Unveiling the Voices of Teachers in Hyflex Learning

Riches L. Tortola, PhD

College of Education, Bukidnon State University Fortich Street, Malaybalay City, Bukidnon, Philippines Correspondence Tel.: +63 9169266409; Email: richestortola@buksu.edu.ph

Abstract: This study explored the lived experiences of purposefully selected of 10 teachers in higher education institutions in the implementation of HyFlex learning during the school year 2022-2023. The study was conducted in two universities in Bukidnon, Philippines. Utilizing the qualitative hermeneutic phenomenological approach of Vann Manen, this study explored in-depth the participants' experiences in implementing HyFlex learning model at the institutional level. With a validated researcher-made instrument, the data were gathered through face-to-face interviews, online interviews, written responses, and focus group discussions. The study revealed three grand themes for the experiences of teachers in higher education institutions in teaching in a HyFlex environment are (1) teaching using HyFlex learning, (2) primary challenges of teachers using HyFlex learning, and (3) assistance rescue from the administration and stakeholders. The result of the study has implications for policy, practice, and future research, such as funding, training and professional development, technology infrastructure, pedagogical approaches, equity implications, and assessment tools. Institutions may consider these implications as they seek to implement and improve flexible learning modes for teaching and learning.

Keywords: Voices of Teachers; Hyflex Learning; Flexible Learning; Philippines; Phenomenology

RESUMO: Este estudo explorou as experiências vividas por 10 professores propositalmente selecionados em instituições de ensino superior na implementação da aprendizagem HyFlex durante o ano letivo 2022-2023. O estudo foi realizado em duas universidades em Bukidnon, Filipinas. Utilizando a abordagem fenomenológica hermenêutica qualitativa de Vann Manen, este estudo explorou em profundidade as experiências dos participantes na implementação do modelo de aprendizagem HyFlex a nível institucional. Com um instrumento validado feito pelo pesquisador, os dados foram coletados por meio de entrevistas presenciais, entrevistas online, respostas escritas e discussões em grupos focais. O estudo revelou três grandes temas para as experiências de professores em instituições de ensino superior no ensino em um ambiente HyFlex: (1) ensino usando a aprendizagem HyFlex, (2) desafios primários dos professores que usam a aprendizagem HyFlex e (3) resgate de assistência da administração e partes interessadas. O resultado do estudo tem implicações para políticas, práticas e pesquisas futuras, tais como financiamento, formação e desenvolvimento profissional, infraestrutura tecnológica, abordagens pedagógicas, implicações de equidade e ferramentas de avaliação. As instituições podem considerar estas implicações à medida que procuram implementar e melhorar modos de aprendizagem flexíveis para o ensino e a aprendizagem.

I. INTRODUCTION

The advent of HyFlex learning has ushered in **a** new era of educational paradigms, offering both opportunities and challenges of teachers in higher education institutions (HEIs). This research study delves into the experiences of these key stakeholders, exploring their perceptions, challenges, and coping mechanisms within the HyFlex learning environment. By employing researcher-made interview protocols, the study captures rich qualitative data, allowing for a comprehensive analysis of the nuances inherent in this innovative pedagogical approach.

Through a rigorous process of data presentation, analysis, interpretation, and organization, the researcher unveils the multifaceted landscape of HyFlex learning experiences among teachers. Central to this exploration are the identified challenges faced by educators, ranging from technological hurdles to pedagogical adaptations. Moreover, the study elucidates the coping mechanisms employed by these stakeholders in navigating the complexities of HyFlex learning, shedding light on innovative strategies and best practices. A critical aspect of the research involves the determination of formulated meanings derived from the collected data. Through meticulous data reduction techniques, meaningful "meaning units" are extracted, culminating in the emergence of overarching themes. Notably, the study identifies three grand themes encapsulating the experiences of teachers in HEIs regarding HyFlex learning. These themes provide a holistic understanding of the dynamics at play and serve as a foundation for informed decision-making and policy development in higher education contexts.

In sum, this research contributes to the scholarly discourse surrounding HyFlex learning by offering valuable insights into the lived experiences of teachers. By unpacking challenges and highlighting coping mechanisms, the study informs pedagogical practices, institutional policies, and future research directions aimed at optimizing the efficacy and inclusivity of HyFlex learning in higher education.

II. METHODS

Research Design

A qualitative research method was employed in this study. Specifically, this study used hermeneutic phenomenology by Vann Mannen [1], whose approach and analysis methods informed that aspect of the research. Included are the researcher's thoughts and a brief critique of phenomenology.

The six steps of Van Manen provide a workable overview for this study. He observed that although the method is one mechanism for undertaking research, it is essential to avoid fixed signposts as they do not necessarily determine a method and do not support the flexible philosophy of phenomenological hermeneutics [2]. However, he outlined six methodological procedures for hermeneutic phenomenological research, which are turning the nature of the lived experiences, investigating the lived experiences, reflecting on the essential themes, describing the phenomenon, balancing the parts of the whole and maintaining a strong and oriented relation to the phenomenon. At the same time, these six procedures are neither absolute nor fixed. These steps were guides in dealing with the phenomena in this study.

Research Locale

The study, conducted in Bukidnon State University (BukSU) and Central Mindanao University (CMU) during the 2022-2023 school year, provides insights into the implementation of HyFlex learning in these institutions. BukSU, comprising seven colleges and 15 satellite campuses across Bukidnon, adopted a HyFlex model with 70% face-to-face and 30% flexible learning for both undergraduate and graduate students. Utilizing its own Learning Management System (LMS) called BukSU Neo LMS, teachers at BukSU leveraged asynchronous or synchronous classes to facilitate flexible learning, ensuring continuity in education amidst the challenges posed by the COVID-19 pandemic. Meanwhile, CMU, one of the oldest premier universities in southern Philippines, embraced HyFlex learning primarily for graduate students, supplementing its existing face-to-face programs. With Google Classroom as their LMS, CMU recognized HyFlex as a valuable tool, especially for students living away from campus, facilitating continued learning even during teacher engagements or workshops.

Located at the heart of Mindanao Island, Bukidnon Province serves as the backdrop for these educational institutions. Bounded by various cities and provinces, including Cagayan de Oro, North Cotabato, and Lanao del Norte, Bukidnon epitomizes a dynamic educational landscape within the southern Philippines.

Participants of the Study

There were 10 participants in the study from BukSU and CMU. These teachers under the College of Education taught prior to, during, and after the pandemic. The researcher utilized purposeful sampling since the intention is to focus on the teacher's experiences of teachers in the implementation of flexible learning. Choosing the participants could shed light

and provide a more profound comprehension of why such a phenomenon occurs in the teaching-learning process.

III. RESULTS AND DISCUSSION

The researcher presented, analyzed, interpreted, and organized the data based on the responses of the teachers on their experiences of HyFlex learning.

There were three grand themes for the experiences of teachers in higher education institutions in teaching HyFlex learning. The three grand themes are (1) Teaching Using HyFlex Learning, (2) Primary Challenges of Teachers using HyFlex Learning and (3) Assistance Rescue from the Administration and Stakeholders.

Theme 1: Teaching Using HyFlex Learning

The first theme is Teaching using HyFlex Learning. It is about the teaching experiences of teachers in higher education in a HyFlex environment. The theme generated four subthemes: *pedagogical strategies, integration of technology, monitoring student workload,* and *assessment of students* as shown in Matrix 6. The responses to this theme are based on the experiences of teachers in higher education implementing HyFlex learning. It can be gleaned from the matrix the theme of teaching using HyFlex learning.

Sub-theme 1. Pedagogical Strategies

Pedagogical strategies are defined as the theory and practice of teaching; pedagogy refers to the methodology and process of instructors' approach using a specific curriculum with specific goals in mind [3]. Pedagogy is critical because it gives teachers insight into the best practices for a classroom setting. It allows the teachers to understand how different students learn so they can tailor their lessons to suit these needs. As a result, this would improve the quality of teaching as students would receive it well.

According to Participant 7, through HyFlex, he can implement the strategies in teaching in a classroom setting, strategies like collaborative learning, class discussion, roleplaying, and gamification. She emphasized that she could assess the student's understanding of her strategy's effectiveness.

Participant 7 narrated how she was able to witness the effects of what she did in her classes. She said:

P7: I can say that its effects to my teaching strategies are that I can already put to action all those strategies that I just imagined before. In this HyFlex, I can also assess them and make my teaching more effective (Communication, February 9, 2023).

Similarly, participant 10 shared that there was a lot to learn from classroom strategies, but she could only use the Socratic method by asking them questions at the same time as a lecture or panel discussion. Sometimes they did microlectures as part of the teaching strategy because not all students could attend the live, synchronous classes. So, the teacher usually gives them a pre-recorded video, like the lecture part. As for online activities, they are constrained. This was an excerpt from the responses during the interview:

P10: [There were varied strategies in every classoom. You can do nothing else but Socratic method, asking them questions at the same time doing lecture or panel discussion. Sometimes we do micro lecture as part of the teaching strategy because not all students can have the synchronous classes. So most of the time, you] give pre-recorded video for lecture parts] (Communication via Zoom, February 10, 2023).

In addition, participant 9 also said that HyFlex changed her strategies because she has to choose between those that work well in face-to-face instruction and those that work well in online instruction. She needs to consider that before delivering the class. This was pointed out in the responses of Participant 9: "And so HyFlex learning had affected my teaching strategies in that I have to look for those which can be done strategies that are good for online and the strategies that are good for the offline or the face-to-face rather" (Communication, February 9, 2023).

The teachers uploaded their learning material to Google Classroom and the BUKSU Neo Learning Management System (LMS). So, during HyFlex, the learning materials were more accessible to students. They could read in advance or if they have yet to attend a previous lesson because the resources were in the LMS and Google Classroom.

As observed, today's students are really at an advantage compared to before because now, even if the student is absent, they still have access to the learning material that the teacher uses when he is not in class. Back then, if students were absent from class, you only had access if you asked for a copy from your classmates who copied it in the notebook. These were revealed in the excerpts during the interview of participants 8 and 4:

P8: Now that it is HyFlex, google classroom and Neo LMS would serve as repository to all our learning resource. I uploaded in advance my ppt so that they can read ahead and our time will not be wasted. Then we will have our clarification when the students have questions about a certain topic. (Communication, February 9, 2023).

P4: [Now it's really flexible because we can already upload the resources and then before the classes, they can already answer the questions. That saves time]. (P4, Communication via Zoom, February 1, 2023).

In teaching HyFlex learning in higher education, instructors can adapt classroom strategies to face-to-face classes rather than solely relying on online approaches. Significant considerations include revising syllabi, content, and activities to suit the HyFlex model, encompassing synchronous, asynchronous, and face-to-face modalities. Notably, teachers advocate for diverse and effective teaching strategies tailored to each modality, cautioning against the overuse of methods like the Socratic approach in online settings. Accessibility of learning resources is highlighted as a benefit for students. Reviewing and revising curriculum, as suggested by George [4] and Laura [5] promotes continuous improvement in teaching practice. Moreover, Orlich and Harder [6] stress the importance of strategic analysis and reflective practice, while Beatty [7] underscores the significance of learner choice, enhancing motivation and engagement in HyFlex courses.

Sub-theme 2. Integration of Technology

Technology gives teachers the tools they need to create creative, interactive classrooms and gives them access to new resources. Teachers who are good at what they do knows how important it is to use technology in the classroom and find new ways to make lessons relevant.

Most participating teachers claimed that they had integrated technology more because it was necessary for the class to be effective in HyFlex learning. Before the pandemic, teachers were encouraged to integrate technology, but nowadays, it is more strongly encouraged.

According to participants 8 and 9, one of their strengths is having the drive to learn something new in technology. Because a teacher with a solid drive to learn technology is enthusiastic about implementing it in the classroom, with HyFlex learning, the majority are easily adjusted because of their willingness to learn and explore the software features such as NEO LMS, Quizizz, and more. As narrated by the teachers:

P8: It has been practiced for so long. So, I will focus on the online learning part. The HyFlex learning setup enabled me to use technology in teaching and learning process. Of course, there are really integration of technology in the past but not as much as we integrate now. We even have university or institutional policy that implements this or mandates us for this kind of learning to the students because of the pandemic (Communication, February 9, 2023).

P9: My strength as a teacher is that I also have the drive to learn something new in the technology. So if you have the drive to learn that technology, you're also enthusiastic to implement in the classroom. You have a lot of options how to manage the software because they have different features, so I think that is my strength (Communication, February 3, 2023).

Participant 10 shared the same experience on the willingness to learn and explore the technology. According to him, he wants to learn. This is a relaxing part for him, even though not all teachers are like this. Because this is considered his strength as a HyFlex teacher, similarly, participant 7 also emphasized her strength that she is techno-savvy and that it is easy for her to adapt how to use technology. These were revealed in the excerpts during the interview:

P10: I am willing to adopt and learn features. I do self-learn on my personal time. I really want to learn and it is relaxing for me because there are people who would not like that (Communication via Zoom, February 10, 2023).

P7: One strength online is perhaps in all modalities I am techno-savvy. I adapt easily on the use of technology. My weakness is on checking outputs. I cannot move on if I am not done yet. I tend to be like that. So when I say it's the deadline, the students need to submit early one week before the midterm. (Communication, February 9, 2023).

The results showed that teachers in higher education know a lot about technology and are able to use new tools quickly. Like the participants in this study, they like to explore and learn, even in their time. For them, it is their strength as a teacher in higher education. That is the skill that a teacher needs, especially with the new learning paradigm. There should be a positive outlook toward the integration of technology.

The technology plays a significant role in the contemporary world. Many jobs that did not previously require the use of technology now do. Many more households have computers than in the past, and the number of people who can use them is growing [8]. Students and adults use technology daily, including web surfing, texting, social networking, interactive games, and more. We are an evolving technological society dependent on its use in many ways [9]. Consequently, using technology and teaching students how to use it have become top priorities in public schools.

Additionally, technology positively influences student learning. Technology increases student engagement, and consequently, students frequently retain more information. Due to the rapid introduction of new technologies around the world, technology is relevant to (Rothaermel, 2008). Technology provides students meaningful learning experiences. Technology also provides opportunities for hands-on learning that can be incorporated into all school curriculum areas, including mathematics, reading, science, social studies, and other academic subjects. It provides students with three opportunities to collaborate with classmates, resulting in mutual learning. The combination of these factors can have a positive effect on student learning and motivation [10].

The findings further confirm the application of the theory of Piaget's constructivism theory. The use of technology in HyFlex learning allowed students to take a more active role in their learning by providing them with greater autonomy and flexibility in their learning experiences.[11]

Sub-theme 3: Monitoring Student Workload

Monitoring student workload makes it to keep a record of outcomes, processes, and experiences, which can

then serve as a foundation for guiding decision-making and learning processes. Monitoring involves comparing actual results to anticipated outcomes. The information gathered through monitoring is utilized in the evaluation process.

Most of the participants kept an eye on how much work the students had because so many outputs needed to be checked from the previous semester. This made it more important to keep an eye on the students. According to Participant 8, the students' submissions are fine now because we are HyFlex, and it is easy to follow up on the face-to-face schedule. The teacher sets a deadline for online submission in the learning management system. Therefore, it is easier to follow up with students because they meet face-to-face once or twice a week. As shown in the responses:

> P8: I think that can be with the submission in face-toface, it's not a problem because whatever we do there, we let them immediately submit, but for online, we can set a schedule. I like the LMS now because when we set the date, we can set an extension and we can also set how many times students are allowed to submit. It would also be easy for the teachers to follow up on their pending outputs because we already meet them twice or thrice a week (Communication, February 9, 2023).

Similarly, participants 7 and 10 stated that they had conducted a class orientation or a friendly reminder after every lecture. That is one way to monitor the students' workloads. Both emphasized that a teacher must be friendly when reminding them so the students will not be too stressed. Moreover, from time to time, the teachers would do some follow-up. As participants 7 and 10 pointed out:

P10: At the start of the class, there is always this routine briefing or orientation, like reminding them. (Communication via Zoom, February 10, 2023).

P7: Not only that after they fill in, that's it. We also need to do follow-ups and make it updated from time to time. (Communication, February 9, 2023).

The findings show that the activities or requirements given to students were more up-to-date because they came right after face-to-face classes. In monitoring the students, teachers should be friendly in their reminders so that the students are not after face-to-face classes. Additionally, teachers should be friendly in their reminders to the students so they will not be stressed.

Monitoring student progress allows teachers to look at a student's current level of performance and see how much they have improved over a school year [12]. For instance, pre- and post-learning tests can measure a student's skills and abilities before and after learning something new. Also, monitoring lets us keep track of any strange behavior and take the proper steps when problems arise. For example, it can tell when a student visits an inappropriate site or searches for things like suicide or self-harm (Fischer, 2007).

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Lastly, one significant benefit of keeping an eye on student progress in the classroom is that the teacher can spot students who are at risk and help them when they need it (Kimberly et al., 2014). Students at risk can get more help and instruction, and areas that need to be taught again or differently can be found. By checking on each student often, we can ensure that no one "falls through the cracks." It also shows which students need more help or more challenging work (Margaret & John, 2005).

As observed, most teachers used HyFlex to monitor student workload in their classes. HyFlex allowed teachers to offer their students multiple options for attending and participating in class, such as in-person, online synchronous, or online asynchronous. This flexibility enabled teachers to track the workload of their students more closely and adjust their teaching strategies accordingly.

When a teacher noticed that students struggled to keep up with the workload in the online asynchronous format, they would provide additional support through online office hours or structured discussion forums. Similarly, when the students need to be more engaging in the in-person format, the teacher would consider adjusting their teaching style or offering more interactive classroom activities.

Hence, HyFlex provided teachers with a valuable tool for monitoring student workload and adapting their teaching to support their student's learning needs better.

Sub-theme 4. Assessment of Students

Assessment is a crucial component of the learning process as it allows instructors to gauge their student's understanding and progress and provides students with feedback on their performance[13]. In the context of HyFlex learning, the assessment takes on added importance, as it can help ensure that students are meeting the course's learning objectives, regardless of how they participate [14].

By providing multiple modes of assessment that align with different participation options, teachers can ensure that all students can demonstrate their learning in a way that works best for them [15]. Additionally, examinations in HyFlex courses can take advantage of digital tools and technologies, allowing for more efficient and streamlined grading and feedback processes.

Participant 7, who is currently doing HyFlex, says that he can use physical paper or the LMS because the students have to turn in their work. When they turned in their work in the LMS, they were sure that we teachers would not be able to read it, but we could see that the answer was the same. The names change, but the answers are the same. Other students' outputs in the learning management system are excellent, but when they present them in person, they could be better. It means that they cut and paste from a source. Sometimes when the teacher checked to see where they got their information, the teacher would put that information as a comment in their output. As shown in the responses:

> P7: [There are several of that even during this HyFlex because for student submission, we can either have hard copy or LMS. With LMS, the students might be really thinking that teachers do not read when they

check. I can see identical answers but different names. There are also those which have very nice answers in their outputs but in person, they are not really that good in their oral recitation. That means they might have copied and pasted from a source] (Communication, February 9, 2023).

P10: Here, we have difficulties because it is always either through online or asynchronous modality but those students for my face-to-face classes, I give them paper-and-pen exam while those who are away can have it in Google form. (Communication via Zoom, February 10, 2023).

Correspondingly, the teachers utilized rubrics for the performance-based assessments. They also have different types of exams, like objective tests and open-ended questions. Participant 10, it was mentioned that students who do online have more difficulty than students who do assessments faceto-face. That is why for the online modality, the exam is through a Google form, and the face-to-face exam is through a paper and pencil test. That means a teacher will prepare twice as much now that we use the HyFlex learning approach. Participant 10 stated:

> P10: By having quizzes. Check-up questions, more on formative still. During the discussion, the way I teach I always give questions even while I discuss, so letting them answer orally, but most of the time I use paper and pencil test, objective test (Communication, February 9, 2023).

Lastly, according to Participant 8, the assessment should be high-stakes for the student's knowledge and skills. She believed that we must strengthen that since we have lots of performance-based tasks. One thing that she believes in is explicit teaching. That is part of developing the knowledge or key concepts that the students must know and gain. As mentioned by the responses of Participant 8 during the interview:

P8: For students' knowledge and skills my assessment in terms of the high stakes test, thinking about that, I believe that we really have to strengthen that like we've got lots of performance-based tasks. One thing that I believe in also on explicit teaching and that is part of developing the knowledge or the key concepts that the students must know, they must gain (Communication, February 9, 2023).

The findings underscore the importance of incorporating rubrics into teaching practices to enhance student learning outcomes. Utilizing rubrics for various activities and examinations, including objective-type and open-ended assessments, enables teachers to promote performance-based learning and better prepare students for high-stakes assessments like the Licensure Examination for Teachers (LET). Rubrics provide clear guidelines for students, facilitating self-evaluation and promoting autonomy in learning. Furthermore, aligning assessments across different participation modes in HyFlex learning environments ensures equitable opportunities for all students to demonstrate their knowledge and skills.

In line with the Equivalency Principle assessment practices in HyFlex learning must ensure consistency and fairness across different participation modes [16]. By designing assessments that leverage digital tools and technologies, instructors can provide timely feedback and assess students' skills effectively. Whether through online quizzes, assignments, or multimedia presentations, assessments should uphold the principle of equivalence, ensuring that students receive a comparable learning experience regardless of their mode of participation. Overall, assessment practices in HyFlex learning are pivotal in upholding the Equivalency Principle and promoting an inclusive learning environment for all students.

Theme 2: Primary Challenges of Teachers Using HyFlex Learning

This theme presents the challenges teachers faced in teaching in a HyFlex environment. It can be seen here that they still need help implementing it. The seventh theme is the challenges of teachers using HyFlex learning. From this theme emerged five sub-themes: HyFlex learning content adaptation, staying connected to students, academic integrity of students' outputs, availability of necessary technology and resources, and additional workloads to the teachers. This can be seen in Matrix 7:

Sub-theme 1: HyFlex Learning Content Adaptation

Content adaptation is the action of transforming content to adapt to device capabilities. Content adaptation is usually related to mobile devices requiring special handling because of their limited computational power, small screen size, and constrained keyboard functionality [17].

In the context of HyFlex learning, one of the significant challenges for teachers is the adjustment and flexibility that they must have. Adjustment period from entire face-to-face teaching to flexible learning to HyFlex learning. One of their considerable adjustments, according to Participant 8, is that their challenges in using the platform or virtual platforms are difficult to adjust because it takes proper training and time. They still need to be more skilled in using these various virtual tools. But the teachers also realized they would help in future education, especially in the teaching and learning process, because we are already exposed to online learning. Participant 7 shared,

> P7: Oo [yes] ang [the] transition gyud [really] is the primary challenge kay daghan bag-o ug daghan [because it's new and there's so many] adjustment and flexibility kay kinahanglanon [needed]" (Communication, February 9, 2023).

P8: Since we are already in the digital era and we're all heading to that, it's really the use of technology for future education especially in using platforms? Virtual platforms like Quiz-iz, poll-everywhere, Wheel of Names... Perhaps we have not discovered these yet but having these can actually aid future education especially in teaching and learning process (Communication, February 9, 2023).

Similarly, participant 9 shared how hard it is to find a performance-based output based on the performance outcome. Performance output is suitable for the students since they are active and creative, but the teachers emphasize the concepts and knowledge on a specific topic. And ideas and learning must also be taught and assessed because education students have a board exam. And they need to become experts in their field or program. As narrated by Participant 9:

> P9: Ah for the assessment, again the challenge is on the teacher because you have to look at the performance-based but the concept also, you have to really, as a teacher, I really have to construct something that would really pinpoint the concept because that is the biggest challenge for me - on the assessment of their knowledge especially that they are taking the board exam. (Communication, February 3, 2023)

This result implies that teachers are challenged to modify from traditional teaching to hybrid teaching. Teachers need adequate training and time to become accustomed to modern ways of teaching. Further, it is also a challenge for teachers to assess the knowledge and concepts of the students. These need to be learned and evaluated because they will be required, especially in the board exam. There is no performance assessment in the board exam.

The technological revolution makes teaching more innovative and reaches more students than ever before. Giving students new ways to learn will help them stay in touch and improve their technical skills immediately.[18]

It is a need as technology evolves, and students' access to technology allows them to understand and see more. If teaching remained traditional, students would no longer be interested or engaged [19]. Adopting a modern teaching style where students can share and feel listened to will raise engagement and allow teachers to control students' focus.

Furthermore, innovative teaching methods are essential for preparing students for the future. It improves students' critical thinking and reduces their stress levels due to the independence it affords them. [20]

In a HyFlex course, students may participate in the system through various ways, such as in-person, online, or hybrid, and instructors must ensure that the course content is accessible and engaging for all students, regardless of their mode of participation.

To address this challenge, teachers need to adapt course materials, such as lectures, readings, and assignments, to meet the needs of students in different modes. Teachers

Participant 8 also said:

must create multiple versions of classes, such as in-person and recorded lectures, to ensure all students can access the same content [21]. In addition, teachers need to provide alternative formats for course materials, such as text-based alternatives to videos or audio recordings for students with limited access to technology or internet connectivity.

Furthermore, teachers would consider using digital tools and technologies to create engaging and interactive course content that students in different modes can access [22].

In summary, adapting course content to meet the needs of students in different participation modes is a critical challenge teachers may face when implementing HyFlex learning. By taking a student-centered approach and leveraging digital tools and technologies, instructors can create a flexible and engaging learning environment that meets the needs of all students in a HyFlex course.

Sub-theme 2: Staying Connected to Students

Having a network of good relationships improves well-being and can keep the mind active. Staying connected with others and participating in social activities can also increase confidence and improve feelings about oneself (Bergamin et al., 2021). Teaching using HyFlex has been challenging for the teachers regarding student engagement and staying connected to the students. These challenges happen during online classes. According to participants 8 and 9, usually, the students tend to be passive. The students will log in and turn off the microphone and camera. They emphasized that even if the students are called, they will not participate, even if they have a signal. Students were unable to participate because the signal was weak. This is one of their valid excuses not to be called to attention.

According to teachers, online class among students is only about compliance, and time management could be more effective. So, the students have a lot of pending outputs based on the monitoring form and promissory letters from the advisers.

Students still need to learn how to perform independent learning because much time is wasted. Regarding their outputs, according to the teachers' responses, the online submissions are creative, but when it comes to the actual class, it could be better than their output through the internet. As emphasized in their responses:

> P8: Another one is on student engagement. For online is student engagement because usually they tend to be passive if it's online because they turn off the cam, and you cannot tell them to turn it on because of data concerns. So that's it for another one not for the student engagement for online. But for face-to-face, it's okay (Communication, February 9, 2023).

> P10: It's student engagement and student compliance and then time management are lacking independent learning for the students although the hyflex learning encourages independent learning but

then again, independent learning in terms of practicing integrity like without copy pasting so independent learning in the truest sense independent learning because well. They can do the research. They can do the output based on the different examples but when they do it on their own doing the original output then that's also the problem in independent learning (Communication via Zoom, February 10, 2023)

Students can only participate a little in HyFlex learning, especially online classes. The teacher must be strategic about maintaining the teacher's presence so that the students engage in the online class. Students should also be informed of the importance of online learning because that is the new approach to teaching in the 21st century and will help the students engage in online classes. In addition, students should also be informed of the importance of online learning because that is the new approach to teaching in the 21st century and will help the students engage in online classes. In addition, students should also be informed of the importance of online learning because that is the new approach to teaching in the 21st century. Everyone needs to update to compete globally. All students should know their roles and responsibilities during face-to-face, online, or asynchronous classes.

The biggest challenge in education is to find a way to teach that gives students the power to take charge of their learning, to be involved in the research and learning process, and to be encouraged to develop the skills they need to process information selectively and turn it into knowledge and, eventually, wisdom.[23]

Similarly, keeping students interested alone could be complicated. How much harder is it when the teacher teaches an online class, and the students are far away and have to learn in ways they have never done before? The truth is that online learning has a lot to offer regarding how easy it is to get to, how it can be customized, and how creative it can be. However, it can only get all of these benefits if the students are interested in learning and work hard at it.[24]

Sub-theme 3. Academic Integrity of Students' Outputs

Academic integrity is basically founded on honesty and trust. Academic integrity violations are referred to as "academic misconduct" or "academic dishonesty". [25]

Teachers face many challenges during HyFlex learning, including ensuring that the work students turn in online is academically sound. As observed, the students think that the teachers will not check their outputs properly, so they are tempted to copy, change the name, and submit it to the LMS. The exclusive content is the same as their classmates.

Due to this, academic integrity is compromised, which is worse than having a face-to-face exam. As suggested by Participant 10, the learning management system (LMS) should have a checker embedded if there is the same output to ensure the reliability and integrity of their outputs. These were revealed in the excerpts during the interview:

> Participant 8: That's also one challenge in our online class because in our exam although there is multiple choice, there is also essay (Communication, February 9, 2023).

P10: There must be an embedded checker; it is more helpful for us as instructors to really see the integrity and reliability (Communication via Zoom, February 10, 2023).

It means that the teachers in HyFlex need help with the quality of the student's work. As the researcher has seen, many students who tried to copy outputs got caught, even those on the dean's list. So, the researcher talked to them and reminded them of the core values, one of which is integrity. In the online assessment, reality and validity are uncertain because the teacher is unsure if the answer is from the student. That is why this has become one of the challenges for teachers in teaching HyFlex learning.

The review of the literature on misconduct or corruption in academia, where research ethics was the main subject, most of the time, researchers who look into academic integrity use multivariate analysis, such as surveys and questionnaires, document analysis, and, less often, interviews. Even though there has been much growth in the literature, there needs to be a stronger focus on finding "ethical" and "unethical" practices, despite methodological problems.[26]

Also, academics at institutions agree that academic integrity is essential. However, they disagree on what it is, how it should be taught, whether it can be taught, whose job it is to teach it, or how to handle misconduct cases. The results show that teachers need clarification about the integrity policies in higher education and their roles in those policies. [27]

Maintaining academic integrity is essential to teaching and learning but can be challenging in a HyFlex learning environment. In a HyFlex course, students may participate through different modes, such as in-person, online, or hybrid. Teachers must ensure all students have the same academic standards and expectations. [28]

One challenge teacher may face when implementing HyFlex learning is ensuring the academic integrity of students' outputs, such as assignments, exams, and projects. Students in the in-person mode may have different opportunities for collaboration or access to resources compared to online students, which could lead to varying levels of academic integrity across different participation modes.

To address this challenge, teachers could take several steps to promote academic integrity in a HyFlex course. For example, instructors can establish clear expectations and guidelines for academic integrity and communicate them to all students, regardless of their participation mode.

Additionally, teachers can use digital tools and technologies, such as plagiarism detection software or remote proctoring, to monitor student work and detect instances of academic misconduct. Moreover, teachers could design assessments that promote academic integrity, such as assignments that require original work or open-book exams that assess students' ability to apply knowledge rather than memorize information [29]. Teachers also provide opportunities for collaborative learning that promote academic integrity, such as group projects or peer review activities that encourage students to work together and hold each other accountable for upholding academic standards.

Maintaining academic integrity is crucial to teaching and learning in a HyFlex course. However, it can be challenging for teachers to ensure consistency across different participation modes. By establishing clear expectations, using digital tools and technologies, and designing assessments that promote academic integrity, instructors can promote a culture of honesty and integrity in their HyFlex courses.

Sub-theme 4: Availability of Necessary Technology and Resources

Resource availability as the information about what resources can be used to service projects, when, and under what conditions. This information is critical because, on every project, the ability to succeed depends on whether there is access to the essential resources and tools.[30]

It is important for teachers, especially those who teach at HyFlex, to have access to the tools or resources they need. HyFlex is a mix of hybrid and flexible learning. If a student has a good reason for not being able to attend class in person, they should be able to get help online. This explains why one of the challenges teachers shared was the lack of tools or resources.

Aside from the lack of physical resources, teachers often talk about how weak or nonexistent the internet signal is. This has been raised as a concern with the administration, but it is not really easy to solve because it is a national problem, especially in the Philippines. As shown in their responses:

P9: The internet, the gadgets especially for the students. And the resources. Unstable internet connection is a world-wide problem. There a lot of countries are experiencing especially the 3rd world countries. Socio-economically, it affects the success of HyFlex learning/ online learning ang internet connection sa mga developing countries. So those are also limitations sa [in the] administration nga dili pod nila kaya ma address pod [that they could would not address as administrator] because they are school administrators. They are not owners of this company and so on (Communication, February 3, 2023).

Hence, participant 7 stressed out her biggest concern is the students' gadgets. The university's LMS only works well if students use their cell phones. It needs to be a laptop; that is why it is the reason that students can't access the LMS because all students can provide their gadgets like laptops. This was an excerpt from the responses during the interview of Participant 7:

P7: Biggest concern is actually their resources specifically gadgets they use in the LMS because

there are some features that are not applicable to some cellphones; they can't maneuver, hover, and at the same time the internet for LMS, needs a good and strong internet connection because if your internet is unstable, intermittent, there's a tendency that you cannot see the postings in your classrooms so the two must go in tandem and umbrella term for that is the resources. The internet and their gadget used in HyFlex (Communication, February 9, 2023).

This means that teaching during the flexible time was challenging for the teacher because most of the students' needed laptops. Having enough resources to make the class engaging using HyFlex learning is necessary. HyFlex is ineffective, especially in the online portion, if there is no stable connection to the internet and no gadgets that are appropriate to use. Strong internet and the right gadgets must match to have a successful HyFlex class. This is one of the challenges that I also observed as a teacher. The teacher and students put much effort into preparing activities or classes online, but if the internet and gadgets do not work well, all the preparations will not be there. So, the internet and gadgets are significant factors to consider in HyFlex learning.

Many schools have added video conferencing to their lessons, but most classrooms and meeting rooms are still set up for people to come in person. Professors and teachers have to use eight different programs simultaneously, but they only have one or two monitors, cameras, and displays that could be in better places [31]. Students living far away may find learning this way less fun and valuable [32]. So, schools need to spend money on the right equipment and training to ensure that online and in-person students have the same chance to participate and learn and that only the professor's voice is heard. [33]

Consequently, the interactive classroom technology is needed when students are simultaneously in and online. Many online teachers use quizzes, polls, and other interactive technologies to engage online students in real-time activities [34]. Students in the classroom should also be doing the same things simultaneously, either with their own devices or a set of devices for the whole class. For these activities, students need networked devices like cell phones, laptops, or tablets that can connect to the Internet. [35]

Sub-theme 5. Additional Workloads to the Teachers

A teacher is a trained professional who teaches students in their specialized subject areas according to rules set by the national curriculum. Their jobs include giving homework, grading tests, keeping track of student's progress, and staying in touch with parents. Teachers must help students do well in school and act as second parents, role models, counselors, and even a kind of politician who influences the students. There are virtually no limitations on the roles a teacher can play.

So, teachers have obligations that know no bounds. Another challenge for teachers is the increased workload that HyFlex learning brings about. Participant 10 emphasized that because there is no HyFlex classroom setup, the teachers' preparation for the lesson plans is doubled because the teacher had to prepare with the in-person students while also keeping the online students entertained.

The teacher's workload will significantly increase in this setup. The teacher's job is more straightforward if the student's learning styles are identical. So that only one preparation is made for each class meeting, there is a schedule for both face-to-face and flexible or online learning. There are many demands on teachers' time, especially in the university, where they serve four roles. Students and teachers are still getting used to the HyFlex learning approach as of right now. As stated by Participant 10:

> P10: With regards to the face to face, you need double preparation because you have to prepare for the in-person students and you have to prepare a special activity for those who cannot meet your class in person. So doubled (Communication via Zoom, February 10, 2023).

This implies that HyFlex causes an additional workload, especially if there are no materials or classroom set-ups ready for HyFlex. The university needs to invest in technology and prepare classrooms for HyFlex so that the workloads of the teachers are not too burdensome and that the students can also be helped to study even if they are not in the classroom. This is a big help, especially for students who have children or newborns. As observed, many students in the college of education give birth in the middle of the school year. Also, to students who are sick or have any problems that cause them to be unable to attend school. HyFlex is the answer to that, especially when everyone is ready and wellimplemented.

The report shows that teachers have a lot of demands and sources of stress every day, so it is not surprising that teaching is one of the most stressful jobs. [36]

Lastly, literature suggests that increased workloads primarily contributed to teachers' burnout and lack of worklife balance during the pandemic [37]. Decreased morale and increased burnout were perpetuated when teachers experienced a lack of support from their administrators [38] and a sense of detachment from their students. [39]

Theme 3. Assistance Rescue from the Administration and Stakeholders

The primary responsibility of a stakeholder is to lend their expertise and perspective to a project to assist the organization in achieving its strategic goals. Additionally, they can offer the resources and materials required. Their assistance is essential for an endeavor to succeed.

The last theme on teachers' experiences using HyFlex learning is *assistance rescue from the administration and stakeholders*. The theme generated two sub-themes: *administrative support to students* and *teachers and stakeholders' support and community partnership*. Matrix 8 shows these.

Sub-theme 1: Administrative Support to Students and Teachers

The safer a school is for all students, the more support there is between the various groups in the school from the administration. When parents, administrators, and teachers work together to help students, life will be better and more accessible.

Even though the modern education effect of COVID-19 has caused many problems, the government and the university are coming up with many solutions. Because students and teachers need an internet connection for class, the university provides free wi-fi so they can use it to do research or take online classes inside the campus. As stated by Participant 7, "The university provided free wifi for students and employees. We can access using our ID number and password (Communication, February 9, 2023).

In the same way, participant 5 had the same experience as Participant 7 in that the university helped them with things like free wifi and paying back their communication allowances. However, employees would take a long time to get the reimbursement. However, it is better than no support at all.

A teacher also talked about the help they got, like space, internet, and giving almost all of them laptops and gadgets like noise-canceling headphones and hard drives. Participant 9 emphasized that some needs have been met, but she still needs more resources, like a HyFlex classroom and a budget, if the university wants to pursue HyFlex learning.

Participant 9 said the university is still being prepared to keep this HyFlex setup going. She said it might be better to bring back complete face-to-face learning first because college students still need to do hybrid learning. However, as for graduate students, she believed it was more applicable because they could already manage their time well. As shown in the responses:

P5: There was also an offer from the university that they would give load the reimbursement of the university but it takes a long time (Communication, February 7, 2023).

P9: Administrative support, space, internet and gadgets. Some of those are addressed but need more if we are really going to pursue the HyFlex. But really, the administration cannot do anything because it's really the internet that is a problem so maybe we can go back to the face-to-face modality. Full face to face since it's not achievable - HyFlex learning especially in online learning yet. Not actually ideal yet for students. (Communication, February 3, 2023)

A guidance program is also helpful for teachers, especially when helping students with mental health problems. The teacher can refer students to a guidance counselor if they need to have something explained. Participant 1 shared that they emphasize to the students that when they need to talk, or they need to be enlightened, they can visit and ask for an appointment with the university guidance counselor, or they can open up to their assigned adviser or whomever the faculty or chairperson is that can share with whenever they have a problem.

As observed, many of today's students are easily stressed. We have a student in the College of Education who is a victim of this depression. Unfortunately, that student died. Because of this, the university's support for the guidance program is now more substantial. So, the students observed to be prone to such situations are being watched and advised to immediately reach out to the adviser, chairperson, dean, and guidance counselor to help the students going through this. As narrated by Participant 1:

P1: Guidance program that's the mental health component for covid 19, So guidance program is a way to help us check the mental health status of the students and co-teachers as well. We don't know what happened to them, perhaps they lost somebody or we don't know the impact of this new set-up of education to the students. At least as a teacher we should know our students (Communication, February 2, 2023).

The teachers' responses showed that the government and university's plan to help modernize education by using HyFlex learning was well received by both students and teachers. However, not all of them are, and it is not easy to meet their needs because we just started using HyFlex. Many problems still need to be fixed, like lousy Internet connections, a lack of resources, and many others. The university's help, on the other hand, makes it easier for students and teachers to deal with problems. They are guided on what to do because of the guidelines, policies, and resources they provide as support.

The role of school administration has changed over time to focus on the student and give them what they need to grow so they can take on more responsibilities now and, in the future, pay attention to their teachers and improve themselves. [40]

In addition, the school environment contains a system of values, habits, and positive practices by the members of the school community; the educational environment is not limited to the educational process alone but is sensitive to the educational process and serves the environment of the student and the environment of teaching and learning to create a healthy and safe environment.[41]

Hence, the school administration is interested in how students' minds and bodies change to ensure that students are active. They also consider how well the classrooms fit the growing number of students. This makes the classroom a good place for students to learn. [42]

The administration could provide training and resources, technology support, flexible schedules, communication, and support services to help students and teachers transition to HyFlex learning. [43]

The administration could provide training and resources for students and teachers to help them navigate the HyFlex learning environment. It could include workshops or online modules on using video conferencing tools, accessing and using the learning management system, and participating in online discussions effectively.

Another support that the administration could provide is technical support to ensure students and teachers have the tools and equipment to participate in HyFlex learning. It could include providing laptops, webcams, or microphones to students who need them and ensuring that classrooms have the necessary technology for in-person and remote learners.

Moreover, the administration could work with teachers to create flexible schedules that accommodate the needs of both in-person and remote learners. For instance, teachers could offer synchronous and asynchronous options for attending classes and provide recorded lectures or class materials for students who cannot attend in person.

In addition, the administration could establish clear communication channels with students and teachers to ensure they are informed and up-to-date on any changes or updates to the HyFlex learning environment. It could include regular email updates, social media posts, or a dedicated webpage with relevant information and resources.

Lastly, the administration could provide additional support services to students and teachers struggling to transition to HyFlex learning. It could include counseling services, academic support, or access to resources such as tutoring or study groups.

In summary, administrative support for students and teachers in a HyFlex learning environment would include training and resources, technology support, flexible schedules, clear communication, and additional support services. The administration would help ensure that students and teachers successfully navigate the HyFlex learning environment by providing these resources and services.

Sub-theme 2: Stakeholders Support and Community Partnership

Stakeholders in education are people who care about the suc cess of a school system. This includes both those who are directly involved like the parents, teachers and students and those who are concerned people or agencies like the government officials, local business leaders and volunteers.

Even though the pandemic is over, it taught everyone who went through it a lot about life. Helping other people is one of them. There was support provided for the university, especially during flexible learning, when each municipality or area becomes a place to drop off printed modules. That's why, at the time, it was a great help to the university, especially for students in remote areas. Even though the implementation isn't perfect because many modules were lost or not sent to the owner, there are still a lot of students were helped during that time. As participants 8 and 10 narrated:

> P8: The municipalities in Bukidnon serves as dropoff area of printed modules for the students. The university and the different municipalities in

Bukidnon served as partners in module distribution and retrieval. (Communication, February 9, 2023)

Participant 10: With the LGU we had a partnership with the LGU during the modular distribution, but now, not so much anymore (Communication via Zoom, February 10, 2023).

Consequently, participant 8 suggested during the interview that there will be a collaboration or partnership in regards to those students who require assistance, such as working students or student-parents, so that they can be given a part-time job so that they do not have to work far away. They can continue their studies. The responses of participant 8 indicate that the university still requires partnerships with stakeholders, despite the fact that they are not very active now that the pandemic has passed.

P8: Perhaps we can do LGU collaboration or partnership in terms of providing also what they can or as a help especially for those student-parent or if they are working already but they have to go far to work? So perhaps a certain consideration can be taken by the LGU also to help these students (Communication, February 9, 2023).

Based on what the teachers said, the results showed that each stakeholder in education plays a different role and can help get more people behind educational goals. Stakeholder involvement in education plays an important part, as the purpose of each stakeholder is to reach a common educational goal through team effort. [44]. Each person or group interested in education plays a different role and can help get more people behind educational goals. Stakeholder involvement in education plays an important part, as the purpose of each stakeholder is to reach a common educational goal through team effort. [45]

Moreover, internal stakeholders need to know where the organization is going so, they can align their work with those goals and directions [46]. To ensure this happens, use all available communication means—newsletters, electronic messaging, e-mail, meetings, posters, and payroll inserts.

Hence, without the stakeholders, there would be no projects. Engaging stakeholders can bring many benefits to the organization. They can get involved in the decisionmaking process and influence the organization's actions in a way that is helpful to management. [47]

On the stakeholder support and community partnership in the context of HyFlex learning, it can be concluded that involving stakeholders and fostering community partnerships is critical to the success of HyFlex learning [48]. Collaboration between teachers, staff, students, and community partners can lead to more effective course design, improved technology support, and enhanced student engagement and success [49]. Additionally, stakeholder and community support can help facilitate the implementation of HyFlex learning and mitigate challenges that may arise during the transition to this mode of instruction. Therefore, institutions prioritizing stakeholder support and community partnership in their HyFlex learning initiatives will likely see positive outcomes for learners and instructors.

Findings

The first theme is on the teachers' experiences in *teaching in a HyFlex environment*. Teachers in higher education have adopted various pedagogical strategies to teach using HyFlex learning effectively. It includes selecting teaching strategies suitable for synchronous, asynchronous, and face-to-face classes, integrating technology to enhance the learning experience, and monitoring student workload to ensure that they can handle the demands of HyFlex learning.

Additionally, teachers have implemented assessment methods to evaluate student progress and adjust their teaching strategies accordingly. By practicing these strategies, teachers can provide students with a more personalized and practical learning experience in the HyFlex environment.

The next theme for teachers' experiences in HyFlex is the *primary challenges of teachers in a HyFlex Environment*. Teachers who use HyFlex learning have faced various challenges in its implementation. These challenges include adapting learning content to the HyFlex environment, staying connected to students in both in-person and online settings, ensuring the academic integrity of students' outputs, availability of necessary technology and resources, and additional workloads for teachers. By addressing these challenges proactively, teachers can enhance the effectiveness of HyFlex learning and ensure that students receive a quality education.

The last theme is *assistance rescue from the administration and stakeholders*. In implementing HyFlex learning, teachers have received support from the administration and stakeholders. This support includes providing laptops for teaching employees, implementing health and wellness programs, and providing free WIFI and hotspot areas to ensure students access the necessary technology and resources.

Lastly, stakeholders have shown support through community partnerships, engaging PTA officers and stakeholders in school-related activities, and involving different municipalities in distributing and retrieving modules. By working together, administrators, stakeholders, and teachers can create a more supportive and effective learning environment for students in the HyFlex setting.

IV. Conclusions/Recommendations

Based on the findings of the study, the HyFlex learning is a practical approach to providing students with flexible learning options that can benefit their educational experiences.

Teaching using HyFlex Learning

This concludes the importance of revising the syllabus, content, and activities to suit HyFlex learning, where teachers should consider varied and effective teaching

strategies, including alternative strategies for synchronous, asynchronous, and face-to-face classes. Teachers should also be tech-savvy, use new tools, and positively integrate technology into the curriculum. It is crucial to be friendly in reminders to avoid stressing students after face-to-face classes. Rubrics and various examination types should be utilized to ensure performance-based learning and preparation for high-stakes exams, such as the Licensure Examination for Teachers. HyFlex learning offers more accessible learning resources to students, and it is essential to prepare them for success in their academic and professional careers.

Primary Challenges of Teachers Using HyFlex Learning

The theme emphasized the importance of training and time for teachers to adapt to new teaching methods in HyFlex learning and the need for strategic ways to keep students interested. It also emphasizes the importance of having a stable internet connection and appropriate devices for effective online teaching. HyFlex is a technology solution that helps students with additional workloads, including those who cannot attend school due to a lack of materials or classroom set-ups. Therefore, investing in technology and preparing classrooms for HyFlex is crucial for success in this approach to teaching.

Assistance Rescue from the Administration and Stakeholders

The conclusion states that while HyFlex learning is a well-received approach to modernizing education, challenges still need to be addressed, such as lousy internet connections and a lack of resources. The university's assistance in providing guidelines, policies, and help is essential to address these challenges. Furthermore, stakeholder involvement is crucial in achieving educational goals. Therefore, the participation of all stakeholders, including students, teachers, and the government, is essential for successfully implementing HyFlex learning.

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