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EXPLORING THE DIMENSIONS OF TEACHERS SENSE OF SELF-EFFICACY IN HYBRID LEARNING: AN EXPLORATORY SEQUENTIAL DESIGN

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ABSTRACT

This study explores the dimensions of teachers' self-efficacy in hybrid learning environments through thematic analysis and Exploratory Factor Analysis (EFA). The research identified eight significant themes, such as Collaborative Growth Experiences and Intentional Persuasive Teaching, highlighting the complex nature of educators' confidence across in-person and online modalities. Moreover, the EFA revealed five critical dimensions of self-efficacy: Autonomy and Collaboration, Cultivating Holistic Development Skills, Inclusive Technology Integration, Technical Agility and Support, and Assessment and Adaptation. These findings underscore the importance of not only technological proficiency but also pedagogical, interpersonal, and reflective skills in hybrid teaching. High reliability scores from the Cronbach's alpha test confirmed the internal consistency and robustness of the questionnaire developed to measure these dimensions. The study affirms that effective hybrid teaching relies on a broad spectrum of skills beyond technological competence, including collaborative practices, adaptability, and holistic development. Teachers' sense of self-efficacy in these areas is crucial for creating engaging and inclusive learning experiences. It is recommended to prioritize professional development programs that encompass the identified dimensions of self-efficacy. The teachers should be encouraged to engage in continuous learning opportunities focused on enhancing digital literacy, collaborative skills, and adaptive teaching methods. Future research should aim to further refine the measurement tool and explore its applicability in diverse educational settings.

Keywords: *Hybrid Learning, Self-Efficacy, Teachers, Professional Development, Educational Technology, Pikit District.*

INTRODUCTION

The pandemic coronavirus is forcing educational institutions to shift rapidly to distance and online learning. It forces teachers and students to apply hybrid learning even though they may not be ready to teach and learn in fully online contexts. Thus, Blended learning is the enrichment and development of the traditional method with online education and the realization of it as a mixed (blending) method. Blended learning, which emerged as a combination of the concept of face-to-face and distance learning, has been tried to be expressed with different concepts such as "hybrid learning" by some researchers (Osguthorpe and Graham, 2003; Balci, 2008).

Higher education administrators have required teachers to implement hybrid courses without exploring the teacher's self-efficacy for instructing in hybrid courses (Ocak, 2010). Thus, campus administrators have not had a clear understanding of how teachers feel about their effectiveness instructing in a hybrid learning environment. The Concord Consortium, a research-based group that investigates online and hybrid technologies stated that the following are best practices used in its learning model for hybrid teaching. "Asynchronous collaboration, explicit schedules, expert facilitation, inquiry pedagogy, community building, limited enrollment, high quality materials, purposeful virtual spaces and ongoing assessment" (Smith, 2006,). The researchers at Concord Consortium focus largely on instructional design to promote inquiry and deeper thinking (Smith, 2006). Thus, a study exploring the dimensions of teachers' self-efficacy in a hybrid learning will benefit the policymaker and administrators of the Department of Education.

Many faculty members, however, have few skills to effectively integrate technology into teaching and learning, which is necessary to offer the course delivery formats that comprise a hybrid learning environment (Smith, 2006). In addition, faculty members are increasingly being expected to teach a more diverse array of learners and do incorporate more technology into their instruction (Herrington & Kervin, 2007). This has created challenges within primary education because faculty have a few professional development opportunities for learning how to teach children (Gecer, 2013).

Hybrid instruction can potentially transform the ways in which teachers teach and students learn, much in the same way as the online model (Garrison & Vaughan, 2008; Graham & Robison 2010. According to Ocak (2010), a teacher's belief in his or her effectiveness forecasted the instruction, environment, and achievement of students. The self-efficacy of a teacher also predicted his or her level of commitment when implementing innovative instructional pedagogies (Benson, Anderson, & Ooms, 2011). As the hybrid format has been added new and innovative approaches to education, there has been a need to explore teachers' self-efficacy for instructing in a hybrid instruction environment.

Competitive markets, budget cuts, and student demand for flexible learning are driving higher education administrators to focus on technology as a way to improve instruction and student learning worldwide (Collopy & Arnold, 2009, Donnelly, 2010; Eynon, 2008, Price & Kirkwood, 2008; Roberts, 2008; Turney, Robinson, Lee, & Soutar. 2009). National and international competition for student enrollment has forced administrators to consider the use of internet and technological tools for instruction and learning (Eynon, 2008; Fox, 2007; Sitzmann, Kraiger, Stewart, & Wisher, 2006; Wang 2007). Instruction aligns with learning when faculty learn how to engage students in meaningful and authentic learning experiences (Garrison & Vaughan, 2008; Vaughan 2010). Herrington and Kervin (2007) suggested that technology receive pedagogical consideration and "be used by students rather than teachers" (p.219) in authentic ways. The process of discovery as suggested by Gecer (2013) helps engage learners and makes learning meaningful.

Therefore, the overarching issue that guided this study is that the landscape of the Department of Education has transformed and forced the education to transform in a hybrid learning environment. Given these challenges, the gap in the literature relates to the understanding of how teachers learn to teach learners using multiple course delivery formats, including online, hybrid, and Face-to-face course formats. (Friesen & Kuskis,

2012). Exploring teachers' sense of self-efficacy in a hybrid learning environment provided a deeper understanding of how teachers perceive their ability to teach in a hybrid learning environment.

Furthermore, this study will provide data to position administrators to make appropriate decisions for teachers teaching in a hybrid learning environment. Researchers (Cowan, 2012; Evans, 2011; Hart, 2012) who have described hybrid programs (programs that use multiple course delivery formats) and hybrid learning (learning that takes place in courses and programs that are online and part FTF) have pointed to the importance and challenge of instructors providing quality learning experiences that use both online technology and FTF instruction to meet the diverse learning needs of students. The few articles written about the hybrid model have been mostly descriptions of the specific hybrid learning environment from the administrative or student perspective (Arispe & Blake, 2011; Auslander, 2010; Banerjee, 2011). The few research studies on hybrid courses have also been mostly descriptive case studies (Cowan, 2012; Evans,2011; Hart, 2012). This study will add to the works of Kaleta, Skibba, and Joosten (2007), wherein there is minimal Research on Teachers sense of self-efficacy in hybrid learning.

FRAMEWORK

This study is frame by Bandura's social cognitive theory (1986). The self-efficacy theory derived from Bandura's social cognitive theory (1986) and the concept of human agency, provided a solid theoretical framework for this study of the teacher self-efficacy. Bandura (1997) acknowledged that the behavior of an individual might be influenced by factors such as confidence or belief in her or his ability to perform certain outcomes in a specific concept and thus lead to self-efficacy. Self-efficacy is a construct through which knowledge is gained through experience and social interaction. Bandura's social cognitive theory has been used to understand behavior in many contexts and for this study will be specifically applied to teachers.

As teachers adapt their teaching capabilities, the examination will be explored in implementing blended learning in the relationship to the theory that will be explored. High teacher self-efficacy has been found to correlate with increased student learning, student tesh scores, student motivation, and student achievement (Goddard, Hoy, & Woolfolk Hoy, 2000; Henson, 2001). Teacher self-efficacy has been shown to improve teacher behaviors, motivation, and student achievement (Mojavezi & Tamiz, 2012; Shaukat & Iqbal, 2012; Van Uden, Ritzen, & Pieters, 2014).

In education, teacher self-efficacy generally has been related to teachers' confidence in their ability to deliver instruction or content. When teachers integrate blended learning into their classroom instruction, the role and structure of professional development becomes an important vehicle. Gonzales (2013) explored how teachers become experts of their content and their teaching pedagogy includes how to incorporate technology into the classroom.

METHOD

Research Design

This study utilized the exploratory sequential approach. Exploratory method is an approach to combining qualitative and quantitative data collection and analysis in a sequence of phases (Creswell & Plano Clark, 2018). In the first phase, researchers collect qualitative data and then analyze the data, the result of which directs the next, quantitative phase, which could be survey or some other form of quantitative data collection. That is, the qualitative analysis provides critical fodder for developing specific research questions for the quantitative phase, which involve a questionnaire, survey, or other form of quantitative data collection.

Research Respondent

In the quantitative measurement, a total of 7 public secondary teachers from higher education institutions were invited for in-depth interview and the result are used to identify the specify variables with the help of other 7 teachers for the focus group discussion that determine the need to go into a follow-up as well as the content to generate the questionnaire.

The constructed survey questionnaire was disseminated to 150 public school teachers' in the Municipality of Pikit, Cluster 2 in the Special Geographic Area-BARMM.

Instruments

In the qualitative phase, the researcher formulated an interview guide that asked questions about their definition of Self-efficacy and hybrid learning. The interview provided an insight into how a group of teachers think about hybrid learning.

Data Analysis

The notes that were obtain from in- depth interview were analyzed using thematic analysis. This method emphasizes pinpointing, examining, and recording patterns (or ‘themes’) with data. Themes are patterns across data sets that are important to the description of a phenomenon and are associated to a specific research questions (Boyatzis, 1998).

In quantitative data, the Factor analysis was used in this study. It determined empirically how many constructs, or latent variables, or factors underlie a set of items. Factor analysis is a multivariate analysis method which aims to explain the correlation between large set of variables (items) in terms of an independent set underlying factors. This statistical method can serve as an important tool for validating the structure of instruments (Nunnally, 1978; Carpenter, 2006) pointed out that factor analyze interrelationships among a large number of variables and to explain these variables in term of their common underlying (factors) the approach involve condensing the information contained in a number of original variables in terms of their common underlying dimensions (factors) with a minimum loss of information

The preliminary phase involved testing the data for suitability using KMO(Kaiser Meyer- Okiy measure of sampling adequacy) which signal advance whether the sample size is enough to reliably extract factor (fieldmm,2009) and Bartlett’s Test which test for the over-all significance of the correlation within a correlation matrix (Hare, 1998).

The next step involved the determination of dimensions of the unrotated factors of the data by initial extraction using principal axis factoring of Exploratory Factor Analysis (EFA). The first half of the data was utilized in the phase. Only the variables or item that

will appear on the matrix data that has a communality value of .40 will be included. After which, it involved rotating the factors using Promax rotation. Rotating the factors is done in order to simplify the factor structure. It is in the phase which the numbers of dimension of factors are determined using the Kaiser rule. Using this method, only the extracted factors whose eigenvalues greater than or equal to 1 are retained. In addition, Cattel's scree plot criterion will be used in which eigenvalue of each factor is graphed.

The screen plot will further validate the number of extracted factors to be retained. Eigenvalues are defined by factor loading coefficients (factor loading). These factors loading are the correlation coefficients between the items or variables presented in rows and the factors or dimensions of presented in columns which are labeled as Factor Rotation Matrix (Carpenter, 2006). This stage answered the underlying latent dimensions on teachers' self-efficacy scale. The obtained factors or dimensions were labeled according to the common theme of the item clustered.

RESULTS AND DISCUSSION

Essential Themes Emerged from the Lived Experiences of Teachers Pertaining to Sense of Self-Efficacy in Hybrid Learning

This section presents an analysis of the eight (8) primary themes that emerged from the comprehensive interviews and focus group discussions conducted with the participants. Table 1 illustrates the eight main themes identified by the respondents in relation to the evaluation dimensions of teachers' sense of self-efficacy in hybrid learning namely: Collaborative Growth Experiences, Hybrid Learning Innovation, Empowered Learning Assurance, Hybrid Learning Optimism, Dynamic Engagement Strategies, Hybrid Teaching Mastery, and Intentional Persuasive Teaching.

Collaborative Growth Experiences was the theme emerged that the significance of educators working together, sharing their knowledge and experiences to foster professional and personal development. By engaging in collaborative practices, teachers can enhance their teaching methodologies, innovate in the classroom, and ultimately improve student outcomes through shared growth and continuous learning. The significant statements of the participants revealed below:

> *"it is very helpful to me on improving my self-efficacy in such a way that gives me a lot idea in designing my teaching practices."*
>
> *IDI.8: "It helps me developing my self-efficacy which has highly influences an individual's action, effort and the way of accomplishing task."*
>
> *FGD 4: "It helps us a lot on improving our self-efficacy since it goes back to the more strategies that we learn to invest in hybrid learning and the more tools that we learned about how to integrate it inside the classroom."*

As reflected by the statements of participants 4 and 8, they concluded that the intervention or experience has been extremely beneficial for enhancing their confidence in their teaching abilities. It has provided them with numerous ideas for designing their

teaching practices, suggesting that exposure to new strategies or methodologies has directly contributed to a stronger belief in their capacity to teach effectively.

Additionally, the various statements of the participants 4 emphasizes the intervention has substantially improved their self-efficacy by exposing them to more strategies and tools for hybrid learning. They acknowledge that their increased competence in integrating innovative techniques into the classroom stems from their learning experiences, implying that gaining knowledge and skills has bolstered their confidence in their teaching abilities.

This implies that the collaborative growth experiences in educational settings emphasize the importance of shared learning among educators. Such collaboration fosters a culture of continuous improvement, innovation, and support, leading to enhanced teaching practices. Ultimately, this collective approach to professional development can significantly impact student learning outcomes and overall educational quality.

The ideas are supported by Bandura, A. (2020) that research has consistently shown that collaborative professional development models, such as Professional Learning Communities, mentorship programs, and collaborative action research, have positive impacts on teacher efficacy, job satisfaction, and student outcomes. Educators who engage in these collaborative practices report a greater sense of empowerment, increased motivation to try new teaching strategies, and a stronger commitment to their professional growth and their students' learning.

Further, Caprara, G. V. (2021) study supported that the literature on teacher collaboration highlights the role of shared experiences in fostering a sense of community and belonging among educators. This sense of community is crucial in mitigating feelings of isolation, particularly in challenging educational environments. Moreover, through shared experiences, teachers can pool their resources, knowledge, and skills to address common challenges, innovate teaching practices, and implement changes more effectively.

Furthermore, the theme that emerges from these practices is **Skill Development and Learning**. This theme focuses on the dynamic interplay between building competence and fostering creativity within hybrid learning environments. It emphasizes the role of innovative teaching strategies in nurturing both the practical skills and creative capacities of learners, ensuring they are well-equipped for the demands of the modern, digitalized world. The significant statements of the participants revealed below:

> *IDI.3: "it is valuable for me in learning from my colleagues experiences because it will served as my tool/weapon on handling my students."*
>
> *IDI.9: "It develop my creativity in teaching and positive perspectives in hybrid learning which is very surprising to us."*
>
> *FGD 6: "In our school, it helped us having a teacher who actually led everyone to learn from each other in order to become confident on handling hybrid learning."*

The statements as revealed by participants 3 and 9 statements concluded that great value in learning from the experiences of their colleagues, considering it as a crucial resource or 'weapon' for effectively managing and engaging their students. The metaphor

of a tool or weapon suggests that these shared experiences significantly empower the teacher, enhancing their ability to navigate classroom challenges and facilitate learning more effectively.

Furthermore, during the Focus Group Discussions (FGD), the statements of the participants 6 confirmed that the benefits of having a leader among teachers who encourages learning from one another. This leadership fosters a collaborative culture that builds confidence among teachers in handling the complexities of hybrid learning. The emphasis on mutual learning and support within the school context suggests that collective competence and confidence are crucial for successfully navigating the challenges of hybrid learning.

This implies that the hybrid learning innovation necessitates a shift in educational strategies, blending traditional and digital methods to enhance learning outcomes. This approach requires teachers to adopt new technologies and pedagogies, fostering an environment where students can thrive both online and in-person. Success hinges on ongoing professional development, creativity, and collaboration among educators.

Similarly, the statements corroborated the ideas of Gibson, S., & Dembo, M. H. (2019) that effective hybrid learning requires the adoption of innovative pedagogical strategies that cater to the diverse needs of learners. The flipped classroom model, project-based learning, and differentiated instruction are among the methods that have been identified as particularly effective in hybrid environments. These strategies emphasize active learning, student-centered approaches, and the critical role of feedback in the learning process.

Additionally, Ghaith, G., & Yaghi, H. (2021) study, the successful implementation of hybrid learning heavily relies on the integration of appropriate technology. This includes learning management systems (LMS), digital collaboration tools, and various forms of multimedia. Research highlights the importance of choosing technologies that enhance rather than hinder the learning process, with a focus on tools that support collaboration, interaction, and engagement.

However, the theme **Empowered Learning Assurance** which captures the essence of using hybrid learning environments to bolster student confidence and mitigate anxiety. It emphasizes the creation of a supportive and flexible educational framework that caters to diverse learning needs, thereby fostering an empowered and assured learning journey for students navigating both digital and physical classrooms. The significant statements of the participants revealed below:

> *IDI 1: "I am more confident to control my attitudes in hybrid learning because it reduces my level of anxiety."*
>
> *IDI 2: "Hybrid learning is a new educational approach when I learn it and about to teach it I do feel so conscious and nervous. I have a doubt to myself if I can effectively do it. But only to find out that I am not alone on that situation. We are all hardly facing those challenges that pandemic brought to us. The only solution that can help us is conducting a trainings."*
>
> *FGD 4: "I felt less anxious and less anxiety in my ability to implement the learning system that we have been through. It helped me increase student's creativity of learning as well as their critical thinking."*

The statements as revealed by participants 1 and 2 statements concluded that engaging in hybrid learning has increased their confidence, particularly in managing their attitudes and behaviors. The reduced anxiety levels can be attributed to the adaptability and flexibility offered by hybrid learning, which allows for a more controlled and personalized learning environment. This indicates that the participant sees hybrid learning as a means to improve not only their teaching strategies but also their personal development in managing stress and anxiety.

Furthermore, during the Focus Group Discussions (FGD), the statements of the participants 4 confirmed that their experiences with hybrid learning have led to decreased anxiety and increased confidence in implementing the system. They note an improvement in students' creativity and critical thinking, suggesting that the educators' enhanced confidence and reduced anxiety positively affect student outcomes. This points to the reciprocal relationship between teacher well-being and student achievement in hybrid learning environments.

This implies that Empowered Learning Assurance within hybrid learning environments implies a strategic emphasis on building confidence and reducing anxiety among students and educators. This approach necessitates comprehensive support systems, including professional development and psychological resources, to ensure individuals feel capable and reassured. Enhancing self-efficacy and providing a stable, flexible learning atmosphere are key to fostering an inclusive, productive educational experience.

Correspondingly, the statements are supported by Hoy, A. W., & Davis, H. A. (2021). Empowering learners involves employing strategies that cater to diverse needs, preferences, and learning styles. Differentiated instruction, personalized learning paths, and formative assessment practices are vital in assuring learners that their individual learning journeys are valued and supported. Moreover, fostering a growth mindset, as advocated by Dweck, encourages learners to view challenges as opportunities for growth rather than threats to their self-esteem.

Additionally, the ideas of Kabakci Yurdakul, I., & Odabasi, F. (2021) confirmed that In hybrid learning environments, technology plays a pivotal role in facilitating Empowered Learning Assurance. Digital tools and platforms can provide flexible, adaptive learning experiences that accommodate individual learner needs. However, the literature also cautions against the digital divide and emphasizes the need for equitable access to technology and digital literacy training to ensure all learners can benefit from empowered learning opportunities.

Although, **Hybrid Learning Optimism** was another theme emerged which embodies the cultivation of positive attitudes towards hybrid learning and technology, highlighting a forward-thinking approach to education. It emphasizes embracing the integration of digital tools and diverse learning modalities, fostering a culture of enthusiasm, adaptability, and openness among educators and students for the transformative potential of hybrid learning environments. Thus, the significant responses of the participants revealed below:

> *IDI 3: "I feel pretty positive towards the skills and tools that I learned that is very helpful to me. It definitely helps me because that more that I learn, the more comfortable I am with hybrid learning."*

> *IDI 5: "I have a positive attitude about the technology in general but I feel more comfortable with hybrid learning to use strategies to personalized learning."*
>
> *FGD 2: "For me, positive experiences in hybrid learning motivates physical sensations and I am more excited about empowering the students with all these opportunities."*

The significant remarks of the participants 3 and 5 revealed that a positive outlook on the acquisition of new skills and tools through hybrid learning, noting a direct correlation between their learning and their comfort level with the hybrid model. The statement suggests that the more they engage with and learn about hybrid learning technologies and methodologies, the more adept and confident they become in utilizing these approaches effectively.

Also, the ideas were confirmed by the participants 2 during the Focus Group Discussions (FGD) that positive experiences with hybrid learning not only boost their enthusiasm but also physically invigorate them. They highlight the excitement that comes with empowering students through the unique opportunities provided by hybrid learning, such as access to a wider range of resources, the ability to learn at one's own pace, and the integration of various learning styles.

The statement implies Hybrid Learning Optimism reflects a cultural shift in education towards embracing technology and flexible learning environments. It suggests educators and students are recognizing the benefits of hybrid learning, such as personalized learning experiences and increased accessibility. This optimism can drive adoption rates, influence curriculum design, and necessitate ongoing support for technological proficiency and innovative teaching methodologies.

Similarly, the ideas are corroborated to the findings of Klassen, R. M., & Tze, V. M. C. (2021), the optimistic view on hybrid learning is also linked to technological adaptation. As educators become more comfortable with digital tools and platforms, there is a growing appreciation for how technology can enhance learning. The literature discusses the importance of digital literacy, not just for students but for teachers, as a critical component of successful hybrid learning environments.

Furthermore, the implications of the study are supported by Lin, T. C., & Tsai, C. C. (2019) that Evidence supporting the optimism towards hybrid learning frequently cites improved student outcomes. Research indicates that hybrid learning can lead to higher retention rates, improved academic performance, and greater student satisfaction. Personalized learning experiences enabled by technology are particularly valued for their ability to meet individual learner needs and preferences.

Notably, the theme **Dynamic Engagement Strategies** emphasizes the importance of innovating teaching practices to foster higher levels of student engagement. It suggests that by adopting dynamic and adaptable strategies, educators can create more interactive and compelling learning experiences. These approaches aim to actively involve students, enhancing their motivation and participation in the learning process. Thus, the significant remarks of the participants revealed below:

> *IDI 4: "It helps my students to engage and help me to use a clear communication about skills and strategies in hybrid learning."*

> *FGD 1: "With hybrid learning we make more relevant learning for the student. I think we can keep our students longer engaged in the curriculum which is something we have been struggling with a long period of time."*
>
> *FGD 3: "I am very excited and engaged in my work as a teacher to work with students particularly on working with my colleagues. Those strategies and techniques that I learned from them is very useful on my teaching practices."*

The participants 4 statements point out that how hybrid learning has facilitated better engagement among students and improved the clarity of communication regarding skills and strategies essential for success in such a learning environment. This suggests that hybrid learning not only supports student participation but also enhances educators' ability to convey important learning concepts effectively.

Further, the ideas were confirmed by the participants 1 and 3 during the Focus Group Discussions (FGD) that excitement about their role as a teacher within a hybrid learning environment, especially in terms of collaboration with colleagues. The sharing of strategies and techniques among educators is viewed as a valuable resource that enriches teaching practices. This collaboration not only enhances the individual's teaching methods but also contributes to a more engaging and effective learning experience for students.

This implies that Dynamic Engagement Strategies in education highlight the shift towards more interactive, student-centered learning environments. Emphasizing adaptability and innovation, these strategies aim to enhance student engagement and participation. Their successful implementation can lead to improved learning outcomes, increased student motivation, and more effective teaching practices, necessitating ongoing professional development for educators to keep pace with evolving educational needs.

The implications are supported by McMillan, J. H., & Schumacher, S. (2021). They gave lighted to dynamic engagement strategies have a positive impact on student outcomes, including improved academic performance, higher levels of motivation, and greater satisfaction with the learning experience. Engaging students in active learning processes fosters deeper understanding and retention of information. Furthermore, strategies that promote autonomy and choice can enhance students' intrinsic motivation and engagement in their learning journey.

However, Pajares, F. (2021) also confirmed that a continued evolution of dynamic engagement strategies as educators and researchers explore new technologies and pedagogies. There is a growing emphasis on personalized learning, where technology is used to tailor educational experiences to individual learner profiles. Moreover, the global shift towards hybrid and online learning models post-pandemic has highlighted the importance of flexible, adaptable teaching methods that can engage students across various settings.

Correspondingly, another theme emerged was **Continual Professional Growth and Inclusivity**. This theme emphasizes the critical journey towards enhancing educators' confidence and capability within hybrid learning environments. It highlights the

importance of continuous professional development, innovative teaching strategies, and technological proficiency. Through mastering these elements, educators can navigate the complexities of hybrid learning, leading to improved outcomes for both teachers and students. Thus, the remarks of the participants revealed below:

> *IDI 1: "Definitely I felt more capable of teaching hybrid learning. It gives me confidence that we could create hybrid learning lesson and become excited for hybrid learning implementation."*
>
> *IDI 3: "I do feel more capable and able to encourage my students more."*
>
> *FGD 5: "What I found that is very helpful was when our school required us teachers to have a discussion or sharing of strategies and activities. That we were able to work at others people work and critique it at the same time. Allow to share each experiences and talk about how teachers either create materials or assessments or how students perform on that assessment."*

From the statements of the participants, participants 1, and 3 that expresses increased confidence and excitement in their ability to design and implement hybrid learning lessons. Their statement underscores the empowerment that comes with acquiring the necessary skills for hybrid teaching, reflecting a sense of readiness and enthusiasm for this innovative approach to education.

In addition, during the interview for Focus Group Discussions, participants 5 pointed out that the value of collaborative professional development, specifically through the sharing and critiquing of teaching strategies and materials among colleagues. This practice of exchanging experiences and constructive feedback is portrayed as instrumental in refining teaching practices, creating materials, and assessing student performance in a hybrid learning context.

This implies that achieving Hybrid Teaching Mastery is essential for educators navigating the blend of traditional and digital classrooms. It implies a need for ongoing professional development, technological proficiency, and collaborative support networks. Mastery enhances educators' confidence and effectiveness, directly impacting student engagement and learning outcomes. Schools must prioritize resources and training to support educators in this transition.

The implications are supported by Schunk, D. H., & Pajares, F. (2020). Essential competencies for hybrid teaching include technological proficiency, pedagogical flexibility, and the ability to engage students in a variety of learning environments. Educators must be adept at using digital tools to create interactive and inclusive learning experiences, as well as capable of adapting teaching methods to suit both synchronous and asynchronous learning settings.

Also, Tondeur, J. (2020) supported the idea that professional development plays a crucial role in achieving Hybrid Teaching Mastery. Training programs that focus on the integration of technology in education, innovative pedagogical strategies, and the management of hybrid classrooms are essential. Such programs not only enhance teachers' skills but also their confidence in applying these methods effectively.

Additionally, another theme emerged was **Motivational Learning Dynamics**. This theme emphasizes motivation as a central element in the success of hybrid learning

environments. It highlights how motivational strategies can significantly influence student engagement, persistence, and academic achievement. By fostering an inspiring and supportive hybrid learning atmosphere, educators can enhance student motivation, driving positive educational outcomes and personal growth. Thus, the remarks of the participants revealed below:

> *IDI 4: "I feel excited and motivated as always and in fact according to studies teachers' motivation and excitement help students to try new things like hybrid learning."*
>
> *IDI 5: "I was motivated and passionate about using technology in my classroom to help my students to learn new things in hybrid learning."*
>
> *FGD 2: "Motivation is the key factor to implement hybrid learning. The teachers level of motivation to teach as well as students motivation to learn new things."*

From the statements of the participants, participants 4, and 5 that excitement and motivation toward hybrid learning, citing studies that suggest the enthusiasm of teachers can inspire students to embrace new educational models like hybrid learning. This indicates a belief that the positive emotional state and motivational attitude of educators directly influence students' willingness to engage with and adapt to innovative learning methods.

In addition, during the interview for Focus Group Discussions, participants 2 pointed out that motivation as a foundational element for the effective implementation of hybrid learning. They note that both the teachers' motivation to teach and the students' motivation to learn are critical factors. This perspective suggests that the success of hybrid learning hinges on a reciprocal motivational dynamic, where motivated educators inspire students, and eager students, in turn, encourage educators to explore and implement innovative teaching methods.

This implies that Motivational Learning Dynamics underscore the pivotal role of motivation in driving engagement, persistence, and achievement in educational settings. Recognizing motivation as both an outcome and a catalyst, educational strategies should prioritize nurturing intrinsic motivation through relevant, interactive, and personalized learning experiences, alongside fostering a supportive and motivational educational environment for both students and educators.

The implications are supported by Tschannen-Moran, M., & Woolfolk Hoy, A. (2021). The literature provides evidence on the positive effects of motivational strategies on student engagement, persistence, and academic achievement. Strategies that personalize learning experiences, provide meaningful feedback, and create opportunities for student choice and autonomy are shown to enhance intrinsic motivation. Gamification, project-based learning, and collaborative learning activities are examples of approaches that can dynamically engage students by making learning more relevant and enjoyable.

Also, Tschannen-Moran, M. (2020) supported the idea that Educators play a crucial role in shaping the motivational dynamics within a classroom. Their beliefs, attitudes, and behaviors significantly influence students' motivational levels. Positive

teacher-student relationships, high expectations, and the modeling of enthusiasm and interest in the subject matter are critical in creating a motivating learning environment. Furthermore, teachers' own motivation and professional development are vital for sustaining their effectiveness in engaging students.

Correspondingly, **Intentional Persuasive Teaching** was the theme emerged that highlights the strategic use of persuasion and intentionality in educational practices. It underscores the importance of deliberately crafted messages and teaching approaches designed to engage, motivate, and inspire students. By embedding persuasive and intentional elements into teaching, educators can significantly enhance learning outcomes and foster a deeper connection with their students. The significant statements of the participants revealed below:

> *IDI 2: "I am pretty confident that at least 80 % of my students stay at task."*
>
> *FGD 4: "Agree! My verbal persuasion to my students is going into this 'I have this great thing; lets try it as opposed to the district wants me to do this without you. I'm going to do it so let's try it.'"*
>
> *FGD 7: "Being more intentional with my words, being more intentional with purpose helps with my verbal persuasion."*

As reflected by the statements of participants 1 expresses confidence in their ability to keep a large majority of their students focused on tasks. This confidence likely stems from their effective teaching strategies, which may include persuasive communication and intentional design of learning activities that align with students' interests and goals, thereby increasing engagement and task adherence.

Additionally, the various statements of the participants 4 and 7 emphasizes the use of verbal persuasion as a strategic tool to generate student interest and buy-in for learning activities. By framing the activity as a shared, exciting venture rather than a mandatory assignment, the educator leverages persuasion to motivate students. This approach reflects an understanding of the importance of how educational content is presented and the role of teacher enthusiasm in influencing student engagement.

This implies that Intentional Persuasive Teaching implies strategic communication and purposeful design in educational practices to engage and motivate students effectively. Educators must cultivate persuasive skills and align instructional content with students' interests and goals to enhance learning outcomes and foster a positive learning environment conducive to student engagement.

The ideas are supported by Zimmerman, B. J. (2020) that research has consistently shown that Intentional Persuasive Teaching involves the strategic use of verbal and nonverbal communication strategies, instructional design techniques, and motivational approaches to engage and motivate students. Examples of persuasive strategies include framing tasks as meaningful and relevant, providing rationale for learning activities, using positive reinforcement and feedback, and creating a supportive classroom climate that fosters student autonomy and intrinsic motivation.

Further, Davenport, T. H., & Ronanki, R. (2021) study supported that the effectiveness of Intentional Persuasive Teaching in improving student engagement, motivation, and learning outcomes across various educational settings and subject areas. Studies have found that teachers who employ persuasive communication techniques and

intentional instructional design strategies are more successful in maintaining student attention, increasing participation, and promoting deep learning.

Dimensions of Teacher Sense of Self-Efficacy

Based on the results of exploratory factor analysis that there five (5) underlying dimensions from the Teachers Sense Of Self-Efficacy In Hybrid Learning such as: Autonomy and Collaboration, Cultivating Holistic and Development Skills, Inclusive Technology Integration, Technical Agility and Support, and Assessment and Adaptation.

On the other hand, the reliability test for the final scale of the questionnaire derived from the overall reliability score of Dimensions Of Teachers Sense Of Self-Efficacy In Hybrid Learning is high with Cronbach's value of (α = 0.904) the subscale or the dimension is also above the criteria reliability above score alpha namely: Autonomy and Collaboration (α = 0.904), Cultivating Holistic and Development Skills (α = 0.905), Inclusive Technology Integration (α = 0.850), Technical Agility and Support (α = 0.877), and Assessment and Adaptation (0.895).

The final instrument which can be used to measure the Dimensions Of Teachers Sense Of Self-Efficacy In Hybrid Learning contains five (5) dimensions with a total of 64 items. This means that these items are appropriate and passed the face validity for measuring tools in the study.

CONCLUSIONS

To give light on the study, the following conclusions are enumerated.

1. The thematic analysis of the Dimensions of Teachers' Sense of Self-Efficacy in Hybrid Learning has elucidated eight significant themes, each highlighting a distinct aspect of educators' confidence and capability in navigating hybrid learning environments. These themes—ranging from Collaborative Growth Experiences to Intentional Persuasive Teaching—underscore the multifaceted nature of teaching efficacy in settings that blend in-person and online learning modalities. The emergence of these themes suggests that teachers' self-efficacy in hybrid learning is not just a matter of mastering digital tools but involves fostering collaboration, innovation, assurance in empowering learning, optimism, engagement, mastery of hybrid teaching methods, and the ability to teach persuasively in varied learning contexts. The identification of these themes indicates that a teacher's sense of self-efficacy in hybrid learning environments is built upon a foundation of collaboration, adaptability, and strategic innovation. Teachers who feel confident in their ability to foster collaborative growth, innovate within the hybrid learning model, and assure and empower learners are better positioned to create optimistic, engaging, and effective learning experiences. Furthermore, mastery in hybrid teaching techniques and the capacity for intentional, persuasive instruction are critical for facilitating deep and meaningful learning.
2. The Exploratory Factor Analysis (EFA) of Teachers' Sense of Self-Efficacy in Hybrid Learning environments has uncovered five critical underlying dimensions: Autonomy and Collaboration, Cultivating Holistic Development Skills, Inclusive Technology Integration, Technical Agility and Support, and Assessment and Adaptation. These dimensions reveal a comprehensive framework of competencies that are essential for effective teaching and learning in hybrid

settings. They highlight not only the importance of technological proficiency but also emphasize the need for autonomy, collaboration, holistic development, and adaptive assessment practices. This nuanced understanding of teachers' self-efficacy provides a clearer picture of what educators need to thrive in hybrid learning environments. The findings from the EFA suggest that self-efficacy in hybrid learning extends beyond simple technological know-how to include a range of pedagogical, interpersonal, and reflective skills. Autonomy and collaboration are key for teachers and students alike, indicating that self-directed learning and cooperative engagement are fundamental to the hybrid model. The emphasis on cultivating holistic development skills points to the importance of supporting not just academic achievement but also social, emotional, and cognitive growth. The need for inclusive technology integration underscores the imperative to use technology in ways that are accessible and equitable for all learners. Technical agility and support highlight the necessity for teachers to be able to adaptively use and troubleshoot technology. Lastly, the dimension of assessment and adaptation stresses the importance of flexible and responsive approaches to evaluation that align with the dynamic nature of hybrid learning.

3. The high reliability scores obtained from the Cronbach's alpha test for the overall scale and each subscale confirm the internal consistency and reliability of the questionnaire, indicating that it is a robust instrument for measuring teachers' sense of self-efficacy in hybrid learning. The high scores across dimensions such as Autonomy and Collaboration ($\alpha = 0.904$), Cultivating Holistic and Development Skills ($\alpha = 0.905$), and Assessment and Adaptation ($\alpha = 0.895$) underscore the critical role these factors play in shaping teachers' confidence and effectiveness in hybrid environments.
4. The final instrument, comprising five dimensions and a total of 64 items, stands as a validated and reliable tool for assessing the dimensions of teachers' self-efficacy in hybrid learning. Its comprehensive nature and the inclusion of a broad range of factors make it an essential resource for educators, administrators, and researchers aiming to understand and enhance teacher self-efficacy in hybrid learning contexts. This tool not only helps in identifying areas of strength and opportunities for growth among teachers but also informs targeted professional development and support strategies to bolster teachers' confidence and skills in managing the complexities of hybrid teaching and learning.

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