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Voices from the Field: Filipino Physical Education Teachers' Experiences with Hybrid-Flexible Instruction


Jem Cloyd M. Tanucan* 
Norfolk State University
Norfolk, VA, United States

Walton Wider 
INTI International University
Nilai, Malaysia
Wekerle Sandor Uzleti Foiskola
Budapest, Hungary

Joseph Lobo 
Bulacan State University
Bulacan, Philippines

Davi Sofyan 
Universitas Majalengka, Majalengka
West Java, Indonesia

Hendra Hidayat 
Universitas Negeri Padang
Padang, Indonesia

Anantha Raj A. Arokiasamy 
INTI International University
Nilai, Malaysia

Abstract. The COVID-19 pandemic accelerated the adoption of hybrid flexible (HyFlex) learning models in education, providing students with flexible learning options. While research highlights benefit for students, understanding teachers' experiences is essential for successful implementation, particularly in physical education, a subject traditionally taught in-person. This phenomenological study explored the lived experiences of 33 Filipino physical education teachers implementing

*Corresponding author: Jem Cloyd M. Tanucan; tanucanj@cnu.edu.ph

HyFlex across 15 schools in Cebu, Philippines. The objective was to examine their experiences navigating HyFlex in physical education classrooms. Data were collected through semi-structured interviews and analyzed using Colaizzi's seven-step method. The findings revealed HyFlex's potential to enhance accessibility and inclusivity, promote active learning and student agency, improve teacher-student interaction, and increase flexibility and efficiency. Teachers reported improved access for students with health or geographical constraints, increased student motivation through choice, and enhanced communication via online tools. HyFlex also facilitated seamless transitions during disruptions and optimized resource use. However, challenges included increased teacher workload, unequal access to technology, difficulties maintaining online student engagement, assessment complexities, and impacts on physical education's social dynamics. Pedagogical considerations emphasize engaging students in both in-person and online environments, fostering flexibility and student choice, building community, providing effective feedback, and ensuring inclusivity. The study offers implications for professional development, addressing equity, fostering community, and ongoing evaluation. It contributes to the limited research on HyFlex in physical education, particularly in the Philippine context, and underscores the need for further exploration of its long-term effects and optimization strategies.

Keywords: Hybrid flexible (HyFlex); Philippines; phenomenological approach; physical education

1. Introduction

The COVID-19 pandemic accelerated the need to integrate digital technology into education, compelling academic institutions to explore innovative pedagogical approaches (Binnewies & Wang, 2019; Tanucan et al., 2022). This led to the widespread implementation of various modalities such as flipped classrooms, hybrid learning, online learning, and face-to-face learning (Foust & Ruzybayev, 2021). Among these, the hybrid flexible (HyFlex) model has emerged as a promising approach, offering cost-effectiveness, accessibility, and flexibility by allowing students to choose from in-person, online synchronous, and online asynchronous learning options (Beatty, 2019; Foust & Ruzybayev, 2021; Miller et al., 2021).

This model aims to overcome physical space limitations and cater to diverse student needs (Beatty, 2007; Foust & Ruzybayev, 2021). While the pandemic highlighted the potential of HyFlex models (Rhoads, 2020), research on their implementation, particularly regarding teachers' experiences, remains limited. This is a critical gap because understanding teachers' perspectives and lived experiences is crucial for successful and widespread adoption.

Existing research on HyFlex education primarily focuses on its benefits for students. Studies highlight the advantages of flexible attendance options, allowing students to balance academics with other commitments (Beatty, 2014). This flexibility empowers students to choose the learning modality that best suits their needs. Furthermore, HyFlex has been shown to enhance student

engagement, even in large courses, by increasing opportunities for interaction with peers and instructors (Heilporn & Lakhal, 2021). The model also supports personalized learning experiences, accommodating diverse learning styles and preferences. Indeed, studies have reported high levels of student satisfaction with HyFlex, citing its flexibility, control, and clear expectations (Rhoads, 2020).

Despite these benefits, implementing HyFlex models presents challenges. Ensuring equivalent learning outcomes across different modalities can be difficult (Binnewies & Wang, 2019). Technological infrastructure, including reliable internet connectivity, appropriate devices, and digital literacy skills for both students and teachers, is crucial (Nweke et al., 2022). Effective communication in HyFlex settings, particularly managing interactions and providing feedback to both in-person and online students simultaneously, poses another challenge (Kohnke & Moorhouse, 2021).

To illustrate the potential of HyFlex in addressing specific educational challenges further, this study focuses on physical education (PE) in the Philippines. While research has explored online and blended learning in PE (D'Agostino et al., 2021; Yu & Jee, 2021), the application of HyFlex remains largely unexplored. This gap in knowledge risks perpetuating traditional pedagogical methods that may not be suitable for today's learners. HyFlex, with its flexibility and student-centered approach, offers the potential to revitalize PE by providing diverse participation options and catering to individual needs and preferences.

The implementation of PE in the Philippines faces challenges such as negative attitudes towards the subject and a lack of facilities and resources (Tanucan et al., 2021). These challenges have led to theoretically driven lessons and decreased physical activity levels among adolescents (Peltzer et al., 2016). Studies show high rates of physical inactivity among Filipino adolescents, with little improvement over time (Peltzer et al., 2016). This issue is compounded by the fact that the Philippines has one of the highest percentages of inactive citizens globally (Dumlao-Abadilla, 2017). Furthermore, the COVID-19 pandemic exacerbated the problem of inactivity due to lockdown measures, increased screen time, and psychological distress (Martinez-Ferran et al., 2020; Tanucan & Bojos, 2021; Villani, 2021; Korkmaz Aslan et al., 2022).

By offering flexible participation options, HyFlex has the potential to address these challenges and promote physical activity among Filipino adolescents. Students facing barriers to attending traditional PE classes (such as lack of access to facilities, time constraints, and health concerns) can benefit from online or asynchronous options. Additionally, incorporating technology and personalized learning approaches can increase engagement and motivation, leading to more active and healthier lifestyles.

The urgent need to enhance physical activity and health outcomes among Filipino adolescents underscores the importance of high-quality PE (Tanucan et al., 2022). Embracing innovative pedagogies such as HyFlex is crucial to maintain PE's relevance in health promotion. By illuminating the lived experiences of PE

teachers implementing HyFlex education, this research aimed to inform the development of contemporary and future HyFlex PE policies and procedures, particularly in the Philippines where this model is still new (Tanucan, 2023). This study, the first to explore the implementation experiences of Filipino PE teachers with HyFlex, fills a critical gap in the literature.

Understanding these experiences is crucial for tailoring HyFlex to the Philippine context, which may involve adapting to specific cultural norms, addressing resource constraints, and considering the unique needs of Filipino students. Examining teachers' experiences will reveal specific needs, challenges, and opportunities for successful adaptation, such as the need for culturally relevant online resources or professional development focused on HyFlex pedagogy. This understanding is also crucial for informing support mechanisms for HyFlex PE. Insights into teachers' practical realities can help develop effective professional development programs, provide targeted technology resources, and offer pedagogical guidance tailored to the unique challenges of HyFlex implementation in the Philippines.

1.1 Statement of the Problem

This study investigated the lived experiences of Filipino PE teachers implementing the HyFlex model by addressing the following questions:

1. What are the advantages of implementing the HyFlex model for Filipino PE teachers in enhancing student participation and learning outcomes?
2. What are the disadvantages or challenges faced by Filipino PE teachers in implementing the HyFlex model?
3. What pedagogical considerations do Filipino PE teachers employ to effectively implement the HyFlex model and ensure inclusive and engaging learning experiences?

2. Theoretical Underpinning

The community of inquiry (CoI) framework served as a theoretical guide for this study as it explored PE teachers' experiences of the HyFlex model. Developed by Garrison et al., (1999), CoI emphasizes the interplay of three core elements—teaching presence, social presence, and cognitive presence—to facilitate meaningful educational experiences in online and hybrid settings. By applying CoI, researchers can structure their inquiry to examine how these presences manifest in teachers' practices, providing a systematic lens to investigate the complexities of implementing flexible modalities. This framework is particularly apt for phenomenological approaches, as it directs attention to the lived experiences of participants while highlighting the dynamic interactions that shape learning communities, thus informing the design of interview questions, data analysis, and interpretations focused on instructional and relational dynamics.

Teaching presence within CoI, which involves the design, facilitation, and direction of learning processes, can guide the study by focusing on how PE teachers plan and adapt HyFlex instruction to meet diverse student needs. Researchers can use this element to explore strategies for creating equitable learning opportunities across in-person, synchronous, and asynchronous modes,

such as through curriculum design and feedback mechanisms (Garrison, 2016). This guides the collection of data on pedagogical decision-making, encouraging an examination of how teachers balance workload and resource management to support effective outcomes. By prioritizing teaching presence, the framework helps ensure that the study addresses practical implications for professional development, directing attention to actionable insights for enhancing instructional efficacy in hybrid PE contexts.

Social presence, defined as the ability of participants to project their personal characteristics and form relationships in the learning environment, directs the study toward understanding interpersonal dynamics in HyFlex PE. It prompts researchers to investigate how teachers foster connections and community building among students across modalities, using tools such as online forums or collaborative activities to mitigate potential isolation (Rapanta et al., 2020). This element guides the exploration of cultural and contextual factors, such as those in the Philippine setting, in which communal values may influence engagement. By applying social presence, the study can be oriented to uncover strategies for maintaining relational aspects essential to PE, informing recommendations for inclusive practices that strengthen sense of belonging and collaboration.

Cognitive presence, encompassing the construction and confirmation of meaning through sustained reflection and discourse, guides the study by emphasizing how HyFlex facilitates deeper learning and skill development in PE. Researchers can leverage this to probe teachers' experiences in promoting critical thinking, self-directed activities, and knowledge integration via technology and flexible participation (Chen et al., 2019). CoI directs analysis toward the cognitive processes involved in assessment and student agency, helping to identify ways to optimize hybrid environments for long-term educational benefits. Overall, CoI provides a cohesive structure for the study, enabling a holistic understanding of HyFlex implementation while guiding future research directions, policy development, and pedagogical refinements in PE.

3. Methodology

3.1 Research Design

This study employed a Husserlian descriptive phenomenological approach to explore the lived experiences of Filipino PE teachers teaching in a HyFlex model. This method aimed to generate rich, detailed descriptions of their experiences, offering a nuanced understanding of this specific phenomenon.

Central to this approach is the implementation of epoché, also known as bracketing (Creswell & Poth, 2018). This process involves setting aside pre-existing beliefs and assumptions about HyFlex teaching to ensure that the research findings authentically reflect the participants' perspectives and remain free from researcher bias. To achieve this, the researcher employed a comprehensive approach to epoché. The researchers critically examined their own experiences, biases, and assumptions about HyFlex teaching through journaling and open discussions with colleagues, actively challenging their viewpoints. Leading questions and personal opinions were avoided during interviews.

Instead, the researcher employed active listening and prompts that elicited participants' lived experiences without imposing preconceived notions. Throughout the data collection and analysis process, the researcher continuously reflected on potential biases and employed strategies such as clustering themes, to ensure the emergence of experiences directly from participants' narratives. Feedback was sought from colleagues and peers with differing backgrounds to ensure the findings remained grounded in the participants' experiences. This comprehensive approach to epoché and data analysis strengthened the research's rigor and ensured the findings authentically reflect the lived experiences of Filipino PE educators teaching in the HyFlex model.

3.2 Participant Demographics

As presented in Table 1, this study involved 33 PE teachers, purposively sampled from 15 schools (8 urban, 7 rural) in Cebu, Philippines to explore their lived experiences with HyFlex teaching. Participants were selected to ensure balanced representation across gender, age, teaching experience, educational attainment, and geographical location, all of whom were trained in and actively implemented HyFlex pedagogy in their PE classes.

The sample included 17 men (51.5%) and 16 women (48.5%), with a mean age of 38.6 years ($SD = 7.2$, range = 27–56). The age distribution was as follows: 12 (36.4%) were 25–35 years, 13 (39.4%) were 36–44 years, 6 (18.2%) were 45–54 years, and 2 (6.1%) were 55–64 years. Participants had a mean teaching experience of 10.2 years ($SD = 4.8$, range = 5–24), with 16 (48.5%) having 5–10 years, 11 (33.3%) having 11–16 years, and 6 (18.2%) having 17 or more years. Regarding educational attainment, 17 (51.5%) held bachelor's degrees, 13 (39.4%) held master's degrees, and 3 (9.1%) held doctorates. The majority taught in private schools (22, 66.7%) compared to public schools (11, 33.3%), with 19 (57.6%) located in urban areas and 14 (42.4%) in rural areas.

Table 1: Demographic characteristics of participants (N = 33)

Characteristic	n	%	M (SD)	Range
Gender				
Male	17	51.5	-	-
Female	16	48.5	-	-
Age (years)			38.6 (7.2)	27–56
25–35	12	36.4	-	-
36–44	13	39.4	-	-
45–54	6	18.2	-	-
55–64	2	6.1	-	-
Teaching Experience (years)			10.2 (4.8)	5–24
5–10	16	48.5	-	-
11–16	11	33.3	-	-
17 and above	6	18.2	-	-
Highest Educational Attainment				
Bachelor's Degree	17	51.5	-	-
Master's Degree	13	39.4	-	-
Doctorate Degree	3	9.1	-	-
School Type of Teachers				
Private	21	63.6	-	-
Public	12	36.4	-	-
Geographical Location of Teachers				
Urban	19	57.6	-	-
Rural	14	42.4	-	-

Note: $N = 33$. M = mean, SD = standard deviation.

It is important to acknowledge that the sample may not be entirely representative of all PE teachers using HyFlex model. The focus on teachers actively involved in professional learning communities might mean that these individuals are more enthusiastic or experienced with HyFlex than the average teacher, which could potentially influence the study's findings. However, the sample size of 33 was deemed sufficient based on the principle of data saturation, in which further data collection did not yield new insights or themes. This approach allowed for in-depth exploration of the phenomenon while considering the scope of the study.

3.3 Selection Criteria and Recruitment Procedures

To ensure a robust sample with in-depth experience in HyFlex teaching, eligibility criteria were established. Participants were required to have a minimum of 5 years of experience teaching PE using the HyFlex model in either public or private schools, ensuring familiarity with the complexities of this pedagogical approach. The study prioritized teachers employing diverse HyFlex modalities, including synchronous, asynchronous, and blended learning, to reflect a comprehensive range of experiences in HyFlex PE instruction.

Additionally, participants needed to demonstrate active engagement in HyFlex pedagogy through participation in school-based professional learning communities or relevant professional development activities, indicating their capacity for reflective practice and willingness to provide detailed insights. A

multi-faceted recruitment strategy was implemented to identify eligible participants. Formal letters were sent to principals of 15 schools in Cebu, Philippines, detailing the study's objectives and requesting assistance in nominating suitable candidates. The research team also partnered with professional organizations to distribute study information and encourage participation. Furthermore, online databases and school websites were utilized to identify schools offering HyFlex PE programs, followed by direct contact with PE department heads to nominate potential participants.

3.4 Data Collection

To facilitate an in-depth exploration of the teacher's lived experiences with HyFlex teaching, semi-structured interviews were conducted with each of the participants. These interviews, designed to be comprehensive, lasted approximately 90 minutes to ensure thorough data collection, while allowing flexibility for participants to elaborate on their experiences. To promote comfort and privacy, participants had full autonomy in selecting the interview date, time, and location, with options including in-person settings (such as private school offices or community spaces) or virtual platforms (such as Zoom) to accommodate their preferences and schedules.

The interview protocol included open-ended questions tailored to elicit detailed narratives about their HyFlex teaching experiences, with prompts to explore challenges, strategies, and reflections on pedagogical adaptations. To ensure clarity and transparency, the informed consent form was translated into the participants' preferred language (such as Cebuano or English) and thoroughly explained the study's purpose, their involvement, potential benefits (such as contributing to educational research), risks (such as minimal emotional discomfort), and the voluntary nature of participation. All interviews were audio-recorded with participants' consent, and the recordings were securely stored and transcribed verbatim to maintain data integrity. Follow-up contact was offered to participants to clarify responses or provide additional insights, ensuring accuracy and depth in the data collected.

3.5 Data Analysis

This study explored the lived experiences of PE teachers implementing HyFlex learning in their classes. Data analysis was guided by Colaizzi's (1978) seven-step descriptive phenomenological method to ensure a systematic and rigorous approach. To begin, each transcript was read multiple times to achieve deep familiarization with the teachers' narratives, paying close attention to their descriptions of challenges, successes, and adaptations related to HyFlex.

Significant statements pertaining to their instructional approaches, student engagement, technology integration, and overall experiences with HyFlex were identified and extracted. The meaning of each statement was then clarified through reflective journaling and discussions with a research colleague, with particular attention paid to understanding the nuances of teaching PE in a HyFlex environment.

To address conflicting or minority perspectives, special care was taken to identify and retain statements that diverged from dominant narratives, ensuring that unique or less common experiences were not overlooked. These perspectives were discussed during peer debriefing to explore their significance and ensure they were meaningfully represented in the analysis. Related statements were grouped into broader themes using a thematic matrix, ensuring that each theme represented a distinct but related aspect of the HyFlex PE teaching experience.

Each theme was described in detail, incorporating vivid language from the teachers' narratives to portray the complexities and nuances of their experiences. These thematic descriptions were integrated into a narrative that captured the essence of implementing HyFlex in PE, highlighting key challenges, adaptations, and successes. Finally, to enhance the confirmability of the findings, participating teachers were invited to review the thematic descriptions and provide feedback on the accuracy of the interpretations. A peer debriefing session was also conducted with experienced qualitative researchers, including those familiar with PE pedagogy, to further enhance the trustworthiness of the findings.

3.6 Rigor

To ensure the methodological rigor and trustworthiness of this study, the consolidated criteria for reporting qualitative research (COREQ) checklist (Tong et al., 2007) was used to guide the research design, data collection, analysis, and reporting, ensuring a comprehensive and transparent approach. Member checking was implemented by sharing preliminary findings with informants and seeking feedback. Informants' feedback was carefully reviewed and incorporated into the analysis.

Peer debriefing sessions involved discussions with experienced qualitative researchers and PE specialists, providing valuable insights into the pedagogical implications of the findings. Thick descriptions were used to provide rich details about the school environment, the teachers' years of experience with HyFlex and PE, and the specific challenges they faced with student engagement in the online environment. Finally, saturation was assessed by monitoring the emergence of new themes in the data.

4. Results and Findings

The HyFlex model is gaining popularity in education as a response to the growing need for flexible and adaptable learning environments. This approach offers a range of advantages in PE, creating a more inclusive, engaging, and personalized experience for students. The findings of this study explored the key benefits and challenges of HyFlex teaching in PE, drawing on insights from teachers who have implemented this model and experienced its impact personally. The findings also delved into the pedagogical considerations associated with HyFlex teaching in PE, offering insights and strategies for effectively implementing and optimizing this model to enhance learning experiences in the PE context.

4.1 Theme 1: Advantages of HyFlex Teaching in PE

This study on teacher experiences with HyFlex in PE reveals numerous benefits, enhancing the learning experience for students, offering flexibility for teachers, and promoting a more inclusive and engaging learning environment.

4.1.1 Subtheme 1: Enhanced Accessibility and Inclusivity

One of the most significant advantages observed is HyFlex's capacity to enhance accessibility and inclusiveness. It dismantles barriers to participation, allowing students with diverse needs and circumstances to fully engage in PE, irrespective of physical limitations, geographical constraints, or scheduling conflicts. As one teacher explained:

"One of my students has a heart condition that often makes it difficult for him to participate in strenuous activity. With HyFlex, he can choose to participate in modified online activities on days when he's not feeling well but still join his classmates in person for less strenuous activities or health-related discussions when he can." (Participant 7)

This example underscores how HyFlex ensures that all students have equitable opportunities to learn and benefit from PE. Furthermore, the study indicated that HyFlex eliminates the barrier of distance. Students who reside far from school or lack reliable transportation can participate synchronously online without the added stress of travel, ensuring consistent access to PE classes. HyFlex also accommodates diverse schedules, enabling a student who has to miss class for family commitments, part-time jobs, or other obligations to catch up readily by watching recorded sessions later and completing online activities at their own pace. This adaptability helps students maintain academic momentum and prioritize a healthy lifestyle despite demanding schedules.

4.1.2 Subtheme 2: Promoting Active Learning and Student Agency

Beyond inclusivity, the research demonstrated that HyFlex promotes active learning, caters to individual learning styles and preferences, and allows for greater student agency and ownership, leading to enhanced learning and engagement. Teachers can differentiate instruction by providing various levels of activities for students online and in person, depending on their skill level and interests. This personalized approach fosters a sense of ownership and motivation, as students have a say in how they learn. One teacher remarked:

"Students seem more motivated when they have a say in how they learn. HyFlex lets them choose what works best for them, whether it's working independently online or collaborating with peers in person." (Participant 18).

4.1.3 Subtheme 3: Augmenting Teacher-Student Interaction

Moreover, the evidence suggested that HyFlex can augment teacher-student interaction. Teachers can have more focused conversations with individual students online during the in-person class, using the 'chat' function to provide immediate feedback or answer questions discreetly. This individualized attention can be particularly beneficial for students who might be hesitant to speak up in class, as one teacher noted:

"I have a student who is very shy... But with HyFlex, she's much more comfortable sending me messages online." (Participant 14)

This increased accessibility fosters a supportive learning environment. In addition to chat, teachers utilize virtual breakout rooms for small group discussions and online platforms for sharing resources and tracking progress. These tools help bridge the gap between in-person and online learning, ensuring all students have ample opportunities to interact with the teacher and receive support. This fosters stronger teacher-student relationships and creates a more personalized learning experience, contributing to improved student motivation and success in PE.

4.1.4 Subtheme 4: Flexibility and Efficiency

Another key advantage of HyFlex identified in this investigation is its inherent flexibility and efficiency. It provides a responsive and adaptable learning environment that can adjust to various situations, including unexpected disruptions. When unforeseen circumstances arise, such as a gym closure due to inclement weather or maintenance, classes can seamlessly transition to online sessions without disrupting the curriculum. This ensures continuity of learning and prevents students from missing valuable instruction time. For example, one teacher described how:

"During a recent snowstorm, we were able to move the entire class online and continue with our planned activities, such as yoga and Pilates, which can be easily done at home." (Participant 23)

HyFlex also facilitates the efficient use of resources. With some students choosing to be online, it frees up space and equipment in the gym for those present in person, allowing for more individualized attention and a wider range of activities. A teacher explained that:

"With fewer students in the gym, I can set up more stations and offer a greater variety of activities, like dance, gymnastics, and individual sports, without worrying about overcrowding or limited equipment." (Participant 33)

This optimizes the use of school facilities and ensures that all students have many opportunities to develop their physical skills and fitness levels. Furthermore, the ability to shift to online learning, when necessary, can reduce the need for make-up classes and minimize disruptions to the overall schedule. This flexibility benefits both students and teachers, allowing for a more efficient and adaptable approach to PE.

4.1.5 Subtheme 5: Preparing Students for the Future

Finally, this study revealed that HyFlex prepares students for the future by integrating technology and encouraging self-management, fostering the development of essential 21st-century skills. Students learn to use fitness applications (apps), create workout videos, and analyze their own performance data, gaining valuable digital literacy skills that are increasingly important in today's technology-driven world. For example, students might use a fitness app to track their steps, monitor their heart rate, or set personal fitness goals. They might also learn to create workout videos demonstrating proper form or

technique, which they can then share with their classmates or use for self-assessment. By engaging with these technologies, students develop valuable digital literacy skills that extend beyond the PE classroom.

HyFlex also encourages self-directed learning, as students take responsibility for their learning, whether it is managing their time effectively, setting their own fitness goals, or monitoring their progress. One teacher described how:

“Students in the HyFlex model are more likely to take ownership of their learning because they have more choices and flexibility. They can decide when and how they want to learn, and this can lead to increased motivation and engagement.” (Participant 22)

These skills are not only essential for success in PE but also for lifelong learning and well-being. By fostering self-management and digital literacy skills, HyFlex prepares students to be active and informed participants in their own health and wellness journeys.

Overall, the HyFlex model offers a multitude of advantages in PE. By enhancing accessibility and inclusivity, promoting engaging learning experiences, increasing flexibility, and fostering 21st-century skills, HyFlex empowers both students and teachers. As technology continues to evolve and educational practices adapt, HyFlex teaching has the potential to transform PE, creating a more dynamic, personalized, and effective learning environment for all. By embracing this flexible and adaptable approach, educators can ensure that PE remains relevant, engaging, and beneficial for all students in the 21st century and beyond.

4.2 Theme 2: Disadvantages of HyFlex Teaching in PE

Although the HyFlex model holds significant promise for enhancing learning experiences in PE, it is essential to acknowledge and address the potential drawbacks. This part of the study’s finding delves into the challenges and disadvantages associated with HyFlex teaching in PE, drawing on insights from teachers who have navigated these complexities personally.

4.2.1 Subtheme 1: Increased Workload and Demands on Teachers

One prominent challenge of HyFlex is the substantial increase in workload and demands placed on teachers. Implementing HyFlex requires meticulous planning, preparation, and delivery of both in-person and online instruction, often concurrently. This can lead to an overwhelming workload, as teachers need to create and adapt materials for both modalities, manage technology, troubleshoot technical issues, and provide individualized support to students in both settings. This increased workload can lead to teacher burnout and may negatively impact on the quality of instruction if not adequately addressed. As one teacher lamented:

“It’s like teaching two classes at once. It’s exhausting trying to keep everyone engaged and on track, both online and in person, while also dealing with the inevitable technical glitches that arise.” (Participant 15)

4.2.2 Subtheme 2: Inequitable Access to Technology and Resources

Despite its aim to be inclusive, HyFlex relies heavily on students having access to reliable internet, appropriate devices such as laptops or tablets, and suitable learning spaces at home. This can create disparities for students from disadvantaged backgrounds who may lack these resources, hindering their ability to fully participate in online learning and potentially exacerbating existing achievement gaps. A teacher observed:

“I have some students who struggle with inconsistent internet connectivity or don’t have a quiet place to study at home, free from distractions. This can make it difficult for them to keep up with the online component of the class and can lead to feelings of frustration and isolation.” (Participant 8).

Addressing this digital divide is crucial for ensuring equitable access and success for all students in the HyFlex model. Schools may need to explore options for providing devices and internet access to students in need.

4.2.3 Subtheme 3: Maintaining Student Engagement and Motivation

Furthermore, the HyFlex model can present challenges for maintaining student engagement and motivation, particularly in the online environment. It can be difficult to replicate the energy and dynamism of in-person PE classes in a virtual setting, in which students may be more prone to distractions and less inclined to participate actively. Some students may struggle to stay focused and motivated when learning remotely, especially if they lack intrinsic motivation or face challenges with self-regulation. As one teacher noted:

“It’s harder to get students moving and participating actively when they’re online. Some of them tend to disengage and become passive learners, simply watching the screen instead of actively participating in the activities.” (Participant 26)

This highlights the need for creative strategies to maintain student engagement and foster a sense of community in the online learning environment.

4.2.4 Subtheme 4: Assessment and Evaluation Challenges

Additionally, HyFlex can pose challenges for assessment and evaluation. Ensuring fair and consistent assessment of student learning in both modalities requires careful consideration and planning. It can be difficult to accurately assess physical skills and performance remotely, relying on student self-reporting or video submissions, which can be subjective and prone to inaccuracies. Teachers may need to adapt their assessment strategies to accommodate the HyFlex environment, potentially incorporating a greater emphasis on formative assessment, peer evaluation, and student self-reflection. One teacher explained:

“Assessing skills like throwing or catching can be tricky online. I have to rely more on self-assessment and peer feedback, which can be subjective and may not accurately reflect students’ true abilities.” (Participant 3)

Developing robust and reliable assessment methods for the HyFlex model is crucial for ensuring accurate evaluation of student learning.

4.2.5 Subtheme 5: Impact on the Social Dimension of PE

Although virtual tools, such as breakout rooms, discussion forums, and collaborative projects, can foster interaction and collaboration online, it can be challenging to replicate fully the social benefits of in-person PE classes, such as teamwork, communication, and sportsmanship. The spontaneous interactions, shared experiences, and sense of camaraderie that often arise in face-to-face settings may be diminished in the online environment. A teacher expressed concern that:

“Students who primarily participate online might miss out on the social aspects of PE, like developing teamwork skills, building relationships with their peers, and learning to navigate social dynamics in a physically active setting.” (Participant 14)

This highlights the need for intentional strategies to foster social connection and a sense of belonging among all students in the HyFlex environment.

Overall, the HyFlex model offers numerous advantages for PE, but it also presents significant challenges and disadvantages. Teachers must be prepared to address the increased workload, potential inequities in access to technology, challenges in maintaining student engagement, and difficulties in assessment and fostering social interaction. By acknowledging and proactively addressing these challenges, educators can work towards optimizing the HyFlex model to ensure that it effectively supports student learning, engagement, and well-being in PE.

4.3 Theme 3: Pedagogical Considerations for HyFlex Teaching in PE

The HyFlex model presents significant opportunities for enhancing pedagogical practices in PE, while simultaneously introducing complexities that warrant careful consideration. The study’s findings explored the pedagogical considerations of HyFlex teaching in PE, drawing upon the insights of experienced educators who have successfully navigated these complexities. A thorough understanding of these nuances is crucial for the effective implementation and optimization of the HyFlex model, ensuring its success in fostering engaging, inclusive, and effective learning experiences within the PE context.

4.3.1 Subtheme 1: Engaging Students in Both Environments

This study revealed that successful HyFlex implementation in PE relies on careful attention to pedagogical approaches, instructional design, and teacher-student interactions. Effectively engaging students in both in-person and online environments requires deliberate planning and the use of diverse instructional strategies, going beyond simply replicating traditional teaching methods in a dual-modality setting. Teachers need to be mindful of the unique challenges of engaging students in a virtual environment and utilize technology effectively to foster interaction, collaboration, and a sense of community. This might involve incorporating interactive simulations, virtual reality experiences, and online fitness trackers to enhance the learning experience. One teacher emphasized the importance of intentionality, stating:

“It’s not just about delivering the same content in two different formats. It’s about creating unique learning experiences that cater to the strengths

of each modality. I use breakout rooms for online discussions, have students create and share workout videos, and use live polls to get everyone involved and participating, regardless of where they are.”
(Participant 20)

4.3.2 Subtheme 2: Flexibility and Student Choice

Furthermore, HyFlex should empower students to choose how they participate and engage with the content, based on their individual needs, preferences, and learning styles. This might involve offering a variety of activities and resources, allowing students to choose between synchronous and asynchronous participation, and providing opportunities for both individual and collaborative work. This flexibility recognizes that students learn in different ways and allows them to take ownership of their learning process. As one teacher explained:

“I try to provide options for students so they can tailor their learning experience to their needs. Some might prefer to watch a video demonstration online and practice independently, while others might want to try it out in person with their classmates and receive immediate feedback. The key is to provide that flexibility and allow students to choose the path that best suits their learning style.” (Participant 9)

4.3.3 Subtheme 3: Building Community and Belonging

Building a sense of community and belonging is also crucial in the HyFlex environment, as it can be challenging to foster the same level of connection and camaraderie that naturally occurs in a traditional face-to-face setting. It is important to create opportunities for students to connect with each other and with the teacher, regardless of their learning modality. This might involve using online platforms for social interaction, incorporating ‘icebreaker’ activities, facilitating peer support, and creating opportunities for both online and in-person students to collaborate on projects and share their learning experiences. One teacher shared:

“I’ve found that creating a dedicated online space for students to chat, share ideas, and support each other has been really helpful in building a sense of community, even when they’re not physically together. I also encourage students to share their experiences across modalities, so those online can see what the in-person students are doing and vice versa.”
(Participant 1)

4.3.4 Subtheme 4: Providing Effective Feedback and Support

Providing effective feedback and support is essential for student success in HyFlex, as students may not have the same immediate access to the teacher as they would in a traditional classroom setting. Teachers need to be proactive in monitoring student progress, providing timely and constructive feedback, and offering individualized support as needed. This might involve using online tools for formative assessment, scheduling virtual office hours, utilizing peer feedback mechanisms, and creating opportunities for one-on-one check-ins with both online and in-person students. A teacher noted:

“It’s important to be more intentional about providing feedback in HyFlex, as students may not have the same opportunities to ask questions or clarify their understanding as they would in a traditional classroom. I

use a variety of methods, like online quizzes, video analysis, and individual feedback sessions, to ensure that all students are receiving the guidance they need to succeed.” (Participant 9)

4.3.5 Subtheme 5: Ensuring Inclusivity

Finally, ensuring inclusivity is paramount in HyFlex teaching. Teachers need to be mindful of the diverse needs and circumstances of their students and design learning experiences that are accessible and welcoming to all. This might involve providing closed captions for videos, offering alternative formats for assignments, being sensitive to cultural and linguistic differences, and creating a learning environment in which all students feel valued and respected.

One teacher emphasized:

“HyFlex has the potential to be incredibly inclusive, but it requires careful attention to ensure that all students feel valued, respected, and supported in their learning, regardless of their background or learning modality.”
(Participant 29)

Effectively implementing the HyFlex model in PE requires careful attention to pedagogical considerations. By creating engaging and interactive learning experiences, designing flexibility and choice, fostering a sense of community, providing effective feedback and support, and ensuring inclusivity, educators can harness the potential of HyFlex to create a dynamic, personalized, and supportive learning environment for all students. This thoughtful and nuanced approach to pedagogy is essential for maximizing the benefits of HyFlex and ensuring that it truly enhances learning experiences in PE.

5. Discussion

The COVID-19 pandemic accelerated the integration of digital technology into education, compelling Philippine academic institutions to explore innovative pedagogical approaches amidst contextual challenges such as limited infrastructure, socioeconomic disparities, and a cultural emphasis on community, or *‘bayanihan’* (Binnewies & Wang, 2019; Tanucan et al., 2022). The HyFlex model, offering students the choice of in-person, online synchronous, or asynchronous learning, emerged as a promising solution to enhance flexibility and accessibility in various classes (Beatty, 2019; Foust & Ruzybayev, 2021; Miller et al., 2021).

Through the lens of the CoI framework, which emphasizes social, cognitive, and teaching presence, this study on Filipino PE teachers’ experiences reveals how HyFlex enhances accessibility and inclusivity in a culturally collectivist and resource-constrained context. Teachers reported that students with health conditions or injuries could participate in modified online activities, ensuring they did not fall behind and could maintain fitness levels.

This is particularly significant in the Philippines, where high adolescent inactivity rates and limited access to facilities exacerbate barriers to PE participation (Peltzer et al., 2016; Tanucan et al., 2021). Students with geographical constraints, such as those in remote rural areas, or those with scheduling conflicts due to familial or economic responsibilities—a common reality in Filipino culture—could attend

classes synchronously from any location, ensuring consistent access. This aligns with CoI's social presence, fostering inclusivity by creating equitable opportunities for connection and participation, and resonates with research highlighting HyFlex's flexible attendance options that allow students to balance academics with other commitments (Beatty, 2014).

HyFlex also promotes active learning and student agency, a cornerstone of CoI's cognitive presence, which emphasizes critical thinking and deeper engagement. Teachers observed that allowing students to choose their participation mode fostered increased motivation and ownership, particularly among Filipino students who often face negative attitudes toward PE due to resource scarcity or traditional pedagogical approaches. One teacher remarked: "Students seem more motivated when they have a say in how they learn", as students took initiative to explore activities and resources tailored to their preferences. This corroborates findings on HyFlex's empowering nature, enabling students to select modalities that suit their needs, a critical factor in a Philippine context where diverse learning styles and socioeconomic challenges demand personalized approaches.

Moreover, HyFlex augments teacher-student interaction, a key aspect of CoI's teaching presence, through online tools such as chat functions and virtual breakout rooms. Shy students, common in Filipino classrooms in which cultural respect for authority may inhibit participation, were more likely to engage online. Teachers appreciated providing real-time, individualized feedback via online platforms, enhancing communication during both in-person and online sessions. This strengthens teacher-student relationships, vital in a culture valuing '*pakikisama*' (comradeship or goodwill), and aligns with research on HyFlex's potential to enhance engagement through increased interaction opportunities (Heilporn & Lakhal, 2021).

The study further revealed that HyFlex fosters positive attitudes toward PE, improving student performance, particularly for those previously disengaged or intimidated by traditional classes—a significant issue given the Philippines' high physical inactivity rates (Dumlao-Abadilla, 2017). By offering choice and flexibility, students felt empowered, leading to increased enjoyment and appreciation for physical activity. The personalized learning environment, supported by CoI's cognitive presence, contributed to better skill development and understanding of fitness concepts, with students demonstrating deeper awareness of their physical abilities and a greater sense of accomplishment. This is crucial in the Philippine context, in which PE must combat sedentary lifestyles exacerbated by lockdown measures and psychological distress during the pandemic (Martinez-Ferran et al., 2020; Tanucan & Bojos, 2021).

Despite these benefits, HyFlex presents challenges that require careful navigation, particularly in the Philippine context. Teachers reported a substantial increase in workload, planning, and delivering dual-modality instruction concurrently, including creating materials, managing technology, and troubleshooting issues. This is exacerbated by limited professional development for HyFlex in the Philippines, where teachers often lack training in blended learning (Tanucan et

al., 2023). Ensuring equity across modalities, a challenge noted in CoI's teaching, is difficult, as highlighted by research on equivalent learning outcomes (Binnewies & Wang, 2019). The digital divide, a significant issue in a country with prevalent socioeconomic disparities, disadvantages students lacking reliable internet or devices. A teacher observed, "Some students struggle with inconsistent internet connectivity or don't have a quiet place to study", reflecting urban-rural divides and economic constraints (Nweke et al., 2022; Tanucan et al., 2023). This undermines CoI's social presence, limiting equitable participation and exacerbating educational inequalities.

Maintaining student engagement in the online environment, critical for CoI's cognitive presence, is challenging, as virtual settings lack the dynamism of in-person PE. Teachers noted, "It's harder to get students moving... they tend to disengage", a concern amplified in the Philippines, where students may face distractions due to crowded home environments or limited motivation for physical activity (Tanucan, 2023). Assessment difficulties, such as evaluating physical skills remotely via subjective self-reports or video submissions, and complicate teaching presence. Replicating PE's social benefits, such as teamwork and sportsmanship—central to CoI's social presence and Filipino *bayanihan*—is difficult online.

These challenges require careful pedagogical planning, guided by the CoI framework's interconnected presences. To engage students across modalities, teachers must utilize technology, such as interactive simulations or fitness trackers, adapted to the Philippines' uneven technological infrastructure. Promoting flexibility and student choice, which supports cognitive presence, enables students to customize their learning experiences, with educators providing diverse activities such as video tutorials or online quizzes (Foust & Ruzybayev, 2021). Fostering community, crucial for social presence and aligned with the Filipino value of *bayanihan*, involves using online forums and culturally relevant icebreakers, such as games inspired by Filipino traditions.

Delivering effective feedback, a key component of teaching presence, necessitates online tools such as quizzes and video analysis, which are vital in a context that values teacher guidance (Heilporn & Lakhal, 2021). Ensuring inclusivity by addressing diverse needs through captioned videos and culturally sensitive materials creates a welcoming environment (Taddese et al., 2025), resonating with Filipino values of respect and inclusiveness. By leveraging the CoI framework and addressing Philippine cultural and contextual factors, HyFlex can transform PE, creating inclusive, engaging, and culturally resonant learning experiences.

6. Implications

This study on HyFlex teaching in PE offers valuable insights for various stakeholders in the educational field, including those in the Philippines. For educators, it highlights the need for comprehensive professional development to equip teachers with the skills and strategies necessary for effective HyFlex instruction. This is particularly crucial in the Philippines, where many teachers may be unfamiliar with blended learning modalities and require support in

navigating the challenges of online instruction, such as using technology platforms for live sessions, managing online and in-person learners simultaneously, and adapting assessments. Providing opportunities for teachers to observe experienced HyFlex instructors, engage in peer-to-peer mentoring, and participate in workshops focused on practical strategies for online and blended learning can be highly beneficial.

Furthermore, the study emphasizes the importance of addressing equity and access issues, a significant concern in the Philippines, where disparities in internet access and device availability are prevalent. To ensure that all students have the necessary technology and resources to participate fully in HyFlex learning, schools may need to consider creative solutions, such as partnering with local businesses or community organizations to provide devices and internet access to students in need, establishing community learning centers with shared resources, or exploring alternative learning modalities like modular learning for those with limited connectivity.

Another key outcome is the importance of fostering a sense of community and belonging in the HyFlex environment. This is particularly crucial in the Philippine context, in which strong social connections and a sense of *bayanihan* are deeply ingrained in the culture. Creating online spaces for interaction, such as dedicated discussion forums or social media groups, can encourage communication and collaboration among students. Incorporating icebreaker activities that reflect Filipino culture and values, such as online games inspired by local traditions or virtual team-building exercises that promote *pakikisama*, can help students connect and build rapport. Facilitating peer support through online tutoring or study groups can further enhance the sense of community and provide valuable assistance to students, fostering a sense of belonging and mutual support.

The study also highlights the need for ongoing evaluation and refinement of HyFlex implementation, which aligns with the Philippine Department of Education's emphasis on continuous improvement in Philippine education. Regularly collecting feedback from both students and teachers, through surveys, focus groups, or individual interviews, can help identify areas for improvement and ensure that the model is effectively meeting the needs of all learners. This iterative process may involve adjusting instructional strategies to suit the Filipino learning style better, modifying assessments to ensure fairness and alignment with the Philippine curriculum, or refining technology use to optimize the learning experience in diverse contexts.

Beyond these implications for educators, this study also provides valuable insights for policymakers and curriculum developers in the Philippines. It underscores the need for policies that support flexible and adaptable learning environments, such as HyFlex, and for funding that allows schools to invest in necessary technology and infrastructure, such as high-speed internet access and reliable learning platforms. This is particularly relevant in the Philippines, where the government is actively promoting digital literacy and investing in educational technology through initiatives, such as the Digital Rise Program. Additionally, it

suggests that curriculum development should focus on creating engaging and interactive learning experiences that can be delivered effectively in both in-person and online modalities, incorporating culturally relevant examples and activities that resonate with Filipino students.

7. Conclusion

This study substantiates the potential of the HyFlex model in PE, offering a pathway towards creating learning experiences characterized by inclusivity, engagement, and personalization. While acknowledging the inherent challenges that necessitate careful consideration and proactive mitigation, the undeniable benefits of HyFlex in dismantling barriers to participation, fostering student agency, and cultivating essential 21st-century skills are evident.

By adopting an adaptive and responsive approach, educators can effectively navigate these complexities and harness the full potential of HyFlex to innovate pedagogical practices in PE. This, in turn, will ensure that PE remains relevant, engaging, and beneficial for all students throughout the 21st century and beyond. The insights gained from this study serve as a guide for educators, policymakers, and researchers to collaboratively champion the thoughtful implementation and continuous refinement of HyFlex models, ultimately shaping a future in which PE empowers every student to thrive.

While this study offers valuable contributions to the understanding of HyFlex in PE, it is important to acknowledge its limitations within the broader research landscape. The focused nature of the study, while allowing for in-depth exploration, inherently limits the generalizability of findings to wider educational contexts. The reliance on teacher perspectives, while offering rich insights, necessitates acknowledging potential biases inherent in self-reported data. Furthermore, the absence of direct student input represents a missed opportunity to capture the nuanced experiences and perceptions of those most impacted by HyFlex implementation. Recognizing these limitations underscores the need for continued research that expands the scope of inquiry, employs diverse methodologies, and prioritizes the inclusion of student voices to paint a more comprehensive and robust picture of HyFlex in PE.

This study serves as a motivator for future research that can further illuminate the complexities and potential of HyFlex teaching in PE. Longitudinal studies tracking the sustained impact of HyFlex on student learning outcomes, motivation, and engagement are crucial to understanding its long-term effectiveness. Comparative studies investigating the efficacy of various pedagogical approaches within HyFlex models can provide evidence-based guidance for educators seeking to optimize their practice. Qualitative research exploring student perspectives can offer invaluable insights into the lived experiences of learners, informing strategies to enhance student satisfaction and success.

Furthermore, research examining the impact of HyFlex on diverse student populations can help identify and address potential equity gaps, ensuring that all

students benefit from this innovative approach. Finally, exploring the evolving role of technology in HyFlex PE can lead to the development of pioneering tools and resources that empower both students and teachers. By pursuing these research avenues, researchers can contribute to a dynamic and evolving understanding of HyFlex, ensuring its continued relevance and effectiveness in shaping the future of PE.

8. References

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