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Article

# Teacher-Student Interaction in Higher Education Institutions: Hybrid Language Learning in the Post-Pandemic Landscape

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Abstract: In the ever-evolving landscape of higher education, the shift to hybrid teaching approaches has introduced novel challenges and opportunities for both educators and students. This qualitative study, grounded in a robust theoretical framework, combines in-depth literature reviews, informal interviews, observations, and thematic analysis to explore the multifaceted dynamics of hybrid language learning within a College of Arts and Sciences. By investigating the experiences of twenty students (referred to as 'S-Part 1' to 'S-Part 20'), the research delves into the core theme of 'Teacher-Student Interaction in Higher Education Institutions' and unpacks nine additional themes: 'Adaptability and Resilience,' 'Flexibility and Autonomy,' 'Connectivity Challenges,' 'Feelings of Isolation,' 'Technology Competence,' 'Personalized Learning,' 'Resource Accessibility,' 'Support Mechanisms,' and 'Positive Learning Experiences.' In this study, these themes encapsulate the diverse experiences and challenges encountered by teachers and college students as they navigate the evolving educational landscape. The insights derived from the study are underpinned by a robust theoretical framework and complemented by existing scholarly literature. As we delve into these themes, it becomes evident that they shed light on not only the intricacies of hybrid language learning but also the broader educational context, offering valuable guidance for educators, institutions, students, and researchers. Based on the ample results, recommendations are presented for school administrators, teachers, students, and future researchers to enhance the quality of hybrid teaching and learning, aligning it with the demands of the post-academic era. Overall, this study contributes to the ongoing dialogue on innovative pedagogical strategies and responsive educational environments, underlining the significance of teacherstudent interaction in the new normal of higher education.

**Keywords:** higher education institutions; hybrid language learning; post-academic landscape; teacher-student interaction

# I. Introduction

In recent years, the educational landscape has experienced a profound transformation, marked by the widespread adoption of hybrid learning as a compelling alternative to traditional classroom settings (Ong & Quek, 2023). This shift not only reshapes pedagogical dynamics but also presents a multitude of unique challenges and opportunities for both educators and learners. In this evolving educational framework, this research centers on the pivotal role of teacher-student interaction within the context of hybrid language learning. This introduction lays the groundwork for comprehending the rationale, objectives, and significance of this study, while also framing the ensuing sections of this paper.

Hybrid learning, a non-traditional approach to education that has gained substantial prominence in recent years, has been further accelerated by the events surrounding the COVID-19 pandemic and its aftermath (Vongalis-Macrow, De Souza, Littleton, & Sekhar, 2023). This approach diverges from the conventional classroom setting, offering students the opportunity to engage with their studies through a combination of in-person and online learning experiences.

This study endeavors to explore the intricate dynamics between teachers and students in the context of hybrid language learning. Language acquisition, a fundamental facet of education, is

profoundly influenced by teacher-student interactions, particularly within this innovative educational setting (Eslit, 2023). The significance of this study extends its reach to multiple stakeholders, encompassing school administrators, teachers, students, and prospective researchers.

St. Michael's College (SMC), which serves as the locale of the study, stands as a beacon of academic excellence in Iligan City. The school is known for its commitment to fostering a dynamic learning environment. The College of Arts and Sciences, as an integral part of SMC, serves as the crucible venue for intellectual growth, where students taking up Bachelor of Arts in Philosophy, Bachelor of Arts in English Language, and Bachelor of Science in Psychology, engage with diverse disciplines to cultivate a well-rounded education. Students' academic and lived experiences serve as fertile records in the exploration about teacher-student interaction and hybrid language learning in the post-pandemic landscape.

The principal objective of this research is to shed light on the nuances of teacher-student interaction within the realm of language learning in the context of hybrid education. Venturing into this relatively uncharted territory, the researcher aims to contribute to a more profound understanding of how teaching and learning have evolved in this post-academic landscape.

Amidst the ongoing evolution of the educational landscape, hybrid learning emerges as a dynamic alternative to traditional classroom settings. As the researcher navigates the post-academic era, it becomes imperative to grasp the influence of teacher-student interaction on language learning within the hybrid learning milieu. This study scrutinizes the intricacies of this interaction, the challenges it poses, and the impact it wields on language learning. Furthermore, it seeks to identify effective teaching strategies and lay the groundwork for future research and educational practices. To uncover all this, the paper has the following research questions to answer:

- 1. How does teacher-student interaction evolve in the context of hybrid language learning?
- 2. What unique challenges do teachers and students encounter in this environment, and how do these challenges influence language learning?
- 3. Which teaching strategies and methods prove effective in hybrid language education?
- 4. What is the impact of hybrid language learning on students' language proficiency and overall academic development?
- 5. How do the findings of this study contribute to future research and shape educational practices in the post-academic era?

This research carries substantial implications for a diverse range of stakeholders. For school administrators, it offers insights into the effectiveness of hybrid learning programs, enabling informed decisions about educational methodologies. Teachers stand to gain a deeper understanding of effective teaching strategies, particularly within the context of hybrid education. Students, as the primary beneficiaries of this innovative educational approach, can anticipate a more enriched learning experience. Lastly, future researchers will find invaluable insights within the contributions of this study, further enriching the evolving field of education (Selwyn, 2022).

Within the post-academic landscape, where hybrid learning has garnered traction, this study seeks to explore the dynamic nature of teacher-student interaction in the domain of language learning. Its objective is to provide a comprehensive understanding of the impact, challenges, and strategies that characterize this evolving educational paradigm.

The forthcoming sections of this paper delves into the theoretical framework, detailed literature review, research methodology, analysis of findings, discussion of the implications, conclusion, and recommendations. This comprehensive exploration aspires to offer a holistic perspective on teacher-student interaction in hybrid language learning, aiming to inform educational practices and guide further research within this dynamic educational paradigm (Garrison & Vaughan, 2018).

# II. Theoretical Framework

This study draws upon three significant theories to provide a robust theoretical foundation. First, Albert Bandura's Social Learning Theory (1977) underlines the role of observation, imitation, and social interactions in the learning process. It highlights how individuals can acquire knowledge and skills by observing and emulating the actions of others. In the context of teacher-student

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interaction in hybrid language learning, this theory underscores the potential influence of teachers as role models and how their interactions with students can impact language learning.

Second, Constructivism, as developed by Jean Piaget (1952) and Lev Vygotsky (1978), emphasizes that individuals actively construct their knowledge through experiences and interactions. Piaget's stages of cognitive development and Vygotsky's Zone of Proximal Development (ZPD) highlight the importance of both individual cognitive development and social interactions in the learning process. In the study of hybrid language learning, Constructivism emphasizes the active role of students in their own learning and how the combination of online and in-person interactions can create an optimal learning environment.

Third, the Community of Inquiry (CoI) Framework, formulated by Garrison, Anderson, and Archer (2000), offers a structured approach for online learning environments. It encompasses three key elements: cognitive presence, social presence, and teaching presence, which interact to create a meaningful and collaborative online learning community. In the context of hybrid language learning, the CoI Framework is relevant as it provides a model for understanding how online and in-person interactions contribute to effective learning. It highlights the importance of social interactions among learners, the role of educators, and critical thinking in creating a conducive learning environment.

These three theories—Social Learning Theory, Constructivism, and the CoI Framework—serve as the underpinning for exploring teacher-student interaction in the hybrid language learning landscape, shedding light on how social interactions, active learning, and structured online and inperson elements contribute to the learning experience.

### III. Literature Review

The landscape of education has witnessed a remarkable transformation in recent years, driven by the fusion of traditional classroom instruction with technology-mediated learning. This evolution has given rise to a multitude of studies exploring various facets of hybrid teaching, teacher-student interaction, feedback, and language learning. The researcher begins by reviewing relevant previous research, transitioning from studies on hybrid teaching to a more specific focus on teacher-student interaction, feedback, and language learning within the context of post-pandemic, online, and blended learning.

Hybrid Teaching and Learning: Hybrid teaching, also known as blended learning, has gained prominence due to its ability to seamlessly integrate in-person and online learning experiences. Researchers such as McNamee (2020) and Kozma (2018) have explored the potential of technology to create dynamic, flexible learning environments. Kozma's work on "Technology, Innovation, and Educational Change: A Global Perspective" underscores the global impact of technology on education, highlighting the opportunities it presents. The role of technology in shaping the 'new normal' of education is also discussed by Johnson and Smith (2021), who emphasize the opportunities and implications that technology brings to the evolving educational landscape.

Teacher-Student Interaction in Hybrid Learning: Effective teacher-student interaction (Hall & Walsh, 2002) is a cornerstone of successful education, and in hybrid learning, it plays a pivotal role in facilitating learning experiences. Scholars like Holmes and Miel (2020) explore the potential of Artificial Intelligence (AI) in K-12 education, paving the way for personalized learning. Research by Bitzer, Waghid, and Frick (2020) reflects on the rapid shift to online learning during the COVID-19 pandemic and provides insights into the challenges faced by higher education institutions. The meta-analysis by Johnson, Smith, Williams, and Lee (2016) delves into the enhancement of blended learning through gamification, shedding light on its effects on student motivation and achievement.

**Feedback Processes in Language Learning:** Feedback, an essential component of the learning process, significantly influences language acquisition. Hattie and Timperley's work (2007) on "The Power of Feedback" emphasizes the impact of feedback on learning outcomes and the need for timely and constructive feedback. Within language learning, this is particularly relevant as constructive feedback from teachers can significantly influence language proficiency and overall academic development.

Post-Pandemic, Online, and Blended Learning: The COVID-19 pandemic accelerated the adoption of online and blended learning across educational institutions. Researchers such as Hodges, Moore, Lockee, Trust, and Bond (2020) provide insights into the rapid transition to online education (Jamisola & Lingating, (2018) during the pandemic, highlighting the shift from emergency remote teaching to online learning. Scherer, Howard, Tondeur, and Siddiq (2021) investigate teachers' readiness for online teaching and learning in higher education, profiling those who are prepared for the challenges. Moreover, Salas-Pilco, Yang, and Zhang (2022) conducted a systematic review on student engagement in online learning in Latin American higher education during the pandemic, offering valuable insights. Resch, Alnahdi, and Schwab (2022) explore the effects of the COVID-19 emergency remote education on students' social and academic integration in higher education, focusing on Austria. Meanwhile, Pokhrel and Chhetri (2021) provide a comprehensive literature review (Snyder, 2019). on the impact of the COVID-19 pandemic on teaching and learning, offering a broad perspective on the disruption it caused. Mok, Xiong, and Bin Aedy Rahman (2021) delve into the pandemic's disruption on university teaching and learning, assessing student evaluations of online learning experiences in Hong Kong. Zimmerman (2019) examines the potential of AI in teaching and learning, providing insights into emerging frontiers for education.

Gaps and Limitations in the Existing Literature: While the existing literature provides valuable insights into various aspects of education, including hybrid teaching, teacher-student interaction, and feedback processes, there are still gaps and limitations. Specifically, the need for research to examine the teacher-student interaction in the context of hybrid language learning persists. Additionally, as the educational landscape continues to evolve, there is a growing need for studies that explore the impact of online and blended learning, especially in the context of language education. Henrich (2020) offers a unique perspective on the psychological and economic peculiarities of the Western world, providing insights into the broader context of educational change and its implications.

Contributions of the Current Study: This study addresses the existing gaps by thoroughly exploring teacher-student interaction in hybrid language learning within the post-pandemic, online, and blended learning landscape. It seeks to uncover how this interaction evolves, identify challenges faced by teachers and students, and discover effective teaching strategies. Moreover, the research investigates the impact of hybrid language learning on students' language proficiency and overall academic development, with a specific focus on feedback processes. By doing so, this study contributes to a deeper understanding of the evolving educational framework, offering insights that can guide future research and inform educational practices. Holyoak, Morrison, and Schunn (2020) provide a comprehensive handbook on motivation and learning, offering a valuable resource for understanding the motivational aspects of language learning within the context of hybrid education.

# IV. Methods

In this study, an innovative and comprehensive research design was employed to gain profound insights into the evolving landscape of hybrid language learning within a College of Arts and Sciences (CAS), St. Michael's College (SMC), Iligan City. The research design combined in-depth literature reviews, informal interviews, observations, and thematic analysis, offering a multifaceted exploration of the challenges and opportunities presented by this educational paradigm. These methodological approaches were meticulously chosen to capture the dynamic and intricate nature of hybrid learning experiences among students, underpinned by a strong theoretical framework and guided by a synthesis of existing scholarly literature (Cardoso, et al. (2021). The researcher, being the current dean of CAS, made use of the robust experience in the field of qualitative study to underpin the result of this study.

**Research Design:** This study employs a qualitative research design, incorporating various data collection methods such as in-depth literature reviews, informal interviews, observations, and thematic analysis (Squires, 2023). Qualitative research is chosen to gain a deeper understanding of the intricate dynamics of teacher-student interaction and feedback processes in the context of hybrid language learning (Creswell & Creswell, 2017).

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**Participants:** The participants in this study consist of twenty randomly selected students from the College of Arts and Sciences at St. Michael's College, referred to as "S-Part 1" to "S-Part 20" in this research. The selection of students from diverse academic backgrounds ensures a broader perspective on the phenomenon under investigation (Hennink & Kaiser, 2022).

**Data Collection:** This research intricately observes and follow the following methods:

- In-Depth Literature Reviews: The study conducts extensive literature reviews to establish a
  comprehensive foundation for the research. Relevant academic papers, books, and scholarly
  articles taken from the library and online sources are examined to understand the existing
  knowledge and identify gaps in the field (Chigbu, Atiku, & Du Plessis, 2023).
- 2. **Informal Interviews**: Informal interviews with teachers and students were conducted to gather firsthand perspectives on teacher-student interaction and feedback in hybrid language learning. These semi-structured interviews allow for open-ended discussions, ensuring rich data collection (Rutakumwa, et al.,2020; Swain & King, 2022).
- Observations: Observations take place within the hybrid language learning setting to document real-time teacher-student interactions and feedback processes (Ciesielska, et al., 2018). These observations provide valuable context and help validate the data obtained from interviews and literature reviews (Braun & Clarke, 2021).

**Data Analysis:** Thematic analysis is employed to identify recurring themes, patterns, and meaningful insights from the collected data. This method involves systematic data coding, theme development, and data interpretation (Braun & Clarke, 2021; Terry & Hayfield, 2021).

**Ethical Considerations:** This research adheres to ethical guidelines in research involving human participants. Informed consent is obtained from all participants, ensuring they understand the purpose of the study and their right to withdraw at any point. Anonymity and confidentiality are maintained, and participants are assigned codes to protect their identities (Caulfield, 2022).

**Saturation in Data Gathering:** Data saturation, the point at which no new information or themes emerge from the data, is considered an essential criterion in this study. Data collection continues until saturation (Hennink, et al., 2019) is achieved, ensuring that all relevant insights and perspectives are included (Guest, Namey, & Chen, 2020).

Why the Choice of Qualitative Method: The choice of a qualitative research method aligns with the study's aim of gaining a deeper understanding of teacher-student interaction and feedback processes. Qualitative methods allow for the exploration of nuance lived experiences, perceptions, and challenges faced by teachers and students in the hybrid language learning setting (Charmaz & Belgrave, 2012).

# V. Results

This section presents the main findings of the study, highlighting the answers to the five research questions and providing insights gathered from a combination of literature reviews, informal interviews, and observations. To offer a deeper understanding of the findings, direct quotations from the participants (S-Part 1 to S-Part 20) are included, with in-depth analysis. The results are structured according to each research question.

The results of this study elucidate the transformation of teacher-student interaction in the context of hybrid language learning, providing insight into each research question. To deepen our understanding, these findings are enriched by the incorporation of additional scholarly perspectives as presented in the reviewed literature and insights gained from informal interviews and observations. The following outcomes correspond to each of the five research questions and are substantiated by direct quotations from the study participants (S-Part 1 to S-Part 20).

# A. Summarized answers to the five research questions:

# 1. Research Question 1: How does teacher-student interaction evolve in the context of hybrid language learning?

Teacher-student interaction has undergone a notable transformation within the realm of hybrid language learning. This shift is closely tied to the extensive utilization of digital platforms and technologies, reflecting the predictions made in the 'Experts Say the New Normal' report (JANNA ANDERSON, LEE RAINIE AND EMILY A. VOGELS, 2021). These technological tools have greatly increased the flexibility and accessibility of communication. As one participant (S-Part 8) succinctly stated, "Teachers now use chat forums and video calls, which allows us to ask questions and clarify doubts outside of regular class hours." This shift towards technology is consistent with the evolving nature of teaching methods and communication platforms (Dziuban et al., 2018).

# 2. Research Question 2: What unique challenges do teachers and students encounter in this environment, and how do these challenges influence language learning?

Challenges were highlighted as a defining aspect of the hybrid learning environment, particularly in sustaining motivation and engagement, corroborating findings from the review of empirical studies (Stewart, 2021). Participants recognized the difficulty of maintaining motivation without the presence of physical classroom interactions, consistent with the concerns expressed in the 'Experts Say the New Normal' report (JANNA ANDERSON, LEE RAINIE AND EMILY A. VOGELS, 2021). As one student (S-Part 12) noted, "Staying motivated is a real challenge. The absence of face-to-face interaction makes it easy to disengage." Motivation, as substantiated by the reviewed literature, emerges as a pivotal factor in the learning process (Sum & Oancea, 2021).

# 3. Research Question 3: Which teaching strategies and methods prove effective in hybrid language education?

The study underscored the efficacy of innovative teaching strategies in hybrid language education. Participants emphasized the advantages of gamification, a method associated with improved motivation and engagement (JANNA ANDERSON, LEE RAINIE AND EMILY A. VOGELS, 2021). As one student (S-Part 16) articulated, "Gamified elements in our language courses have been a game-changer. They make learning fun and competitive." Additionally, observations highlighted the value of a flipped classroom approach, as outlined in the literature (Dziuban et al., 2018). These insights indicate that creative strategies play a pivotal role in enhancing the hybrid language learning experience.

# 4. Research Question 4: What is the impact of hybrid learning on students' language proficiency and overall academic development?

The findings disclosed a nuanced impact on students' language proficiency. While some participants reported positive effects linked to the enhanced flexibility of hybrid learning (Bitzer, Waghid, & Frick, 2020), others pointed out potential pitfalls. As one student (S-Part 5) remarked, "Language learning is effective, but we miss the depth of in-person interactions." These findings are consistent with the recognition of trade-offs associated with hybrid learning presented in empirical studies (Stewart, 2021). The data suggests that hybrid learning can have both positive and negative impacts on language proficiency and overall development.

# 5. Research Question 5: How do the findings of this study contribute to future research and shape educational practices in the post-academic era?

The insights gathered from this study hold significant implications for the future of hybrid language learning. The participants acknowledged the necessity of striking a balance between technology and human interaction, aligning with the contemporary perspective on the role of technology in education (Dziuban et al., 2018). As one student (S-Part 18) expressed, "We need to maintain a human touch in hybrid learning. It's about striking the right balance." The findings advocate for future research to explore innovative ways of integrating technology while preserving the human

aspect of education. In essence, this study provides valuable insights for the ongoing transformation of education in the post-academic era.

Overall, this study has elucidated substantial changes in teacher-student interaction within the domain of hybrid language learning, underscored by the prominent role of technology (Johnson & Smith, 2021). The challenges in sustaining motivation and engagement, the effectiveness of innovative teaching strategies, and the complex impact on language proficiency have been brought to light. These insights advocate for the pursuit of a balance between technology and human interaction in shaping the future of

### **B. In-Depth Interview Results**

The extensive review of pertinent literature has significantly enriched our comprehension of the transformations taking place in the field of education during the post-academic era, particularly in the era of hybrid learning models. Insights gleaned from this literature elucidate a profound metamorphosis in education, driven by the rapid proliferation of technology, the incorporation of artificial intelligence (AI), and the accelerated transition to online and blended learning. These transitions have been particularly expedited by external forces, notably the global COVID-19 pandemic, which necessitated a swift adaptation by educational institutions to the realm of remote teaching and learning (Matthewman & Uekusa, 2021; Sum & Oancea, 2021; Stewart, 2021).

The literature brings into focus the rising significance of AI in the realm of education, offering opportunities to personalize and elevate the learning experience (Saleh, 2023). AI-powered tools possess the potential to cultivate a more personalized educational environment that caters to individual student needs and preferences. This signals a shift toward a student-centric approach where traditional roles of educators and learners are being redefined. The literature also underscores the critical importance of teacher professional development (Alonzo & Santos, 2019), in harnessing the potential of these technologies effectively, which closely aligns with the findings of this study in the domain of hybrid language learning (Jimoyiannis et al., 2020).

Furthermore, the exploration of technological integration and the application of blended learning models reveals the potential of these approaches to augment student satisfaction and engagement (Chen & Jiao, 2018). The literature reviews also shed light on some of the challenges faced by educators when adopting these transformative changes, encompassing concerns about technological readiness, the imperative for effective teacher professional development, and the successful implementation of an integration strategy (Dela Rosa & Tenedero, 2018). These challenges resonate with the experiences reported by the participants in this study within the realm of hybrid language learning.

Moreover, the investigation into educational technology trends and the evaluation of teachers' acceptance and readiness for AI integration in the Philippines align with the global shift towards technology-driven education. The embrace of online and blended learning models (Abao, & Matildo, 2021), within Philippine colleges and universities, as evidenced in the literature, harmonizes with the broader global trends unveiled in this study, signifying that the post-academic landscape transcends geographical boundaries (Garcia & Santiago, 2021; Nolasco & Cruz, 2020; Salazar & Baluga, 2020).

Overall, the comprehensive review of the literature has provided a holistic understanding of the transformations unfolding in the realm of education during the post-academic era, characterized by the integration of technology, AI, and evolving pedagogical methods. These insights underscore the urgency for educators and institutions to adapt to and embrace these changes. This study significantly contributes to this broader discourse by delving into the dynamics of teacher-student interaction in the context of hybrid language learning, proffering practical implications for educators and researchers. It caters to the evolving needs of students navigating the technology-driven educational landscape (Kimmons & Rosenberg, 2022; Seaman & Seaman, 2022b; Sum & Oancea, 2022).

# C. Informal Interviews and Conversations

The informal interviews conducted as part of this study provided valuable insights into the experiences of twenty College of Arts and Sciences students (referred to as "S-Part 1" to "S-Part 20") in the context of hybrid language learning (Resch, Alnahdi, & Schwab, 2022). These interviews offered a more personalized and in-depth perspective, complementing the findings derived from the extensive literature review, observations, and thematic analysis (Pokhrel & Chhetri, 2021). Several key themes emerged from these interviews (Swain & Spire, 2020).

Firstly, the students expressed a shared sentiment of adaptability and resilience in the face of the evolving educational landscape, particularly in the aftermath of the COVID-19 pandemic (Matthewman & Uekusa, 2021). They spoke of the challenges they encountered during the transition to hybrid learning, including connectivity issues, limited access to resources, and feelings of isolation. As one student (S-Part 8) noted, "The sudden shift to online and hybrid classes was tough; not everyone had access to a stable internet connection, and it sometimes felt like we were on our own" (Anderson, Rainie, & Vogels, 2021). However, they also highlighted the benefits of flexibility, increased autonomy, and a sense of empowerment in their learning journeys. Another student (S-Part 15) shared, "Hybrid learning gave us more control over our schedules. It wasn't easy, but it forced us to develop time management skills". The same finding is also observable in the study made by Swain & Zachery, 2020 amd Sum and Oancea in 2021.

Furthermore, the informal interviews shed light on the significance of teacher-student interaction within the hybrid learning environment (Stewart, 2021). Participants described the pivotal role of educators in facilitating meaningful engagement and providing timely feedback. They emphasized the importance of clear communication and empathetic support from their teachers in sustaining their motivation and academic progress (Dela Rosa & Tenedero, 2018). In the words of one student (S-Part 3), "Having teachers who were approachable and responsive made all the difference. They guided us through the challenges and made learning more enjoyable". This same idea is also supported in the study conducted by Nolasco & Cruz in 2020.

Additionally, the interviews revealed that students had varying degrees of readiness and acceptance of the hybrid learning format, influenced by their prior experiences and personal circumstances (Garcia & Santiago, 2021). Some students were more comfortable with technology and self-directed learning, while others faced greater challenges in adapting to this mode of education. As expressed by another student (S-Part 12), "I had to learn to navigate various digital tools and platforms. It was a learning curve, but I eventually got the hang of it". The same insight can be gleaned from the study conducted by Salazar and Baluga in 2020 and Cabantog & Ares in 2019.

These interview findings corroborated and enriched the insights gleaned from the literature review and thematic analysis. They underscored the dynamic nature of hybrid language learning and emphasized the critical role of teacher-student interaction, technology integration, and support mechanisms in ensuring a positive learning experience (Kimmons & Rosenberg, 2022).

Overall, the informal interviews provided a human perspective on the hybrid learning landscape, offering a deeper understanding of the students' lived experiences, challenges, and resilience in this evolving educational paradigm. These insights not only validate the study's broader findings but also contribute to a more comprehensive view of the post-academic era's impact on language learning within higher education (Sum & Oancea, 2022).

By incorporating these personal narratives, this study acknowledges the diverse needs and experiences of students in the hybrid learning context and underscores the importance of creating inclusive and supportive learning environments. Future research in this field could delve even further into students' experiences, harnessing their voices to inform pedagogical strategies, technological advancements, and support systems that cater to the unique challenges and opportunities of the post-academic landscape (Dziuban et al., 2018).

# D. Observations

The observation component of this study provided a valuable and unique perspective on the experiences of students engaged in hybrid language learning (Kawulich, 2005) within the College of Arts and Sciences. These observations were instrumental in shedding light on the practical realities

of the learning environment and complemented the insights garnered from the extensive literature review, informal interviews, and thematic analysis (Lowe, Norris, Farris, & Babbage, 2018; Yeung, & Yau, 2021).

First and foremost, the observations revealed the intricate dynamics of teacher-student interactions within the hybrid learning setting. They illustrated the fluidity and adaptability of educators as they navigated between in-person and online instruction, often seamlessly integrating various technological tools to engage with their students. This dynamic pedagogical approach was consistent with findings from the literature, which emphasized the role of technology integration and teacher adaptability in hybrid education (Dado & Ortega, 2020; Stewart, 2021; Kimmons & Rosenberg, 2022).

Moreover, the observations provided evidence of the students' active participation and engagement during both the in-person and online components of their language learning experiences. It was evident that students adapted to the hybrid format by utilizing digital resources, participating in virtual discussions, and collaborating with their peers in both physical and virtual spaces. These findings align with previous research that has underscored the importance of student engagement in hybrid and online learning (Santiago, & Reyes, 2019; Sum & Oancea, 2022).

Furthermore, the observations offered insights into the role of technology in hybrid language learning. They highlighted the various digital tools and platforms employed by both teachers and students to facilitate the learning process. These observations corroborated findings from the literature that emphasized the significance of technological resources in hybrid education (Dziuban et al., 2018).

Another noteworthy aspect of the observations was the emphasis on flexibility and adaptability in the hybrid learning environment. The observations demonstrated how students had the freedom to choose when and where to engage with course materials, often tailoring their learning experiences to suit their individual needs and preferences. This flexibility was consistent with the insights from the informal interviews, which emphasized the empowerment and autonomy that students derived from the hybrid format (Matthewman & Uekusa, 2021).

Overall, the observational findings not only complemented but also provided a tangible dimension to the insights derived from the literature review, informal interviews, and thematic analysis (Braun and Clarke, 2021; Dawadi Caulfield, 2023). They illuminated the dynamic and adaptive nature of teacher-student interactions, the active participation of students in hybrid learning, the role of technology, and the flexibility embedded within this educational paradigm. These findings contribute to a more holistic understanding of the multifaceted landscape of hybrid language learning within higher education and resonate with the recommendations for future research and practice.

By incorporating these observational insights into the broader findings of the study, the researcher acknowledges the intricate interplay between pedagogical strategies, technological tools, and student engagement within the hybrid learning context. Future research in this field could benefit from continued observation (Farid, 2022) to further explore and refine the best practices that enhance the quality of hybrid language learning experiences, ultimately contributing to the evolution of higher education in the post-academic era.

# D. Thematic Analysis

These themes collectively provide a comprehensive understanding of the multifaceted nature of hybrid language learning in higher education, including the pivotal role of teacher-student interaction, technology integration, and support mechanisms, as well as the impact of external factors like the COVID-19 pandemic as manifested in the responds among the CAS students in SMC. The themes also highlight the challenges and opportunities students encounter, emphasizing the importance of creating inclusive and supportive learning environments.

 Adaptability and Resilience: Participants displayed remarkable adaptability and resilience in the face of evolving educational modalities, aligning with Resch, Alnahdi, and Schwab's (2022) concept of adaptability as a crucial skill for students in adjusting to new learning environments.

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- 2. Flexibility and Autonomy: Students found value in the flexibility and autonomy offered by hybrid learning, echoing Kimmons and Rosenberg's (2022) emphasis on these aspects in promoting student motivation and satisfaction.
- Connectivity Challenges: The study revealed the pressing issue of connectivity challenges, highlighting the need to ensure equitable access to digital resources, as discussed in the literature during the COVID-19 pandemic (Bitzer, Waghid, & Frick, 2020).
- 4. Feelings of Isolation: College students reported feelings of isolation and self-reliance, mirroring the challenges students face regarding social isolation in online learning, as emphasized by Sum and Oancea (2022). This underscores the importance of strategies to combat loneliness and promote social interaction in online education.
- 5. Teacher-Student Interaction: The theme of teacher-student interaction underscored the pivotal role of educators in facilitating meaningful engagement and sustaining student motivation and academic progress, aligning with the extensive body of literature emphasizing the significance of effective teacher-student relationships in online and blended learning (Garrison & Vaughan, 2008; Jimoyiannis, Tsiotakis, & Roussinos, 2020).
- 6. Technology Competence: The study revealed the influence of technology competence on students' acceptance of hybrid learning, aligning with the findings of Chen and Jiao (2018). Recognizing these differences is essential for institutions to provide appropriate support.
- 7. Personalized Learning: The flexibility in hybrid learning allowed for more personalized learning experiences, resonating with the principles of student-centered education, as highlighted by Matthewman and Uekusa (2021).
- 8. Resource Accessibility: Resource accessibility emerged as a concern, echoing the need to ensure equitable access to educational materials and digital tools, a crucial consideration in educational technology (Santos & Tumala, 2019; Nkulu-Ily, 2023; Allman, 2023).
- 9. Support Mechanisms: Support mechanisms, particularly those provided by approachable and responsive instructors, played a pivotal role in making the learning experience enjoyable for students. Faculty support has been recognized as a significant factor in student success, as noted in the work of Stewart (2021).
- 10. Positive Learning Experiences: Despite the challenges, the college students in this study reported positive learning experiences in hybrid environments, which align with the broader goal of enhancing student engagement, as emphasized by Dela Rosa and Tenedero (2018). These themes collectively shed light on the diverse needs and experiences of students in the evolving landscape of higher education, offering guidance for institutions aiming to create inclusive, supportive, and adaptive learning environments.

Contemplating the ever-evolving landscape of post-pandemic education, one cannot help but ponder the profound transformation brought about by hybrid language education. This transformation is undeniably evident, as showcased through in-depth literature reviews, informal interviews, observations, and thematic analysis. It presents a dual-mode approach, seamlessly blending face-to-face and virtual course delivery, and emerges as a poignant symbol of adaptability and resilience in the educational world. Amidst the formidable challenges in terms of interaction that educators and students faced during the abrupt shift to online teaching, hybrid language learning not only survived but thrived, marking itself as a transformative pedagogical force in the new educational paradigm. As institutions like the College of Arts and Sciences in SMC gradually navigate the journey back to conventional classroom instruction, the question that lingers is not

whether hybrid language education will endure, but how it will continue to shape the future of language learning and education.

### VI. Discussion

The findings of this study illuminate the intricate dynamics of teacher-student interaction in the context of hybrid language learning within higher education institutions as manifested among the CAS students in SMC. This section discusses the results in relation to the research questions, compare and contrast the findings with existing literature, and outline the implications and significance of these results for both theory and practice.

Evolution of Teacher-Student Interaction in Hybrid Learning: The first research question aimed to understand how teacher-student interaction has evolved in the context of hybrid language learning. The findings uncovered a significant shift in the mode of interaction. Participants acknowledged that hybrid learning necessitated more flexible and adaptive approaches to communication (Saleh, 2023). This aligns with the views of Matthewman and Uekusa (2021), who theorized that the post-pandemic era would see the emergence of new forms of interaction, emphasizing adaptability and technology integration.

Unique Challenges and Impact on Language Learning: The second research question delved into the unique challenges faced by teachers and students in hybrid learning and their impact on language learning. Participants identified challenges such as connectivity issues, varying technological literacy, and maintaining student engagement (Sum & Oancea, 2022). These findings resonate with Sum and Oancea's (2022) systematic literature review, which emphasized the need for tailored support and professional development for educators in technology-mediated environments. The results also highlight the significance of addressing the digital divide in hybrid learning contexts.

Effective Teaching Strategies in Hybrid Language Education: The third research question aimed to identify effective teaching strategies and methods in hybrid language education (Chen & Jiao, 2018). Participants emphasized the importance of a well-structured online platform, interactive content, and personalized feedback. These findings align with Dziuban et al.'s (2018) assertion that blended learning requires careful integration of technology and pedagogy. The study also supports the work of Seaman and Seaman (2022), who emphasized the pivotal role of digital curricula and resources in hybrid learning environments (Chen & Jiao, 2018).

Impact on Language Proficiency and Academic Development: The fourth research question explored the impact of hybrid learning on students' language proficiency and overall academic development (Garcia & Santiago, 2021). Participants reported mixed outcomes, with some students excelling in the hybrid environment while others faced challenges (Salazar & Baluga, 2020). These findings resonate with Stewart's (2021) review of empirical emergency remote teaching studies during the initial phase of the pandemic, highlighting the variability in student experiences (Stewart, 2021). This highlights the need for tailored support and flexibility in hybrid learning to cater to diverse student needs.

Contributions to Future Research and Educational Practices: The final research question investigated how the findings of this study could inform future research and educational practices in the post-academic era (ASEAN education sector charts way forward post-COVID 19). Participants stressed the importance of continuous professional development for educators and the need for institutions to invest in hybrid infrastructure (Jimoyiannis, Tsiotakis, & Roussinos, 2020). These results echo the sentiments expressed by Allman et al. (2023) regarding emerging trends in educational technology. The study also aligns with Kimmons and Rosenberg (2022), who emphasized the importance of staying updated with educational technology trends (Jimoyiannis, Tsiotakis, & Roussinos, 2020).

# Implications and Significance

The findings of this study have several implications for both theory and practice (Dela Rosa & Tenedero, 2018). They provide insights into the evolving landscape of education and the complexities of teacher-student interaction in hybrid learning. These insights are particularly relevant as educational institutions navigate the challenges posed by the "new normal" (Janna Anderson et al.,

2021). The study underscores the importance of flexibility, adaptability, and equitable access to technology in hybrid learning environments (Dela Rosa & Tenedero, 2018).

For practice, the results call for the development of tailored professional development programs for educators in higher education institutions, focusing on effective pedagogical strategies in hybrid settings (Alonzo & Santos, 2019). Additionally, institutions must invest in technology infrastructure to ensure seamless hybrid learning experiences for all students (Nolasco & Cruz, 2020).

This study offers valuable insights into the dynamics of teacher-student interaction in the context of hybrid language learning (Chen & Jiao, 2018). The findings underscore the need for educators and institutions to embrace flexible and adaptable approaches to teaching and learning in the post-academic landscape (Manal Saleh, 2023). This study contributes to the growing body of knowledge on hybrid learning and serves as a guide for practitioners and researchers in shaping the future of education (Jimoyiannis, Tsiotakis, & Roussinos, 2020).

## Recommendations

In light of the study's findings, several key recommendations emerge for school administrators, teachers, students, and future researchers. These recommendations aim to address the challenges and opportunities presented by the evolving landscape of hybrid language learning in higher education:

**For School Administrators:** School administrators play a pivotal role in shaping the learning environment and ensuring the success of hybrid education programs. Here are three key recommendations for them:

- Invest in Teacher Training: Prioritize professional development programs for educators, focusing on digital literacy, online pedagogy, and effective use of educational technology. Equipping teachers with these skills is essential for the success of hybrid learning.
- 2. **Bridge the Digital Divide:** Address issues of connectivity and digital access by providing students with affordable or subsidized internet connectivity and necessary devices. Bridging the digital divide will ensure equitable access to education.
- 3. **Promote Supportive Ecosystems:** Foster a supportive hybrid learning environment by promoting open communication, encouraging timely feedback, and enhancing student support services. Nurturing a sense of belonging and well-being among students can significantly impact their motivation and success.

**For Teachers:** Teachers are at the forefront of hybrid education, guiding students through this evolving landscape. Here are three key recommendations for teachers:

- 1. **Enhance Digital Competency:** Invest in developing strong digital literacy and technological skills. Mastery of online teaching platforms, effective communication tools, and feedback strategies is critical for creating engaging and effective hybrid learning experiences.
- 2. **Prioritize Interaction:** Actively facilitate teacher-student interaction within the hybrid learning environment. Encourage student engagement, facilitate discussions, and maintain open channels for communication. Personalized feedback and meaningful interactions are vital.
- 3. **Customize Instruction:** Tailor instruction to address diverse student needs, learning styles, and levels of technological readiness. Implement strategies that promote inclusivity and accommodate students' unique challenges and strengths.

**For Students:** Students are central to the success of their own education. Here are three key recommendations for students to navigate the hybrid learning environment:

 Develop Self-Directed Learning: Cultivate strong time management and self-directed learning skills. Creating a structured study schedule, setting goals, and staying organized will enhance your ability to thrive in a hybrid learning environment.

- Advocate for Needs: If you encounter challenges in the hybrid learning environment, don't
  hesitate to communicate your needs to teachers and administrators. Seeking assistance,
  accommodations, or clarification when needed will make your learning experience more
  manageable.
- 3. **Engage Collaboratively:** Collaborate with peers through study groups, online discussions, and virtual meetups. Collaborative learning fosters understanding, motivation, and peer support, contributing to a more enriching educational journey.

For Future Researchers: Researchers should prioritize investigating the central role of teachers and students in the success of their education. Here are three key recommendations for researchers to explore the ways in which students navigate the hybrid language learning environment:

- 1. In-Depth Examination of Support Mechanisms: Future researchers should conduct in-depth investigations into the support mechanisms available to educators and students in hybrid teaching environments. Understanding how institutions provide support and how students and teachers perceive and utilize these support structures can offer valuable insights into enhancing the overall hybrid learning experience. This may involve qualitative studies, surveys, and interviews specifically focused on the effectiveness of support systems in higher education.
- 2. Longitudinal Studies for Sustainability: Given the evolving nature of language in higher education, researchers should consider longitudinal studies to assess the sustainability of hybrid teaching approaches. Monitoring the long-term impacts on teacher-student interaction and the identified themes such as adaptability, technology competence, and feelings of isolation over an extended period will provide a more comprehensive understanding of the challenges and opportunities associated with hybrid learning. This can help institutions adapt and fine-tune their strategies accordingly.
- 3. **Exploration of Technological Solutions:** As the results of the study mention "Connectivity Challenges" and "Technology Competence" as one of the key themes, future research should delve deeper into technological solutions to address these challenges. Researchers can explore the development and effectiveness of educational technology tools, platforms, or training programs designed to enhance connectivity, bridge technology gaps, and improve overall technological competence in the context of hybrid language learning. Comparative studies on the impact of different technology solutions can be particularly insightful.

Overall, sort of caveat gleaned from the existing results recommendations, inherent limitations in this research include the smaller sample size associated with qualitative research, limiting the generalizability of findings. Additionally, the subjective nature of qualitative data collection (Young & Casey, 2018) may introduce bias, and participants' self-reporting may not always reflect their true experiences. The study is also confined to a specific group of students from the CAS students of St. Michael's College, which may not represent the broader population. However, the focus on depth and richness of insights compensates for these limitations, offering a comprehensive exploration of teacher-student interaction and feedback in hybrid language learning (Baker, 2006).

### VI. Conclusion

Having completed this study, the study's overarching research question, "How has teacher-student interaction evolved in the context of hybrid language learning?" has been addressed through the meticulous application of qualitative research methods, including in-depth literature reviews, informal interviews, on-the-ground observations, and thematic analysis. The chosen theoretical framework, based on theories of technology integration, pedagogical strategies, and blended learning, has informed our interpretations and provided a broader educational context for our

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findings. The in-depth interviews with twenty College of Arts and Sciences (CAS) students, also known as S-Part 1 to S-Part 20, from St. Michael's College (SMC) have provided authentic and insightful perspectives on their experiences in hybrid language learning, while the observations within hybrid learning environments offered real-time insights into the nuances, challenges, and successes of hybrid teaching. Thematic analysis brought structure to the data analysis, facilitating the identification of key patterns and themes. This research has implications both theoretically and practically, informing school administrators, educators, students, and future researchers about the evolving dynamics of hybrid language learning. It underscores the enduring significance of human interactions in education, even within technology-rich environments. Overall, future research should delve deeper into pedagogical strategies and further assess the impact of hybrid learning on language proficiency and academic development. This study calls for a continuous exploration of the harmonious integration of technology and human interaction in education, recognizing the pivotal role of teacher-student relationships in shaping the "new normal" in the field of language learning.

### References

- Abao, R. M., & Matildo, J. M. (2021). Blended Learning in Higher Education Institutions in Mindanao: Challenges. Mindanao Forum. Retrieved Perspectives and from https://mindanaoforum.com/blended-learning-higher-education-mindanao/
- Allman, B., (2023). Trends and Topics in Educational Technology, 2023 Edition. TechTrends 67, 583-591 (2023). https://doi.org/10.1007/s11528-023-00840-2
- 3. Alonzo, A. C., & Santos, M. A. (2019). Enhancing Teacher Professional Development through Online Learning: A Case Study in the Philippines. International Journal of E-Learning & Distance Education (IJEDE), 35(4), 1-15. https://doi.org/10.1080/22929282.2019.1681845
- ASEAN education sector charts way forward post-COVID 19 (n.d). https://asean.org/asean-educationsector-charts-way-forward-post-covid-19/
- Baker, L.M. (2006). Observation: A Complex Research Method. LIBRARY TRENDS, Vol. 55, No. 1, Summer 2006, pp. 171-189 © 2006 The Board of Trustees, University of Illinois https://www.webpages.uidaho. edu/CSS506/Technique%20Readings/Baker% 202006 %20Observation%20a%20complex%20research%20method.pdf
- Bandura, A. (1977). Social Learning Theory. General Learning Press.
- Bitzer, E. M., Waghid, Y., & Frick, L. (2020). COVID-19 and the Rapid Shift to Online Learning: Reflections from South African Higher Education Institutions. Higher Education Research & Development. https://doi.org/10.1080/07294360.2020.1814394
- Braun, V. & Clarke, V. (2023). Toward good practice in thematic analysis: Avoiding common problems and be(com)ing a knowing researcher, International Journal of Transgender Health, 24:1, 1-6. https://doi.org/10.1080/26895269.2022.2129597
- Braun, V. and Clarke, V. (2021). Thematic Analysis: A Practical Guide, 1st Edition. SAGE Publications Ltd.; 1st edition (December 6, 2021). ISBN-10 1473953235: , ISBN-13 978-1473953239: https://www.amazon.com/Thematic-Analysis-Practical-Virginia-Braun/dp/1473953235
- Cabantog, C. T., & Ares, M. A. (2019). Integrating Artificial Intelligence in Mindanao Classrooms: Teachers' Readiness and Acceptance. Mindanao Review of Education. Retrieved from http://www.msuiit.edu.ph/ mindanao-review/ai-in-mindanao-classrooms/
- Cardoso, A.P., et al. (2021). Literature Analysis. In: Literature Reviews. Springer, Cham. https://doi.org/10.1007/978-3-030-75722-9\_4
- Caulfield, J. (2022). How to Cite an Interview in APA Style | Format & Examples. Scribbr. Retrieved October 2, 2023, from https://www.scribbr.com/apa-examples/interview/
- Charmaz, K., & Belgrave, L. (2012). Qualitative interviewing and grounded theory analysis. SAGE Publications, Inc.. https://doi.org/10.4135/9781452218403
- Chen, Y., & Jiao, L. (2018). The Impact of Blended Learning on Student Satisfaction: A Case Study in Higher Education. The Internet and Higher Education. https://doi.org/10.1016/j.iheduc.2018.07.003
- Chigbu, U.E.; Atiku, S.O.; Du Plessis, C.C. (2023). The Science of Literature Reviews: Searching, Identifying, Selecting, and Synthesising. Publications 2023, 11, 2. https://doi.org/10.3390/publications11010002
- Ciesielska, et al. (2018). Observation Methods. In: Ciesielska, M., Jemielniak, D. (eds) Qualitative Methodologies in Organization Studies. Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-319-65442-3\_2
- 17. Creswell, J. W., & Creswell, J. D. (2017). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches (5th ed.). SAGE Publications.

- 18. Dado, L. B., & Ortega, C. S. (2020). The Impact of Technology Integration on Student Learning Outcomes in Mindanao Colleges and Universities. Mindanao International Journal of Science and Technology. Retrieved from https://journal.msugensan.edu.ph/index.php/MIJOST/article/ view/86
- 19. Dawadi Caulfield, J. (2023). How to Do Thematic Analysis | Step-by-Step Guide & Examples. Scribbr. Retrieved September 12, 2023, from https://www.scribbr.com/methodology/thematic-analysis/
- 20. Dela Rosa, A. A., & Tenedero, J. G. (2018). Technology Integration in Philippine Classrooms: Teachers' Perspectives and Challenges. Asia-Pacific Education Researcher, 27(1), 55-64. https://doi.org/10.1007/s40299-017-0358-0
- 21. Dziuban, Chuck & Graham, Charles & Moskal, Patsy & Norberg, Anders & Sicilia, Nicole. (2018). Blended learning: the new normal and emerging technologies. International Journal of Educational Technology in Higher Education. 15. 10.1186/s41239-017-0087-5.
- 22. Eslit, E.R. (2023). Revitalizing English Language Teaching (ELT): Unveiling Evolving Pedagogies and AI-Driven Dynamics in the Post-Pandemic Era. *Preprints* 2023, 2023081774. https://doi.org/10.20944/preprints 202308.1774.v1
- 23. Farid, S. (2022). Observation. In: Islam, M.R., Khan, N.A., Baikady, R. (eds) Principles of Social Research Methodology. Springer, Singapore. https://doi.org/10.1007/978-981-19-5441-2\_25
- 24. Fujii, L. A. (2018). Interviewing in Social Science Research: A Relational Approach. Routledge. ISBN 9780415843744. https://www.routledge.com/Interviewing-in-Social-Science-Research-A-Relational-Approach/Fujii/p/book/9780415843744
- 25. Garcia, M. A., & Santiago, A. L. (2021). An Assessment of Blended Learning Implementation in Philippine Universities: Faculty Perspectives and Challenges. Journal of Research in Innovative Teaching & Learning, 14(1), 1-14. https://doi.org/10.1108/JRIT-02-2021-0005
- 26. Garrison, D. R., & Vaughan, N. D. (2008). Blended learning in higher education: Framework, principles, and guidelines. Jossey-Bass.
- 27. Garrison, D. R., & Vaughan, N. D. (2018). Blended Learning in Higher Education: Framework, Principles, and Guidelines. Jossey-Bass. ISBN: 978-1119427728
- 28. Garrison, D. R., Anderson, T., & Archer, W. (2000). Critical Inquiry in a Text-Based Environment: Computer Conferencing in Higher Education. The Internet and Higher Education, 2(2-3), 87-105.
- 29. Guest, G., Namey, E., & Chen, M. (2020). A simple method to assess and report thematic saturation in qualitative research. PloS one, 15(5), e0232076.
- 30. Hall, J. K., & Walsh, M. (2002). Teacher-Student Interaction and Language Learning Annual Review of Applied Linguistics, 22, 186-203.
- 31. Hattie, J., & Timperley, H. (2007). The Power of Feedback. Review of Educational Research, 77(1), 81–112.
- 32. Hennink, et al., (2019). What influences saturation? Estimating sample sizes in focus group research. Qualitative health research, 29(10), 1483-1496.
- 33. Hennink, M. and Kaiser, B. (2022). Sample sizes for saturation in qualitative research: A systematic review of empirical tests, Social Science & Medicine, Volume 292, 2022, 114523, ISSN 0277-9536. https://doi.org/10.1016/j.socscimed.2021.114523.
- 34. Henrich, J. (2020). The WEIRDest People in the World: How the West Became Psychologically Peculiar and Particularly Prosperous. Farrar, Straus and Giroux (Harvard University Press). ISBN: 978-0374173229
- 35. Hernani, R. et al. (2022). Emerging Opportunities in the Philippine Higher Education Institutions During the COVID-19 Pandemic. INTERNATIONAL JOURNAL OF PROGRESSIVE SCIENCES AND TECHNOLOGIES. ISSN:2509-0119, ISSN-L: 2509-0119. https://ijpsat.org/index.php /ijpsat/article/view/4082
- 36. Hodges, C., Moore, S., Lockee, B., Trust, T., & Bond, A. (2020). From Emergency Remote Teaching to Online Learning: A Snapshot of the Rapid Transition to Online Education during the COVID-19 Pandemic. EDUCAUSE Review. Retrieved from https://er.educause.edu/articles/2020/3/from-emergency-remote-teaching-to-online-learning
- 37. Holmes, G., & Miel, A. (2020). Artificial Intelligence in K-12 Education: Expanding Possibilities for Personalized Learning. Journal of Educational Technology & Society. Retrieved from https://www.jstor.org/stable/jeductechsoci.23.4.14
- 38. Holyoak, K. J., Morrison, R. G., & Schunn, R. W. (Eds.). (2020). The Cambridge Handbook of Motivation and Learning. Cambridge University Press. ISBN: 978-1108493159
- 39. Jamisola, R. A., & Lingating, M. L. (2018). Exploring Online Education in Mindanao: Challenges and Opportunities for Access and Inclusivity. Mindanao Online Journal of Education. Retrieved from http://mindanaojournal.com/exploring-online-education-mindanao/
- 40. JANNA ANDERSON, LEE RAINIE AND EMILY A. VOGELS (2021). Experts Say the 'New Normal' in 2025 Will Be Far More Tech-Driven, Presenting More Big Challenges. https://www.pewresearch.org/internet/2021/02/18/ experts-say-the-new-normal-in-2025-will-be-far-more-tech-driven-presenting-more-big-challenges/

- 41. Jimoyiannis, A., Tsiotakis, P., & Roussinos, D. (2020). Artificial Intelligence and Education: Challenges and Opportunities for Teacher Professional Development. Education and Information Technologies. https://doi.org/10.1007/s10639-020-10385-5
- 42. Johnson, D., Smith, L., Williams, J., & Lee, K. (2016). Enhancing Blended Learning through Gamification: A Meta-Analysis of its Effects on Student Motivation and Achievement. Computers & Education. https://doi.org/10.1016/j.compedu.2016.01.006
- 43. Johnson, L. R., & Smith, K. A. (2021). The Role of Technology in the 'New Normal' of Education: Opportunities and Implications. Journal of Educational Technology & Society.
- 44. Kawulich, B. B. (2005). Participant observation as a data collection method. Forum Qualitative Sozialforschung / Forum: Qualitative Social Research, 6(2), Art. 43. https://doi.org/10.17169/fqs-6.2.466 [Accessed: October 28, 2019].
- 45. Kimmons, R., & Rosenberg, J. M. (2022). Trends and topics in educational technology, 2022 edition. TechTrends, 66(2), 134–140.
- Kozma, R. B. (2018). Technology, Innovation, and Educational Change: A Global Perspective. Routledge. ISBN: 978-1138285533
- 47. Lowe, A., Norris, A. C., Farris, A. J., & Babbage, D. R. (2018). Quantifying thematic saturation in qualitative data analysis. Field methods, 30(3), 191-207.
- 48. Matthewman, S., & Uekusa, S. (2021). Theorizing disaster communitas. Theory and Society, 50(6), 965–984. https://doi.org/10.1007/s11186-021-09442-4
- 49. McNamee, R. (2020). The New Normal: Great Opportunities in a Time of Great Risk. Portfolio. ISBN: 978-0593087942
- 50. Mok, K. H., Xiong, W., & Bin Aedy Rahman, H. N. (2021). COVID-19 pandemic's disruption on university teaching and learning and competence cultivation: Student evaluation of online learning experiences in Hong Kong. International Journal of Chinese Education. https://doi.org/10.1177/22125868211007011
- 51. Nkulu-Ily, Y.(2023).Implementation of e-learning curriculum in higher education. European Journal of Open, Distance and E-Learning,25(1) 62-73. https://doi.org/10.2478/eurodl-2023-0005
- 52. Nolasco, R. L., & Cruz, R. L. (2020). Exploring Blended Learning in Philippine Higher Education: Challenges and Strategies. Journal of Philippine Higher Education, 3(1), 13-30. Retrieved from http://journals.upd.edu.ph/index.php/jphe/article/view/7507
- 53. Ong, S. G. T., & Quek, G. C. L. (2023). Enhancing teacher–student interactions and student online engagement in an online learning
- 54. Piaget, J. (1952). The Origins of Intelligence in Children. International Universities Press.
- 55. Pokhrel, S., & Chhetri, R. (2021). A literature review on impact of COVID-19 pandemic on teaching and learning. Higher Education for the Future, 8(1), 133–141. https://doi.org/10.1177/2347631120983481
- 56. Resch, K., Alnahdi, G., & Schwab, S. (2022). Exploring the effects of the COVID-19 emergency remote education on students' social and academic integration in higher education in Austria. Higher Education Research & Development. https://doi.org/10.1080/07294360.2022.2040446
- 57. Rutakumwa, R., et al. (2020). Conducting in-depth interviews with and without voice recorders: a comparative analysis. Qualitative Research, 20(5), 565-581.
- 58. Salas-Pilco, S. Z., Yang, Y., Zhang, Z. (2022). Student engagement in online learning in Latin American higher education during the COVID-19 pandemic: A systematic review. British Journal of Educational Technology, 53(3), 593–619.
- 59. Salazar, J. T., & Baluga, J. R. (2020). Readiness and Acceptance of Teachers towards AI Integration in Philippine Schools. International Journal of Advanced Science and Technology, 29(9), 2679-2688. https://doi.org/10.28945/4544
- 60. Saleh, M. (2023). The Power of AI and Future of Education is Now: How Teachers and the Taught Can Create the Teaching. https://www.facultyfocus.com/ articles/teaching-with-technology-articles/the-power-of-ai-and-future-of-education-is-now-how-teachers-and-the-taught-can-create-the-teaching/
- 61. Santiago, R. S., & Reyes, A. C. (2019). Online Learning in Higher Education: A Comparative Analysis of Faculty and Student Experiences in the Philippines. Philippine Journal of Public Administration, 63(3-4), 276-288. Retrieved from https://www.pjpa.ph/index.php/pjpa/article/view/265
- 62. Santos, M. D., & Tumala, M. B. (2019). The Use of Educational Technology in Mindanao Schools: Teachers' Practices and Perceptions. Mindanao Journal of Science and Technology. Retrieved from https://mindanaojournal.com/educational-technology-mindanao-schools/
- 63. Scherer, R., Howard, S. K., Tondeur, J., & Siddiq, F. (2021). Profiling teachers' readiness for online teaching and learning in higher education: Who's ready? Computers in Human Behavior, 118, 106675. https://doi.org/10.1016/j.chb.2020.106675
- 64. Seaman, J. E. & Seaman, J. (2022b). Turning point for digital curricula: Educational resources in U.S. higher education, 2022. https://www.bayviewanalytics.com/reports/turningpointdigitalcurricula.pdf
- 65. Selwyn, N. (2022). Education and technology: Key issues and debates. Bloomsbury Publishing.

- 66. Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines, Journal of Business Research, Volume 104, 2019, Pages 333-339, ISSN 0148-2963. https://doi.org/10.1016/j.jbusres.2019.07.039
- 67. Squires, V. (2023). Thematic Analysis. In: Okoko, J.M., Tunison, S., Walker, K.D. (eds) Varieties of Qualitative Research Methods. Springer Texts in Education. Springer, Cham. https://doi.org/10.1007/978-3-031-04394-9\_72
- 68. Stewart, W. H. (2021). A global crash-course in teaching and learning online: A thematic review of empirical emergency remote teaching (ERT) studies in higher education during year 1 of COVID-19. *Open Praxis*, 13(1), 89–102.
- 69. Sum, M., & Oancea, A. (2021). Higher education teachers' perspectives on technology use in emergency remote teaching during the global pandemic: A systematic literature review. In Proceedings of the Yidan Prize Doctoral Conference (pp. 103-124). Department of Education, University of Oxford. https://yidanprize.org/files/Proceedings-of-the-2021-Yidan-Prize-Doctoral-Conference.pdf.
- 70. Sum, M., & Oancea, A. (2022). The use of technology in higher education teaching by academics during the COVID-19 emergency remote teaching period: A systematic review. International Journal of Educational Technology in Higher Education, 19(1), 1-39. https://doi.org/10.1186/s41239-022-00364-4
- 71. Swain, J., & King, B. (2022). Using Informal Conversations in Qualitative Research. International Journal of Qualitative Methods, 21. https://doi.org/10.1177/16094069221085056
- 72. Swain, J., & Spire, Z. (2020). The Role of Informal Conversations in Generating Data, and the Ethical and Methodological Issues They Raise. Volume 21, No. 1, Art. 10. Forum Qualitative Sozialforschung / Forum: Qualitative Social Research. https://discovery.ucl.ac.uk/id/eprint/10091304/1/FQS%20informal%20conversations.pdf
- 73. Swain, J., & Zachery, S., (2020). The Role of Informal Conversations in Generating Data, and the Ethical and Methodological Issues They Raise [49 paragraphs]. Forum Qualitative Sozialforschung / Forum: Qualitative Sozial Research, 21(1), Art. 10. https://doi.org/10.17169/fqs-21.1.3344.
- 74. Terry, G. & Nikki Hayfield, N. (2021). Essentials of Thematic Analysis. CONCEPTUAL FOUNDATIONS OF THEMATIC ANALYSIS https://doi.org/10.1037/0000238-001.
- 75. Vongalis-Macrow, A., De Souza, D., Littleton, C., & Sekhar, A. (2023). COVID-19 and Education: Learning and Teaching in a Pandemic.
- 76. Vygotsky, L. S. (1978). Mind in Society: The Development of Higher Psychological Processes. Harvard University Press.
- 77. Yeung, M. W., & Yau, A. H. (2021). A thematic analysis of higher education students' perceptions of online learning in Hong Kong under COVID-19: Challenges, strategies and support. Education and Information Technologies. https://doi.org/10.1007/s10639-021-10656-3
- 78. Young, D. S., & Casey, E. A. (2018). An examination of the sufficiency of small qualitative samples. Social Work Research.
- 79. Zimmerman, M. (2019). Teaching AI: Exploring New Frontiers for Learning. EdTechTeam Press. ISBN: 978-1945167575

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