 1. *Continued.*

Research Questions	Interview Protocol Guide
2. What are the gaps in teaching a hybrid class as perceived by Deans and Administrators?	 a. How is your college monitoring both virtual and physical classroom teacher attendance? b. How is your college monitoring and managing instructional content in both physical and online classes? c. What do you see as communication barriers in hybrid classes that are affecting teacher performance? d. How is your college managing these communication channel barriers in hybrid classes that influence teacher performance? e. What do you see as opportunities for improvement in your college in terms of the conduct of hybrid classes that will essentially improve teacher performance?
. What pedagogical leadership opportunities could be drawn from the learning and teaching gaps in a hybrid class as perceived by Deans and Administrators	 a. How is your college managing both your technological and physical resources in the conduct of hybrid classes? a.1. elibraries and physical libraries, a.2. e-learning and physical learning assistance, a.3.e-learning and physical learning delivery systems, among others. b. What do you see as gaps in terms of technological and physical resources of your college that you think you were able to address and effectively manage through time? c. What do you see as opportunities for improvement in your college in terms of resources for hybrid classes?

All the necessary protocols in the completion of this study were treated with utmost confidentiality and honesty following the Data Privacy Act of the Philippines and the ethical standards and procedures for research with human beings, as set by the World Health Organization (WHO Website, n.d.). Further, all requirements of the Research Ethics Board of this University were complied with promptly and diligently.

Results

The study intended to create opportunities for pedagogical leadership in hybrid classes using the perspectives and experiences of a voluntary sample consisting of five (5) Higher Education Institution Administrators in Manila. Two are College Deans, two are Program Heads and one is a Graduate School Coordinator. Through a careful and systematic analysis of their responses, gaps in teaching and learning in hybrid classes were identified. Consequently, opportunities were created, the "outcome space" as Marton called it, which is targeted to be the basis for pedagogical leadership reforms.

The table below summarizes the identified gaps in learning as observed by the selected Deans and Administrators.

Table 2.Learning gaps and opportunities in hybrid classes as analyzed from interviews of selected Deans and Administrators in Manila

Learning Gaps	Learning Opportunities	Outcome Space
Ambiguity in student participation and engagement Student participation becomes difficult to assess (some are attending classes in-person while with unstable net connections at home).	Design hybrid classes where instruction could be online, and which are recorded for easy access of students while assessments are during in-person classes (flipped classroom).	Conceptual Clarity Create a hybrid class syllabus template that should clearly outline the transitioning of lectures to activities (or vice- versa) from online to offline to on- site within a timeline that is realistic and feasible for the students and teachers. A
Disparity of learning assessment results Learning assessments, as they were made to be diverse (online, offline, inperson) posed certain issues— technical problems when quizzes were online, low-test scores when tests were conducted in-person, etc.	Assessments should be varied and purposeful. Hybrid classes should be outcome- based, with the outcome or the product of learning as the validation of the student's progress.	well- planned syllabus is fundamental in improving student engagement. Academic integrity Other than creating purposeful activities as outlined in the hybrid class syllabus, academic integrity and honesty should be promoted and always enforced.

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Table 2. *Continued.*

Learning Gaps	Learning Opportunities	Outcome Space
Weak self- directedness and time management skills of students were observed.	Hybrid classes should be engaging enough to overcome any distraction.	
	Establish class routines and clear goals for each class session. The syllabus set for each class must outline the boundaries and shifts between online (synchronous/asynchronous) and inperson classes.	

Ambiguity in terms of assessing the extent of student participation and engagement in hybrid classes was identified. Attendance is no longer a requirement in one university, with excessive absences no longer a ground for dropping a student from the course. Two (2) administrators admitted that they have yet to create a system for consolidating or evaluating the extent of student participation and engagement in both online and on-site classes and if on-site attendance should be afforded a greater value over online attendance. One (1) administrator requires teachers to submit screenshots of their online class activities and a summary of how many students were present per class per week. However, he admits that this practice could be taxing, and he may decide to put an end to it in time.

Raes (2022) sees this ambiguous situation in terms of student engagement in a hybrid class as a challenge that is both pedagogical and technological in nature. Hybrid class learners were observed to feel a sense of distance towards their teacher and their face-to-face classmates while at the same time with recognized issues on group membership, functionality of technology and learning spaces. Weitze et al (2013), also noted the difficulty of eliciting an immediate response from the teacher in hybrid classes which could make students feel frustrated and uninvolved.

Fredricks et al (2004) introduced a framework to increase student engagement in hybrid classes. The framework suggests careful and

systematic planning of activities by the teacher that is centered on improving the students' behavioral, emotional, and cognitive engagements. It also magnifies the influence of contextual variations such as learning environments and teacher strategies alongside the importance of investigating how student engagement, as an affective learning outcome, is shaped both by the design of the synchronous hybrid learning environment, and the various ways of participation of students in the hybrid classrooms. The researchers think that all these could be placed in a carefully planned hybrid syllabus template.

Figure 4.

Three Component Model of Engagement (Fredricks et al., 2004)



Another learning gap identified was the disparity between online and on-site assessment test results of students. The credibility of student test scores becomes a gray area as students tend to get higher scores in online tests in comparison to on-site tests.

Holden et al. (2021) reviewed academic integrity in relation to assessment practices in online platforms. Academic integrity is being committed to the fundamental values of honesty, trust, fairness, respect, responsibility, and courage (Fisherman, 2014). Jung and Yeom, 2009; Moten et al., 2013; Rogers, 2006; Underwood and Szabo, 2006, collectively

agreed that through time, unique and diverse ways to cheat in online course environments continue to proliferate. Known ways to cheat in an online assessment include downloading papers from the internet and claiming it as self- authored, using materials without permission during an online exam, conversing with other students while taking the online test, opening a website for answers while taking the online test, or having another person take the exam or do the assignment for the student. Kennedy et al. (2000) even ascertained that both faculty and students share the perception that online testing offers more cheating opportunities than in traditional, live-proctored classroom environments.

Hounded by issues on the possibility of online cheating, students also seem to be lacking in self- directedness and motivation. One (1) school administrator said that they adjusted the passing grade percentage at 50% to avoid students from failing the course. While there were two (2) school administrators who lamented that they encountered an increased number of students with In Progress (IP) or Incomplete grades. Failed grades were converted into either Incomplete or In progress grades to allow students to comply with lacking academic requirements and/or to retake examinations. The remaining two (2) school administrators did not change their passing grade percentages but were quick to remind their faculty to be empathic in dealing with student grade concerns. Gheng et al. (2019) investigated selfdirected learning, technology readiness and learning motivation and implied that if a blended learning classroom is properly planned and organized, it could create a cohesive community that could enhance collaborations between students. However, it also asserted that it is best applied in higher education. All five (5) participants agreed that there is a need to create a more cohesive community in a hybrid classroom. They collectively surmised that the necessity to fine tune or re-adjust the academic policies is necessary given these same observations.

The outcome space culled from these identified learning gaps is to promote conceptual clarity and academic integrity. Conceptual clarity could be initiated by shifting into the flipped classroom model where lectures are done online (and are always recorded for students to effectively manage their time) and activities and/or assessments are done on-site. All planned activities should be purposeful, outcome-based and organized. On the other end, academic integrity could be promoted by integrating it into guidance and counseling routines and class orientations. The administrators could

also create a standard set of guidelines to be incorporated and discussed during course orientations.

Creating a hybrid class syllabus template could be the start of systematizing this pedagogical leadership opportunity. Some universities have adopted a 50/50 approach in scheduling online and on-site classes while there were others who opted for a 70/30 approach with 70% being allotted to onsite classes, and the remaining 30%, to online classes. The transitioning of lectures to activities (or vice- versa) from online to offline to on-site within a timeline that is realistic and feasible for the students and teachers must always be prioritized.

The identified teaching gaps, again based on the perspectives of the selected Deans and Administrators, are summarized, and presented in the table below.

Table 3.Teaching gaps and opportunities in hybrid classes as analyzed from interviews of selected Deans and Administrators in Manila

Teaching Gaps	Teaching Opportunities	Outcome Space	
Complex duality of teaching tasks	Teachers handling the same courses could create an open- access online tasks/ exam item-bank repository.	Digital equity Digital inclusion	
Creation of online learning assessments and activities takes time to complete.	Teachers could also prefer to assess students during in-person classes.	Design a needs- based teacher- training plan for ICT integration in	
Flexibility is limited as both students and teachers are required to attend physical classes.	Planning of classes should be systematic and purposeful and in which only important activities/ assessments are scheduled inperson.	online, offline, and on-site classes.	
Digital divide Teachers could lack digital training to effectively teach online.	Re-tool, upskill, to address the digital gap; students are found to be digital natives, transitioning flexibly to the use of digital tools, and teachers must balance the playing field.		

The duality of tasks, specifically in preparing and evaluating online and on-site student tests and activities was identified to be a common teaching gap. Flexibility also poses an issue as activities scheduled on-site or online could be curtailed by an unexpected class disruption and/or a holiday. Further, they see some teachers needing training to maximize the use of available online teaching tools and online resources. One (1) administrator shared that there is a vast array of available technology-based teaching tools and resources in their university but only a few faculty use them.

Raes et al. (2020) seem to affirm these findings when they identified that one major challenge teachers face in a hybrid classroom is that they are required to change their teaching styles significantly as the need to be able to provide the same high-quality learning experience for both remote and in person students is imperative. Likewise, the educational experiences of students are asserted to be highly dependent on the technological competence of the teacher. Lorenzo-Lledo et al. (2021) see this reality brought by the hybrid classroom as affecting all aspects of the teachinglearning process, accelerating eventually the process of digital transformation. It places pressure on the training requirements of teachers for them to be effective in both online and on-site class scenarios. Substantial change in teaching and learning must happen, from face-to-face to virtual, which requires teaching to be adapted, starting with the careful planning of subjects and exams to adapt to available university spaces. In this vein, the online learning context must offer a distinctive pedagogical approach as opposed to face-to- face learning and which, therefore, should involve the willingness of the teacher to engage and adapt.

The outcome spaces mapped from these teaching gaps identified are digital equity and digital inclusion. Digital equity promotes full participation by making sure that all stakeholders are afforded services and training to increase their digital knowledge, awareness and skills (Judge, et al., 2004). It is intended to ensure that teachers are constantly involved, engaged and adaptable, allowing maximum participation and engagement of students in the hybrid classroom. Digital inclusion, on the other hand, is seen to be the avenue towards closing the digital divide (Yang, et al, 2022). There were three significant findings from this aforesaid study on digital inclusion of Yang et al. that could be of use to the academe: one, that older adults' positive attitudes (contextualized to be the teachers in this study) toward technology are positively associated with digital inclusion; two, that

the personal average monthly income is also positively associated with digital inclusion; and three, that the digital inclusion of older adults affects their quality of life.

Opportunities drawn from these perspectives of the participants are the following: Teachers handling the same courses could create an open-access online exam item-bank repository alongside other learning tasks and/or activities. Further, planning of classes should be systematic and purposeful and in which only important activities/ assessments are scheduled in-person. The participants are aware of the possibility of students engaging in online cheat hacks. Other than constantly reminding students of the value of academic integrity, they see the design of purposeful activities by teachers as the only way to resolve this dilemma. Lastly, there should be constant re-tooling and upskilling activities for the faculty, in relation to their digital skills, to match the adeptness of most students when it comes to the use of technology. After all, students are digital natives who could easily make sense of the digital tools he is presented with while the older faculty are digital immigrants who may find managing digital teaching tools a daunting prospect.

Conclusion and Recommendations

The emerging themes, which were culled into outcome spaces in this phenomenographic research on hybrid classrooms are *lack of conceptual clarity and academic integrity, the complex duality of teaching tasks and digital divide.*

Issues concerning *conceptual clarity and academic integrity* were identified as learning gaps. The pedagogical leadership opportunities that could potentially resolve these gaps are:

- Create a standardized hybrid class syllabus template that should clearly outline the transitioning of lectures to activities (or vice- versa) from online to offline to on-site within a timeline that is realistic and feasible for the students and teachers. The focus is on hands-on activities and assessments to be planned on-site with lectures delivered online (flipped classroom).
- 2. Promote academic integrity by incorporating it in course orientations, class orientations and general student assemblies. Schools could set uniform standards and measures for enforcing academic integrity specifically for hybrid classes.

The *complex duality of teaching tasks and digital divide* was ascertained to be teaching gaps in the hybrid classroom. The following pedagogical leadership opportunities, drawn from the ideas of digital equity and inclusion, are suggested to resolve these gaps:

1. Design a needs-based teacher- training plan for ICT integration in hybrid classes. This could not be standardized as needs may emerge and may be diverse from time to time. However, administrators could create a system of checks and balances, such as the Plan-Do-Study-Act (PDSA) Cycle, for efficient ICT integration in teaching and learning.

Shakman et al. (2017) see the application of the PDSA as a tool for the continuous improvement of schools. Continuous improvement, as clarified in this same study, is a process that can support stakeholders in implementing and studying small changes to make lasting and sustainable reforms. Through the application of the PDSA, educators could address a specific problem via the use of iterative cycles to test potential solutions to the identified problem. These cycles could support the development, revision, and fine-tuning of a tool, process, or initiative—in this case, seamless ICT integration of teachers—that might lead to desired change.

Patterned after PDSA, six core principles of improvement were suggested by the Carnegie Foundation for the Advancement of Teaching as postulated by Bryk et al. (2015):

- 1. Make the work problem specific and user-centered.
- 2. Variation in performance is the core problem to address.
- 3. See the system that produces the current outcomes.
- 4. Measure outcomes set.
- 5. Anchor practice improvement in disciplined inquiry.
- 6. Accelerate improvement through networked communities.

Continuous improvement assumes that all systems are designed to get exactly the results they achieve. Therefore, it is critical to ask what system-design elements—in this case, learning and teaching gaps—may be causing the problem.

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