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CONVERGENCES AND DIVERGENCES IN PERSPECTIVES ON FLEXIBLE LEARNING AT A PRIVATE HIGHER EDUCATION INSTITUTION: AN EXPLORATION USING THE IRON TRIANGLE FRAMEWORK

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This paper prepared by **MARK NICKHOLE R. BERNANDINO** with the title: **"CONVERGENCES AND DIVERGENCES IN PERSPECTIVES ON FLEXIBLE LEARNING AT A PRIVATE HIGHER EDUCATION INSTITUTION: AN EXPLORATION USING THE IRON TRIANGLE FRAMEWORK "** is hereby accepted by the Faculty of Education, U.P. Open University, in partial fulfillment of the requirements for the Master of Distance Education.

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Certification of Final Thesis Manuscript Submission

I, **MARK NICKHOLE R. BERNANDINO**, declare that this Final Thesis Manuscript submission entitled "**CONVERGENCES AND DIVERGENCES IN PERSPECTIVES ON FLEXIBLE LEARNING AT A PRIVATE HIGHER EDUCATION INSTITUTION: AN EXPLORATION USING THE IRON TRIANGLE FRAMEWORK**" is not more than **23,537** words in length including quotes and exclusive of tables, figures, appendices, bibliography, references, and footnotes. The thesis contains no material that has been submitted previously, in whole or in part, for the award of any other academic degree or diploma.

MARK NICKHOLE R. BERNANDINO September 12, 2025

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Biographical Sketch

I am, Mark Nickhole Reyes Bernandino, a dedicated educator and community leader from Brgy. San Bartolome, San Leonardo, Nueva Ecija. I currently serve as the Program Coordinator of the Institute of Teacher Education at M.V. Gallego Foundation Colleges Inc., where I play a vital role in shaping the future of aspiring teachers. My commitment to education and students' development reflects my passion for learning and teaching.

Beyond my professional endeavors, I am deeply devoted to my faith and community service. I volunteer as an organist, parish youth adviser, and the Diocesan Youth Leader of the Diocese of Cabanatuan. In these roles, I had a profound impact on the lives of young people, guiding them in their spiritual journeys and encouraging them to become active members of the Church and society.

My dual commitment to education and religious service exemplifies my dedication to serving others and his community. My work as both an educator and a volunteer worker in the vineyard of the Lord showcases his versatile talents and compassionate nature.

Acknowledgement

I would like to express my deepest gratitude to Almighty God for His divine guidance, wisdom, and strength throughout this journey. Without His grace, this work would not have been possible.

To my family, thank you for your unconditional love, support, and encouragement that have been my source of inspiration. You have always been my pillar, especially during the most challenging moments.

To my friends in the Ministry (PYM, DYC, TMJ, College friends), my MDE cohort (Mimi, Sir Frances, Job, Ma'am Aileen, Doc Lio, Sir Ron) your unwavering belief in me and your constant words of encouragement gave me the strength to keep pushing forward. I am eternally grateful for your presence in my life.

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Finally, to my research adviser, Dr. Primo Garcia, your tireless dedication, thoughtful feedback, and encouragement have been instrumental in the completion of this work. Thank you for your patience and belief in my potential. Thank you all from the bottom of my heart.

Dedication

This work is lovingly dedicated to Papa Alex, Claire, Chiqui, Chon, Lemon, Chuchu, and Tanda.

To Papa Alex, your strength, wisdom, and love have been the foundation of everything I do. Thank you for always being my guiding light and inspiration.

To Claire, Chiqui, and Chon, your unwavering support and encouragement have been a constant source of motivation for me. I am forever grateful for your belief in me.

To Lemon, Chuchu, and Tanda (My pets), your presence in my life brings joy and comfort in ways words cannot express. This journey would not have been the same without you.

You all hold a special place in my heart, and it is to each of you that I dedicate this work.

Research Abstract

This study investigated the convergences and divergences in stakeholder perspectives—specifically faculty, students, and administrators—on the implementation of flexible learning (FL) in a private higher education institution and explored what accounted for such convergences and divergences.

Framed in the Iron Triangle framework, which highlights the interconnected dimensions of access, cost, and quality, the research adopts an abductive case study approach to explore how these stakeholder perspectives, when triangulated with institutional responses to challenges encountered during FL implementation, reflect the tensions arising among issues of access, cost, and quality.

Findings showed that the extent to which these dilemmas are resolved or left unresolved is shaped by their perspective of FL. Specifically, the persistence of the dilemmas can be attributed to the perspective that FL is just a solution to the disruptions caused by the pandemic. While the convergent theme that portrays FL as a combination of traditional and digital modalities provides a plausible basis for institutional engagement in FL, this limited understanding of the relationship between technology and learning also explains the institution's inability to sustain FL beyond the immediate crisis.

These findings provide implications on the critical role of social perspectives and their interactions in the emergence of the tensions but also the extent to which they are addressed. Recommendations for educational administrators implementing FL are presented along with further areas for research.

Keywords: *Flexible Learning, Iron Triangle, Higher Education, Abductive Research*

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Chapter I

INTRODUCTION

Background of the Study

The educational landscape has changed due to the COVID – 19 pandemic with higher educational institutions being one of the highly affected sectors. With an increasing number of cases spreading to various territories and confirmed human-to-human transmission, the World Health Organization declared the outbreak as a Public Health Emergency of International Concern (PHEIC) on 30 January 2020. The Philippines was place under the first Enhanced Community Quarantine (also known as lockdown) on 17 March 2022. Due to the high risk of being infected by the disease, the traditional face-to-face or classroom setting has to be in minimal use for safety and of physical distancing requirement. The Commission on Higher Education (CHED) presented guidelines on the implementation of flexible learning (FL) in the country during pandemic times. The emergence of the COVID-19 pandemic brought unprecedented disruptions in the lives of people all over the world. It came unexpectedly where no one was ready enough to brace its impact on society. The Philippines in particular, faced a critical situation due to the rise of said health crisis. For higher education institutions, avoiding and limiting the risks of infection of the academic community has become a primordial concern. Hence, with the implementation of community quarantine, conduct of classes needed to be immediately suspended. The herculean challenge then was how to continue teaching and learning beyond the usual face-to-face instruction.

Thus, it has become an urgent need to explore other innovative learning modalities that will facilitate migration from traditional to flexible teaching and learning options. As learners are differently situated in terms of time, pace, and place, universities had to explore options that allow customization of delivery modes responsive to students' need for access to quality education. The situation also provided the students the opportunity to choose the delivery mode most convenient to them as early as the time of their enrollment. The paradigm shifts therefore in the teaching and learning process in Philippine higher education necessitates collaboration among stakeholders and strengthening the culture of sharing knowledge, resources, and best practices. Everyone is called to be part of this transition and transformation towards the new normal. To achieve this, "humanity needs leadership and solidarity to defeat the coronavirus" (UNDP, 2020). Therefore, universities had to choose the mode of delivery in teaching that is both beneficial to the learners and the facilitators of learning. With the advancement of technology, the use of the Internet is the easiest and best way to convey the learning content that students need during their self-managed learning period.

In both the Philippine and global contexts, flexible learning (FL) has emerged as a response to the growing demand for accessible and adaptable education. The literature generally portrays FL as a promising approach, particularly in reaching geographically and economically marginalized learners (Camara, 2022). Students appreciate its convenience and autonomy, but concerns remain about engagement, unequal access to technology, and varying levels of support (Salmon, 2013; Baticulon et al., 2021). Faculty members report increased workload, lack of training, and burnout (Rapanta et al., 2020; Crawford et al., 2020), while institutions attempt to balance cost-efficiency with quality delivery (Hodges et al., 2020).

Much of the current literature is descriptive, focusing on stakeholder experiences without offering a theoretical explanation of how these challenges came to be or how institutional dynamics influenced these outcomes. While these surface-level accounts are important in mapping out the landscape of FL implementation, they do not provide a deeper explanation of systemic factors that are at play in the adoption of FL.

A closer examination of the literature would indicate that while educational appreciate the access that FL provides, their concerns also revolve around issues of access to technology, the quality of instruction and assessment, and the importance of acquiring new technologies and implementing training of faculty and students, which all require institutional resources (Adedoyin & Soykan, 2020; Bozkurt & Sharma, 2020; Rapanta et al., 2020). In other words, issues of access, quality, and cost are already implicitly acknowledged in the literature. To better understand the interplay of the factors that drive these outcomes, I adopted Daniel et al.'s (2009) Iron Triangle framework, which argues that in education, factors of access, cost, and quality are tightly interrelated and that prioritizing one compromises the others, leading to trade offs and compromises in others. To understand how the interplay of factors in the context of FL, this study looked into the experiences of a College that adopted FL as a teaching and learning approach during the pandemic. In doing so, the study hoped to go beyond managerial or "official" version of FL implementation (Czerniewicz et al., 2020) toward understanding how different groups in the organization differently experience it, and how these multiple convergent and divergent perspectives can reveal the underlying processes that give rise to the the tensions as well as the reasons for their emergence or even persistence. The study employed an abductive case approach since my aim was neither to validate the Iron Triangle Theory nor to

develop new theories on FL implementation. The iterative movement between data, theory, and interpretation has enabled me to find unexpected patterns, particularly in these convergent and divergent perspectives, and facilitated a more contextual explanation of the processes involved in the emergence of these tensions in the case of an educational institution implementing FL.

[1] See

https://ched.gov.ph/wp-content/uploads/CMO-No.-4-s.-2020-Guidelines-on-the-Implementation-of-Flexible-

Statement of the Problem

In view of the foregoing, the study aimed to answer to answer the following research questions:

1. What are the perspectives on flexible learning and its implementation in the institution?

2. What are the convergences and divergences in these perspectives on flexible learning and its implementation in the institution?

3. How and to what extent would the Iron Triangle framework account for these convergences and divergences??

Significance of the study

This study was both timely and relevant as educational institutions nationwide and globally were increasingly incorporating distance education-inspired modalities, such as flexible learning (FL), into their curricula. The Commission on Higher Education (CHED) reinforced the significance of this shift, asserting that FL had

become the standard in education, marking a permanent departure from traditional systems (CHED, 2021). Universities worldwide had also committed to continuing flexible class structures due to the convenience and other affordances they offered.

This research contributed theoretically by examining how cost, access, and quality were interrelated in the context of a higher education institution that adopted flexible learning during a public health crisis. It attempted to show how stakeholders' perspectives of FL shaped how they acted on the dilemmas between issues of access, quality, and cost. The study shed light on how people's viewpoints on FL accounted for what the institution did and did not do in relation to the said tensions.

By employing an abductive research approach grounded in the Iron Triangle framework—which conceptualized the interdependence of access, cost, and quality—this study contributed theoretically by both advancing the literature on flexible learning (FL) implementation in transitional educational contexts and extending the Iron Triangle theory itself. It demonstrated that stakeholder experiences during institutional shifts—such as the move from emergency remote teaching to sustained hybrid models—were shaped not by isolated challenges, but by evolving tensions among the three dimensions of the triangle. Rather than treating access, cost, and quality as static benchmarks, the study framed them as negotiated trade-offs influenced by the lived realities and priorities of faculty, students, and administrators.

This reorientation enriched the Iron Triangle by transforming it from a systems-level planning model into a dynamic, sense-making framework that captured how educational actors responded to shifting demands in real time. By introducing temporality and contextual fluidity into the model, particularly through differing stakeholder views on whether FL was a temporary solution or a long-term direction, the study enhanced the model's relevance for post-pandemic education. Ultimately, it

deepened the understanding of FL implementation in times of transition while offering a more flexible and context-sensitive interpretation of the Iron Triangle.

The use of abductive research grounded in the Iron Triangle as a theoretical lens significantly advanced the broader literature on flexible learning (FL) implementation in educational institutions undergoing transition. By interrogating the dynamic tensions among access, quality, and cost—core components of the Iron Triangle—this study unearthed how institutions strategically adapted FL models to navigate resource constraints, policy shifts, and student diversity. Theoretically, this work extended the Iron Triangle beyond its conventional application in public policy and healthcare by contextualizing it within educational transformations, emphasizing its fluidity and interdependence under transitional pressures. It also enriched the discourse on FL by revealing that trade-offs were not fixed but could be negotiated through innovation and institutional agility. Thus, the study not only deepened understanding of how FL was operationalized during periods of change but also reshaped the Iron Triangle itself, positioning it as a flexible diagnostic tool rather than a rigid framework—highlighting a novel and necessary contribution to both theoretical and practical domains.

Research of this kind was beneficial to the administrative and academic leaders of higher education institutions. The study was significant in understanding the different challenges, adjustments, and interventions adopted by faculty and students to be able to fully embrace this new mode of learning. Their personal experiences assisted in providing support to improve the flexible learning experience of the institution.

Finally, the results of this study also served as a reliable basis for future practice, research, and policymaking in higher education institutions.

Scope and Delimitations

This study focused on the experiences and perspectives of participants in an educational institution. While the study described the perspectives in detail and discussed them in context to enhance the transferability of the study's findings (Lincoln and Guba, 1985), the results and the conclusions drawn from the interview data could not be considered generalizable to the broader population.

The proponent chose to apply the qualitative research process to capture the multiple realities of institutional leaders, tertiary faculty members, students, and other stakeholders in the private higher education institution. While they may have shared similar experiences with their counterparts in the higher education sector, their responses were also shaped by the context of their personal experiences in implementing a flexible learning approach.

As previously mentioned, the study intended to provide an in-depth understanding of the tensions faced by educational institutions transitioning to flexible learning, using the Iron Triangle Framework as a theoretical lens. It was concerned with determining the dynamics of the interactions between quality, access, and cost considerations, and how these shaped the implementation of flexible learning in an institution—with the aim of developing practical and theoretical implications that could benefit similar institutions.

Given the limited studies in this area, the study placed more emphasis on analyzing how institutional practices unfolded (how), the reasons behind such practices (why), and the perceptions of their outcomes (experiences), rather than determining the commonality of these experiences across different institutions

Chapter II

REVIEW OF RELATED LITERATURE

Much of the literature on flexible learning was conducted against the backdrop of the COVID-19 pandemic. In this section, I presented the perspectives of students, teachers, and administrators on flexible learning within this contextual background.

Students' Perspectives

Students largely saw FL as providing more access—facilitating more opportunities to learn anytime and anywhere—and perceive flexibility as a means to overcome geographic or time-based barriers (Bao, 2020; Dhawan, 2020, Erlam et al, 2021; Chen et al, 2022). FL was seen positively for its ability to provide accessibility to education, regardless of physical and geographical constraints (Bao, 2020). Online platforms facilitated independent learning and self-regulation, fostering digital literacy among both students and teachers (Bozkurt & Sharma, 2020).

While students see the affordances of FL, they also see it as being hampered by challenges like self-motivation, unstable internet connectivity, and poor study environments (Fabito et al., 2020; EUA, 2023; Ngubane, 2021; Refae and Kaba, 2021). The research of Samala et al. (2022) on students' perceptions of online learning during the pandemic revealed that while 89% of students supported online education,many found it less enjoyable due to increased assignments and challenges such as poor internet connectivity, inadequate independent study skills, and low motivation.

According to a study at a South African University of Technology, students reported that online instruction was limited by their limited access to reliable internet, inadequate digital devices, and unsuitable home learning environments, which collectively hindered their academic performance and increased stress levels (Ngubane, 2021).

Faculty Members' Perspectives

Faculty members internationally value the pedagogical potential of flexibility but also express concerns about maintaining rigor and ensuring equitable assessment (Frontiers, 2024; Müller & Mildenberger, 2022). Additionally, FL is also seen as accommodating diverse instructional strategies, incorporating synchronous and asynchronous methods (Hodges et al., 2020; Draxler-Weber et al, 2022) that catered to different learning styles, thereby promoting a more inclusive educational experience (Means et al., 2021). The use of digital platforms was also reported as enabling a more personalized approach to learning, allowing students to engage with materials at their own pace (Bond et al., 2021). In the Philippine context, studies at Agusan del Sur College show instructors appreciate flexible learning's role in sustaining education but also sees its potential threatened by deficits in training, technical support, and infrastructure ((Ulanday et al., 2021).

On the other hand, findings revealed that educators also see FL adoption as hindered by numerous obstacles, including technological difficulties, lack of institutional support, and challenges in student engagement. Teachers reported difficulties in accommodating diverse learning needs in virtual settings, with

overcrowded classrooms, inadequate training, and resource constraints posing significant obstacles (Rudenko et al, 2020; Ngubane, 2021; Refae and Kaba 2021, Kaginari 2023,;Wong 2023). Educators in rural areas expressed the critical challenges in implementing web-based collaborative learning. Key barriers included insufficient technological infrastructure, limited digital literacy among both teachers and students, and a lack of professional development opportunities (Ngubane, 2021). Bond et al. (2021) noted that many teachers also expressed struggle in balancing synchronous and asynchronous instruction due to inadequate prior training in digital teaching methods. Faculty perspectives also reveal tensions in assessment practices. Concerns about cheating, unequal access to resources, and the validity of online examinations are common (Gloria, 2025).

Institutional or Administrative Perspectives

Institutions such as the European University Association (EUA, 2023) and the University of the Philippines Open University (Moldez et al., 2024; UPOU, 2025) see flexible learning as a strategic tool for widening participation, enhancing resilience, and sustaining educational operations during disruptions. Educational institutions looked at FL as an avenue for them to build better tools, curricula, and support systems for remote education, particularly during unforeseen crises (Tsai et al. 2020). Many institutions also expressed the important role that technological infrastructure plays in implementing FL. They have cited significant barriers, including unstable internet connectivity, lack of technological resources, and inadequate learning environments at home. Higher education institutions, particularly those in developing regions, encountered significant academic and psychosocial challenges due to the rapid shift to online learning. These findings emphasize the necessity of bridging the digital divide

to provide equitable educational opportunities for all students. In the Philippine context, Camara (2022) highlighted the struggles of Pangasinan State University (PSU) in implementing FL during the 2020-2021 academic year, identifying issues such as device compatibility and resource accessibility on the part of the students and teachers.

Implications for this research

This body of literature also indicates that teachers, students and administrators also have different, if not conflicting, perspectives on priorities and experiences during the implementation of flexible learning (Johnson 2021; Smith and Lee , 2022); Amini et al.,2024). While these studies were not interested in theorizing, a deeper analysis would indicate that the experiences they tell also revolve around issues that matter to educational organizations—- access, cost, and quality (Gaba and Li, 2015; Garraway et al., 2019; Kewell et al., 2017). This observation is aligned with the Iron Triangle Theory which argues that three factors of access, cost and quality are bonded and are characterized by tensions between each other (Daniel et al, 2009; Nsamba et al, 2021: 37-52). The concept of iron triangle is highly significant specifically to all institutions who are wishing to secure a balance of components between quality of instructions, access/inclusivity and cost-effectiveness. This study aimed to fill this gap by examining the experiences of a college adopting FL from the point of views of different stakeholders and from a theoretical lens that looks into the dynamics between the issues of access, cost,and quality.

The literature review has also shown that there is very little empirical studies on the Iron Triangle in the context of flexible learning. For instance, Nsamba (2021) sued the theory to assess the cost effectiveness of university resources . This is inline with the dearth of studies in financial management of distance education (Li and Wang 2021; Larazeva 2024). The very few studies that imply the framework focused on the university executives perspectives (Immerwahr et al. 2008). Even in these articles, it is quite evident that executives' view of the tension between quality and cost does not align with that of the general public (Immerwahr et al. 2008). Additionally, the few studies that employed the Iron Triangle Framework in other disciplines or sectors, for example healthcare (e.g., Delaronde, 2019, Marginson, 2020), also indicate the institutional policies and programs are viewed and experienced differently by different groups in the organization, highlighting the tensions surrounding tradeoffs between and among cost, access, and quality (Kissick, 1994; Delaronde, 201; Dowd & McDonald, 2024). In adopting the Iron Triangle Framework, the study has contributed additional insights into this theory. Given that much of the empirical work on flexible learning studies are descriptive and not theoretical, framing the perspectives of different groups in an educational institution into a theoretical lens not only provided a more systematic understanding of the issues at hand but also a sense making device by which administrators can manage these issues.

Much of the research on institutions undergoing FL implementation were also framed within a functionalist framework (Gómez-Diago, 2019). Conducted with the intention to analyze the dysfunctions in the phenomenon with the end-goal of re-aligning it for stability, these studies focused on capturing the perceptions and experiences of various actors in the educational institutions to be able to identify the

challenges and provide solutions to address such issues. The range of solutions ranged from faculty development (Trust & Whalen, 2020; Peralta et al., 2024), to digital inclusion (Crawford et al., 2020) and effective instructional design (Martin & Bolliger, 2018). To better understand how these perspectives relate to each other, there is a need to adopt a more interpretivist approach, which emphasizes multiplicity of participants' viewpoints on phenomena to not just describe realities but also to understand them in their contexts (Pervin, and Mokhtar, 2022). In doing so, the study aimed to examine the perspectives and their relationship with each other and how such relationships can be explained by the Iron Triangle given the context of the participants.

Theoretical Framework

To understand the stakeholders perspectives on flexible learning and their experience of its implementation, the study shall use the Higher Education Iron Triangle Framework. It is a visual triangular model representing three factors of access, cost and quality and argues that these three factors are bonded and interdependent, and any change in one of them affects the other two, either individually or collectively (Daniel et al, 2009; Nsamba et al, 2021: 37-52). The concept of iron triangle is highly significant specifically to all institutions who are wishing to secure a balance of components between quality of instructions, access/inclusivity and cost-effectiveness. While the theory is institutional in approach, I argue that the experiences as shared by the participants in past studies on FL implementation deal with broader aspects of cost, access, and quality (Daniel, 2012) . By examining the perspectives of multiple stakeholders (instead of singular) in an educational institution (i.e., teachers, students, and administrators), this study has been able to draw out the areas

for convergences and divergences, which in turn, allowed me to interrogate the tensions between the three elements of the Iron Triangle Theory. Using the abductive research approach (Dubois & Gadde, 2002), the theory has allowed me to go beyond the individual stories by the stakeholder and elevate the theoretical discourse to factors and concerns that matter to educational institutions.

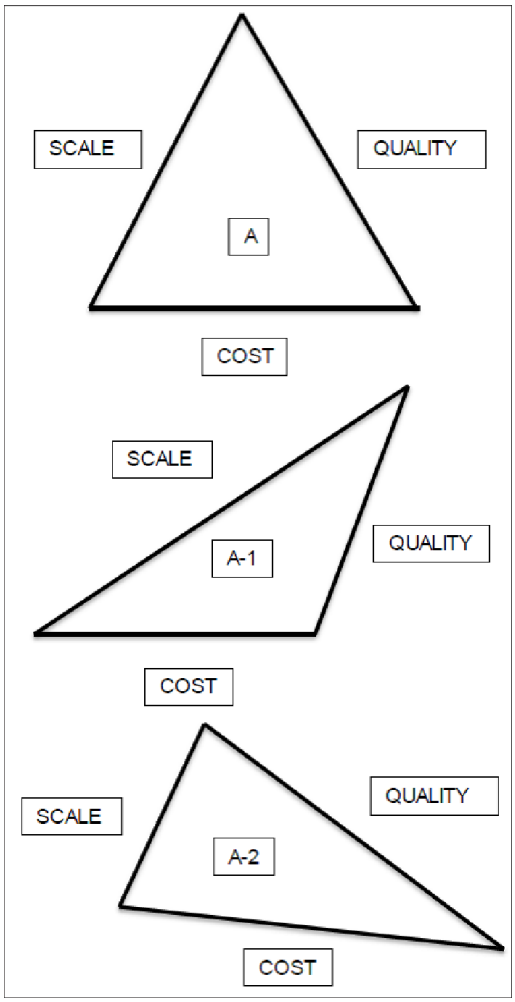

Figure 1: The Iron Triangle of Education

Figure 1 shows the basic triangle as outlined by Daniel and Uvalic-Trumbic with equal length sides representing the three factors, in this model, of scale, quality and cost. The assumption is that increases in one point of the triangle will inevitably lead to stresses in the other points. This is particularly assumed to be so because of the relatively fixed costs of the physical infrastructure of universities and the number of

teachers they employ due to the relatively small cohorts that each teacher can manage to teach successfully (there are many debates worldwide about optimum class sizes and effects on pedagogic quality but the physical limitations of most existing classroom sizes in expensive buildings and their occupancy rates are universal). They go on to visualize changes within this triangle of inter-related factors (Figure 1-A). These changes make the basic point that with conventional teaching in classrooms there is little scope to alter these factors advantageously because improving one factor will worsen the others. Pack more students into the class and quality will be perceived to suffer (Figure 1- A1). Equally, try to improve quality by providing more learning materials or better teachers and the overall cost will go up (Figure 1- A2). In effect the area under the triangle does not change because of these physical limitations.

Initial conceptions presented the bond between the three factors as "unbreakable". To address this, several authors have introduced modifications to the concept. The basic triangle as outlined by Daniel and Uvalic-Trumbic with equal length sides representing the three factors, in this model, of scale, quality and cost. The assumption is that increases in one point of the triangle will inevitably lead to stresses in the other points. (Mulder, 2013) has recently modified this model from a 2-dimensional to a more 3-dimensional one, focusing on the accessibility, quality and efficiency of education as the three factors, the aim for all being maximization of the factor rather than minimization as it is for cost in the original model. Mulder also postulates that a radical intervention such as OER, rather than just technology, can end up increasing all three factors and so enlarging the educational space represented by the triangle and thus increasing the numbers of people participating (Mulder, 2013).

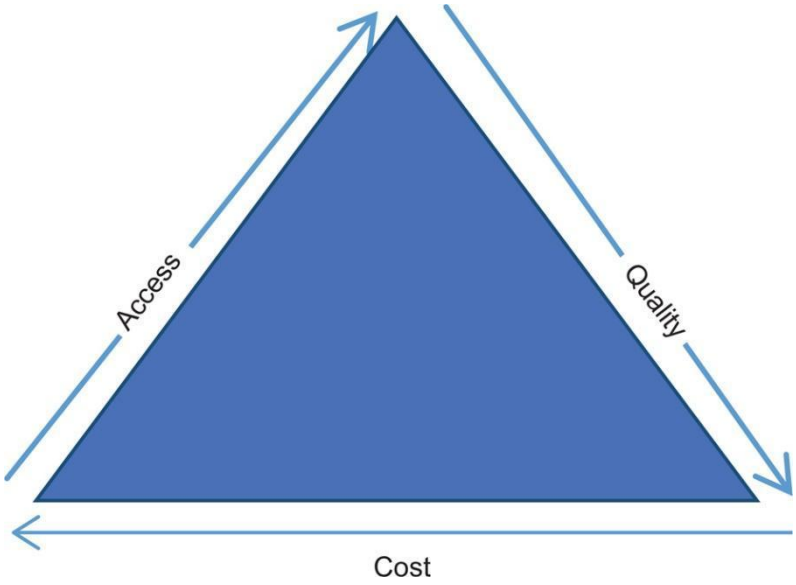

Figure 2: Iron Triangle

Figure 2 shows the HE iron triangle of equal sides.

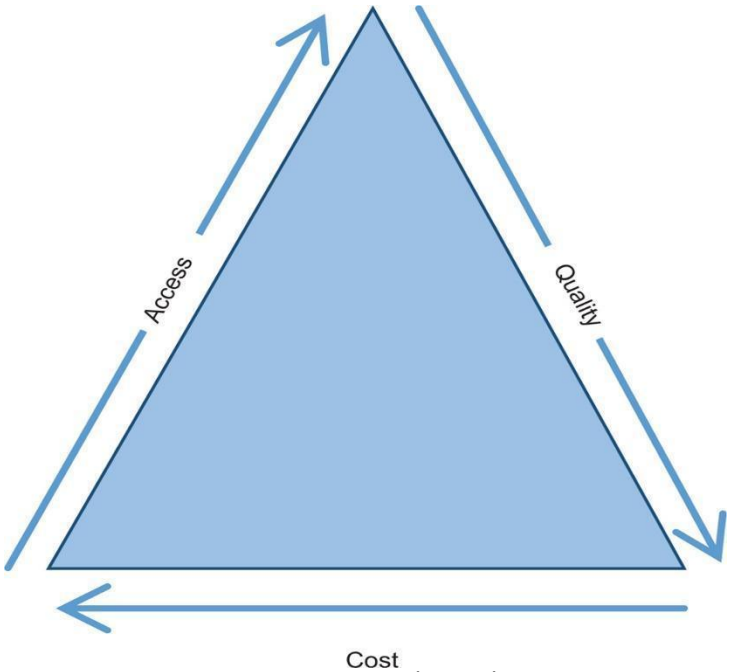

Figure 3: Daniel et al (2009) Triangle

Figure 3 shows Daniel et al.'s (2009) triangle that is flexible and can be adjusted.

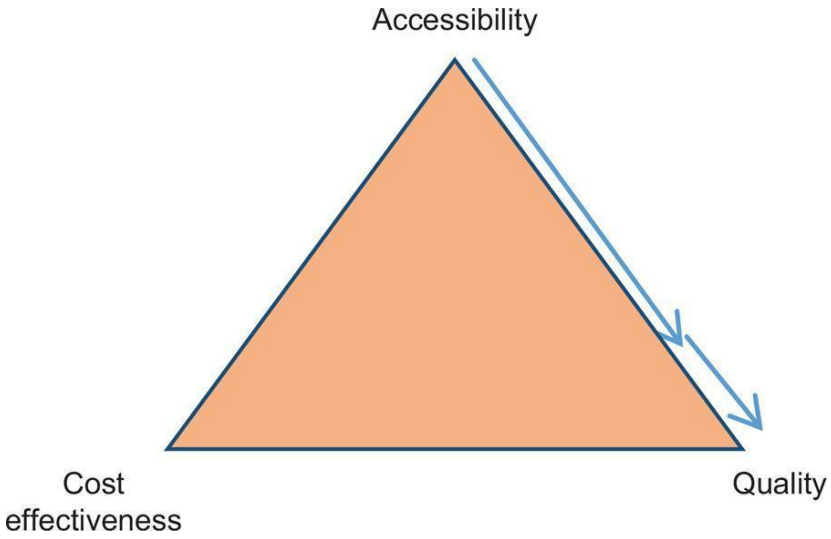

Figure 4a: Power & Gould Morven's (2011) student push and staff pull alignment

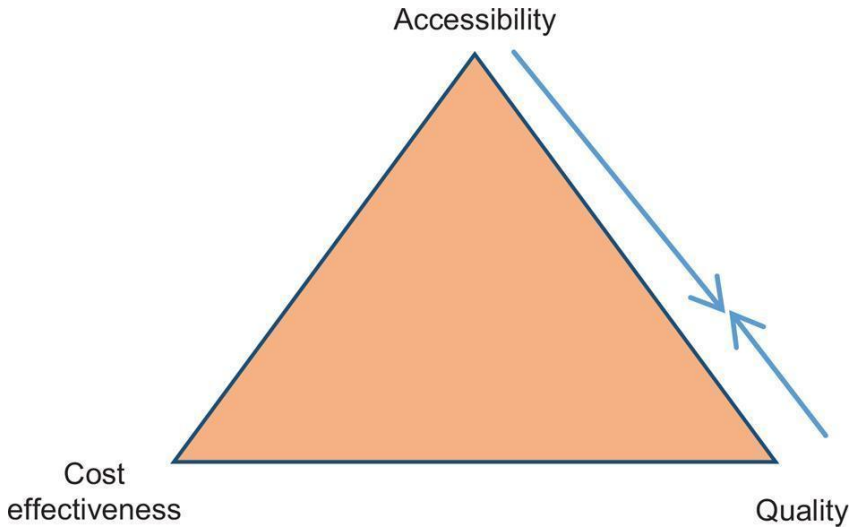

Figure 4b: Power & Gould Morven's (2011) student push and staff push back non alignment

Figures 4a and 4b depict Power and Gould-Morven's (2011) modified triangle. Figure 4a shows student push and staff-pull alignment; and Figure 4b shows student push and staff push-back non-alignment.

Operational Definition of Terms

Convergences: Shared perspectives, commonalities, or agreements among different stakeholders (students, faculty, and administrators) regarding the benefits, challenges, and implementation of flexible learning in a private higher education institution.

Divergences: Disagreements, contrasting viewpoints, or conflicting opinions among different stakeholders (students, faculty, and administrators) regarding the benefits, challenges, and implementation of flexible learning in a private higher education institution.

Flexible Learning: A pedagogical approach that offers students the freedom to choose when, where, and how they learn, incorporating a variety of instructional methods and technologies to accommodate diverse learner needs and preferences.

Implementation: The process of putting flexible learning into practice within a private higher education institution, including the development, adoption, and integration of various flexible learning strategies and technologies.

Perspectives: The viewpoints, opinions, and attitudes of students, faculty, and administrators towards flexible learning, including their perceptions of its effectiveness, challenges, and potential benefits.

Private Higher Education Institution: A non-government educational institution that operates on a self-supporting basis, offering undergraduate and postgraduate programs, and governed by a private board of trustees.

Stakeholders: Individuals or groups who have an interest or concern in flexible learning, including students, faculty, administrators, and support staff within a private higher education institution.

Chapter III

METHODOLOGY

In this chapter, I explored the key building blocks of research methodology in greater detail. I delved into research design and approach, data collection techniques, data analysis methods, trustworthiness of the research, and ethical considerations.

Research Design

To have an in-depth understanding of the nature of flexible learning adopted in the educational institution as well as the tensions it faced brought about by the perceived interactions between the issues of quality, access, and cost, I adopted a qualitative research methodology. Qualitative research is defined as "...an inquiry process of understanding a social or human problem based on building a complex, holistic picture, formed with words, reporting detailed views of informants, and conducted in a natural setting" (Creswell, 1994: 1-2). In qualitative research, the assumption about the nature of reality is that it is subjective, multiple, and socially constructed—shaped by individuals' experiences, contexts, and interactions. Rather than seeking a single, objective truth, qualitative inquiry acknowledges that reality is fluid and interpreted differently by each participant, emphasizing the importance of understanding meaning from the perspectives of those being studied. Cresswell (2014) stated that qualitative research relies on data obtained by the researcher from first-hand observation, interviews, questionnaires, focus groups, and participant-observation, recordings made in natural settings, documents and artifacts. The data are generally non-numerical.

Research Approaches

a. **Case study**

The study adopted a case study approach to analyze the dilemmas in quality, cost, and access issues arising from interactions between the institution's flexible learning practices, initiatives, and actions by different actors or participants, as well as the social context in which they were situated (Yin, 2003). This approach allowed the study to develop a deeper, context-based, and interpretive understanding of the how's and why's of the initiatives that were undertaken or not, the impacts of such initiatives, the challenges they faced, the actions they took, and the ensuing effects of these decisions (Yin, 2003).

b. Abductive approach

Adopting the Iron Triangle as a theoretical lens in studying an educational institution that has recently undergone such change can not only provide a clear interpretive focus but also contribute to the advancement of the theory. To be able to do this, an abductive research approach was taken — one that combine elements of induction and deduction to gain new theoretical insights Lipscomb, 2012, Delve & Limpaecher, 2023)

As previously mentioned, my study has been conducted with a abductive qualitative research approach, guided from its inception by the Iron Triangle of Education conceptualized by Daniel (2012), which articulates the interdependent and often competing dimensions of educational quality, access, and cost. The research framework is intentionally designed not merely to describe experiences of flexible learning (FL) implementation, but to explain how these experiences reflect and negotiate systemic educational tensions.

As defined by Timmermans and Tavory (2012), abductive reasoning is an iterative, theory-informed mode of inquiry that oscillates between empirical observations and conceptual frameworks. Abductive analysis allowed the researcher to begin with empirical data from interviews and continually move between data and theory, refining insights and theoretical understandings in the process.

This study intentionally departs from that tradition. Rather than stopping at surface-level themes, it applies the Iron Triangle as a lens to interpret how the tensions between quality, access, and cost manifest in the lived experiences of teachers and students navigating FL environments.

The Iron Triangle functions here not as a fixed theory to be tested, but as an interpretive framework that facilitates deeper understanding of systemic trade-offs. For example, a faculty member's comment on increased workload is interpreted not merely as individual stress, but as an institutional manifestation of the drive to maintain instructional quality at minimal cost. Similarly, a student's limited access to digital content is not seen simply as a connectivity issue, but as a reflection of access constraints when cost-saving measures are prioritized. Through abductive analysis, these experiences are continually reinterpreted in light of the Iron Triangle framework, producing findings that move beyond anecdotal narrative toward systemic insight.

Unlike deductive research that tests pre-formulated hypotheses, or inductive research that builds theory exclusively from raw data, this abductive study positions itself in the methodological middle ground. It maintains sensitivity to participants' voices while actively engaging with conceptual structures. Drawing on the work of Dubois and Gadde (2002), this study views theory not as a boundary but as a dynamic tool that both informs and is informed by empirical realities. In doing so, it offers a more

explanatory model of inquiry—one that is responsive to both local complexity and global frameworks.

Three key contributions emerge from this abductive, theory-informed design:

a. It links the local narratives of FL implementation to broader discourses on educational policy and reform, offering a meta-analytical lens that highlights systemic challenges beyond individual experiences.
b. It achieves a form of analytical generalizability by situating findings within a conceptual schema (the Iron Triangle) that is widely applicable across educational contexts.
c. It yields practical insights for institutional decision-making, enabling administrators and policymakers to recognize which dimension (quality, access, or cost) is being strained, and to devise more targeted and balanced interventions.

While grounded in theory, this research remains methodologically rooted in qualitative inquiry. It does not aim to measure statistical relationships or derive numerical generalizations. Instead, it embraces the complexity, nuance, and contextual depth that qualitative methods afford. Unlike phenomenology, which seeks to bracket lived experience, or ethnography, which immerses in cultural worlds, this study is defined by its analytical purpose: to interpret narratives through a conceptual lens in order to surface structural tensions.

In alignment with Age (2011), this study exemplifies “theoretically driven qualitative research,” where conceptual frameworks are not retroactively imposed but actively shape the research questions, data interpretation, and overall analytic trajectory. By foregrounding the Iron Triangle and employing an abductive stance, the study is able to articulate with confidence not only what participants experience, but

what those experiences reveal about the structural forces at play in educational reform.

Research Locale

The proponent chose to apply this case study to the case of Nickhole's College as the model school to study because of their evident transition of modality to flexible learning.

Situated in the central plains of Luzon, Nickhole's College is one of the oldest higher education institutions in the province and the only professional institution in the Region committed to uphold the vision of its founder to achieve a better life by providing full opportunities where every graduate and member of the community are transformed into competent and morally upright professionals dedicated towards the development of a better society. Currently, the school offers junior and senior high school, teacher-education program, criminal justice education, nursing, business administration and information system. Because of the current pandemic, the institution was forced to migrate their mode of teaching into flexible learning wherein they categorized students based on their capacity to access education: Category 1 for purely modular students, Category 2 for mixed students – who wish to use printed modules and can access online classes and Category 3 for purely online students.

As a response to the on-going challenge, the school leaders during one of the academic council meetings unanimously agreed to continue its operation by using flexible learning whether the country will reach the endemic stage of the health crisis.

50:50 This particular decision was based from the fact that both teachers and students gained huge benefits from the said modality. [1]

Just like other colleges in the country, the College considered the key policy directives issued by the Commission on Higher Education (CHED) at that time to guide higher education institutions (HEIs) in transitioning to Flexible Learning (FL). . One of the most significant issuances was **CHED Memorandum Order (CMO) No. 4, Series of 2020**, titled *"Guidelines on the Implementation of Flexible Learning."*

Key points of the guidelines include:

- **Learning Continuity**: Institutions were required to develop Learning Continuity Plans (LCPs) tailored to their resources and the learning needs of students.
- **Institutional Autonomy**: HEIs were given the freedom to choose and design their own FL modalities—be it online, offline, or blended—depending on capacity and context.
- **Capacity Building**: CHED encouraged HEIs to invest in faculty training, ICT infrastructure, and instructional material development to support FL.
- **Equity and Accessibility**: Emphasis was placed on ensuring that no student is left behind, with calls for inclusive practices, especially for learners in geographically isolated and disadvantaged areas.

These guidelines reflect CHED's commitment to educational resilience, digital transformation, and learner-centered approaches during and beyond the pandemic.

[12] Based on author's participation in the May 2022 academic heads meeting.

Data collection

Data were collected through semi-structured interviews with the participants. The selection of four (4) student council officers as respondents is based on their unique position as the formal representatives of the student body, serving as intermediaries between the administration and students. They regularly receive, document, and communicate student complaints, concerns, and feedback related to academic modalities, institutional services, and learning conditions. This role provides them with a broad and reliable perspective on student experiences. The strategically chosen group has yielded sufficiently rich and repetitive themes, especially when each officer holds a different position within the council, ensuring diversity in student representation. Their deep understanding of context (UC)—rooted in direct involvement with institutional processes and policies—further strengthens the reliability of their insights.

The faculty member selection criterion requiring a minimum of three years of teaching experience ensures that respondents have taught under both previous (traditional) and current (flexible) learning modalities. This allows them to share their perspectives and experiences on the transition to FL and relate it with their previous experiences in the previous mode of instruction. More experienced faculty members possess institutional memory, having observed patterns in student performance, institutional support, and curriculum delivery over multiple academic cycles. They also receive regular feedback from students, allowing them to triangulate their own professional observations with learner perspectives. The three-year threshold filters out those who may lack exposure to varied instructional contexts, thereby ensuring responses are grounded in both breadth and depth of experience.

The inclusion of administrators—specifically the heads of academic units learning support units, technology support unit, and adminsitration—recognizes their critical roles in shaping and overseeing flexible learning implementation from an institutional management perspective. Deans oversee academic programs and ensure alignment with quality standards, while the head of finance evaluates the cost implications of maintaining or improving delivery systems. The registrar provides insights into enrollment trends, student demographics, and operational processes affecting access. The director for instructions supervises curriculum implementation and faculty performance, ensuring academic quality. Finally, the MIS head is central to technological infrastructure, which underpins access and cost-efficiency in flexible learning. Their combined perspectives reflect decision-making at the macro level, offering essential input on how institutional policies, budget priorities, and technological capacities interact to either stretch or constrain the Iron Triangle.

In summary, the number of participants was also based on several factors -- the perspectives and experiences that the participants can provide based on their role in the institution, saturation of data to signal the adequacy of gathered data, availability of respondents, and time provided to the researcher to conduct the data gathering.

Research Instruments

In this research, semi-structured interviews were used as the primary method for gathering data. This approach was ideal for exploring the nuanced perspectives of the participants while maintaining enough flexibility to delve deeper into unexpected areas of interest. The semi-structured format allowed me to prepare a core set of five questions that guided the conversation, ensuring to cover essential topics related to the research. However, the open-ended nature of these questions also enabled

participants to share their insights and experiences in their own words, leading to rich, detailed responses. This method struck a balance between structured data collection and the freedom to explore emerging themes, providing a comprehensive understanding of the subject matter. See Appendix A for a copy of the interview questions.

Data Analysis

The interview data were analyzed thematically to identify patterns, relationships, and tensions in the perspectives and implementation of Flexible Learning (FL). The process began with initial coding, where meaningful excerpts from participants were assigned descriptive labels. These codes were then grouped into broader categories, which developed into themes aligned with the research questions (Miles and Hyberman, 1994). For example, the excerpt *"It's actually the combination of online teaching and learning and limited face-to-face teaching and learning"* (AD 2, Director for Instruction, Female) was coded as *"Combination of Online and Face-to-Face."* Similarly, *"Flexible learning (sigh) is using either online, face-to-face, plus modular teaching"* (FC 2, Faculty, Female) was coded as *"Multiple Modes of Delivery."* When clustered together, these codes contributed to the emerging theme: *"Flexible Learning as a Combination of Traditional and Digital."*

Table 1: Viewpoints on Flexible Learning

Data Source(Participant Code & Position)	Excerpts from Interview Data	*Code*	*Theme*

AD 2 – Administrator, Female	"it's actually the combination of online teaching and learning and limited face to face teaching and learning."	Face-to-face and online learning combined	Flexible learning is a combination of Traditional and Digital
FC 2 – Faculty, Female	"Flexible learning (sigh) is using either online, face to face, plus modular teaching."	Multiple modes of delivery	
FC 1 – Faculty, Male	They can have their time to do self-managed learning then the professor can do also online teaching, they're given task to do while at home this is one common denominator of flexible learning.	Hybrid Mode	
FC 3 – Faculty, Male	"It actually became prominent during the pandemic because you know teachers and students are some miles apart so we really have to, uhmmm, observe some of the principles of flexible learning."	Pandemic-driven prominence	Flexible learning is a product of pandemic
AD 6 – Administrator Female	"I think flexible learning is well articulated since the pandemic because during the pandemic most of the students, all of our students actually were required to stay at home and despite quarantine they still had to continue their studies."	Pandemic-driven formalizatio n of FL	
DE 1 – Administrator, Male	"The benefit is of course we can have many students and also coming from different or	*Increased reach of FL*	*Flexible learning attracts potential students*

	far places, that is the number one."		
AD 4 – Administrator, Female	You know, more people enrolled, especially in graduate school. Some of them are already working far away. Those are just a few examples.	*Enrollment growth due to FL*	

The themes related to FL implementation were further categorized within the Iron Triangle. Cost-related concerns included financial implications such as budget allocations, expenses, and cost-saving opportunities. Access-related themes involved references to instructional modality affordances, learner demographics, and the perceived availability of opportunities. Quality-related themes focused on instructional outcomes, teaching effectiveness, and overall learning experiences. This process was iterative and abductive (Rinehart, 2021), requiring movement back and forth between the data, themes, and theoretical framework.

Table 2: Viewpoints on the implementation of Flexible Learning

Data Source(Participant Code & Position)	Excerpts from Interview Data	Code	Theme
AD 1 – Administrator, Male	*"…they (students) don't need to come to school then working students can access education."*	Cost saving from FL	***Flexible learning is economical for***

SD 1 – Student, Male	*A*ctually, students living from far place could save money and experience less hassle, they don't need to take transport to study or to listen to teachers' lectures.	Reduction ins student's cost and hassle	***schools and students***
FC 2 – Faculty, Female	"*And of course another thing is we were able to gain new skills. I used to be very very poor in terms of technology but because of the, you know the implementation of flexible learning we became familiar with different platforms."*	Digital skill developmen t	***Flexible learning improves teacher's technical skills***
FC 3 – Faculty, Male	"We were able to adopt our strategies, we became more creative with our presentations before we just use[d] powerpoint presentation[s] but during the time of pandemic we maximized the use of Google slides, before we are only using PPT but now we were able to make creative presentations using Canva."	Acquired advanced digital ability	
SD 2 – Student, Female	"It gave me an opportunity to address how I wanted to use my freedom in how, when, what and where I learn." :	Ability to choose how to learn le learning	Flexible learning provides learner's freedom and control of their studies
SD 1 – Student, Male	"For me Sir, as a student, we have the power to use our time wisely especially on making our learning tasks."	Efficient time managemen t	
FC 3 – Faculty, Male	"I find flexible learning very challenging especially if you are not really adept in technology and I am not tech-savvy. That's why, perhaps, I'm experiencing challenges in virtual learning."	Technologic al proficiency challenge	Flexible Learning requires acquisitio n of appropriat e technical

DE 1 – Administrator, Male	"...I observed the difficulty in adapting or adaptation of the old faculty or the traditional teacher to adopt the modern *approach of teaching and learning".*	Faculty's adaptation challenges	and pedagogical skills
SD 4 – Student, Female	*"More on online class po and sometimes the distance kasi sir ahmm… on Online class, I have encountered a lot of technical issues as well as sa internet po sir. Ahmm. There are times I wouldn't be able to attend my class due to internet connection sir.*	Connectivity challenges	***Flexible Learning requires students' access to technology***
SD 2 – Student, Female	*"the issues and challenges in the implementation of flexible learning would be, first on the side of the students wherein some lack in terms of digital device, internet access and load allowance."*	Device gap	
AD 2 – Administrator, Female	*…Ah, because there were lots of preparation, like ahhh.. we need to ahh, we need to revise our course outline and we also need to modify our modules for each of the courses that we are teaching and in the tertiary level teachers like me especially a subject specialist who is not really trained in doing module, it is quite challenging.*	Increased Instructional Preparation Demands	***Flexible Learning increased workload of faculty***
FC 3 – Faculty, Male	*...So, yun medyo dagdag trabaho din kasi sa mga ganoong pagkakataon kailangan hindi ka maghihintay gagawa ka ng contingency plan so its really challenging and aside from that its also quite challenging*	Extra Duties	

	to call students to actually determine if they are listening		
SD 4 – Student, Female	*Flexible learning is a combination of online and F2F, during online class we are not giving full attention to our classworks because it can be done later.*	Students' inattentiveness	***Flexible mode makes students unmotivated to learn***
SD 2 – Student, Female	*"students are not paying attention and are unmotivated during classes."*	Students' lack of motivation	

In examining convergences and divergences, I analyzed the relationships between themes. Converging themes were assessed based on whether they reinforced or aligned with each other, and whether their alignment pointed to a broader, higher-level theme. Divergences, by contrast, were examined in terms of whether themes contradicted, negated, or limited one another with respect to intent, outcomes, or requirements. These divergent relationships were verified by revisiting the raw data—including excerpts not presented in the manuscript—further strengthening the trustworthiness of the findings. The analytical tables for these themes are in the appendices but are also cited in the next chapter to further demonstrate to the reader how the Iron Triangle theory was employed to interpret the findings for the said research question.

Table 3 provided an example of how areas of convergences, expressed as themes, were identified from the data. For this part of the study, I coded the data that emerged from the previous analyses according to their relationships with one another. These codes were then drawn into conceptual maps (Daley, 2004) to aid identifying the relationship between the codes and come up with convergent themes. See Table 4-5 for the rest of the analytical tables on convergences.

Table 3. Convergence Around Issue of Access

Data Source(Participant code & position)	Excerpts from Interview Data	Code for Relationship to Another Theme	Convergent Theme
AD 1 – Administrator Male	"…they (students) don't need to come to school then working students can access education."	Cost-efficiency within *Benefits of Flexible Learning*	Flexible learning provides greater access to students
SD 2 – Student, Female	"Based on my experience, it enabled and gave me control on my learning and became self-directed since I get to choose a variety of learning modes."	Learner autonomy within *Benefits of Flexible Learning*	Flexible learning provides greater access to students
DE 1 – Administrator, Male	"The benefit is of course we can have many students and also coming from different or far places, that is the number one."	Enrollment growth within *Benefits of Flexible Learning*	Flexible learning provides greater access to students

Table 4. Convergence around issue of required resources for FL implementation

Data Source(Participant Code & Position)	Excerpts from Interview Data	Code for Relationship to Another Theme	Convergent Theme	
FC 3 – Teacher, Male	"I find flexible learning very challenging especially if you are not really adept in technology and I am not tech-savvy. That's why, perhaps, I'm experiencing challenges in virtual learning."	Teacher Digital Competence within *Technical Skills and Resources for FL*	Flexible learning requires acquisition of appropriate technical and pedagogical skills	
SD 4 – Student, Female	"More on online class po and sometimes the distance kasi sir… I have encountered a lot of technical issues as well as sa internet po… There are times I wouldn't be able to attend my class due to internet connection…"	Student ICT Readiness within *Technical Skills and Resources for FL*	Flexible learning requires students' access to technology	

Table 5. Convergence around investment and cost

Data Source(Participant Code & Position)	Excerpts from Interview Data	Code for Relationship to Another Theme	Convergent Theme
AD 6 – Administrator, Female	*"So, we had to do other options to deliver the student services like to go to their places and bring the module that are printed and it is also difficult because we have to go to different locations so you know uhmm."*	Institutional Readiness	Flexible learning requires additional skills and investment for the educational institution

AD 1 – Administrator, Male	*"…We also upgrade some infrastructure especially on the network side… we added a lot of access points so teachers can do their class online and… added some servers to install the LMS that the school is using today."*	Institutional Investment	Flexible learning requires additional skills and investment for the educational institution
AD 2 – Administrator Female	*"…Ah, because there were lots of preparation… we need to revise our course outline and… modify our modules for each of the courses that we are teaching."*	Faculty Workload	Flexible learning requires additional skills and investment for the educational institution

Tables 6–8 provided a summary of how the areas of divergences were arrived at by coding the data as to whether they referred to issues of access, quality, or cost. The coding also took into consideration their relationship to other coded data based on the Iron Triangle Theory. The conflicting data were then classified according to which elements they were in contradiction with.

Table 6: Divergence between learners' access and poor motivation

Data Source(Participant Code & Position)	**Excerpts from Interview Data**	**Code for Relationship to Another Theme**	**Type of Tension based on Iron Triangle Framework**
DE 1, Administrator, Male	"The benefit is of course we can have many students and also coming from different or far places, that is the number one."	Accessibility benefit – supports *Greater Student Access*	Contradictory: Accessibility vs. Quality (FL increases access but may reduce engagement)
SD 4 – Student, Female	"We don't pay much attention to the tasks, sir, because it's online anyway, and we can do it later, so	Reduced motivation and engagement – aligns with *Challenges in*	Contradictory: Accessibility vs. Quality (ease of access may lead to

	the teachers are not able to properly monitor us."	*Learning Outcomes*	reduced focus and learning quality)

Table 7. Divergence between teacher's skills enhancement and increased workload

Data Source(Participant Code & Position)	Excerpts from Interview Data	Code for Relationship to Another Theme	Type of Tension(Iron Triangle Framework)
FC 3 – Faculty, Male	"We were able to adapt our strategies, we became more creative with our presentation."	Teacher Skill Development within *Benefits of Flexible Learning*	**Quality vs. Cost** – Improved instructional quality through enhanced ICT skills contrasts with increased time/effort investment.
AD 2 – Administrator, Female	"…Ah, because there were lots of preparation… we need to revise our course outline and modify our modules for each course…"	Increased Instructional Preparation Demands within *Faculty Workload Challenges*	**Quality vs. Cost** – Maintaining quality requires significant additional workload, creating tension between skill gains and workload burden.

Table 8: Divergence between student access and additional resources for the educational institution

Data Source (Participant Code & Position)	Excerpts from Interview Data	Code on Relationship to Another Theme	Type of Tension (Iron Triangle Framework)
AD 4, Administrator, Female	"Many potential students became attracted because of this mode."	Accessibility	Contradictory (Benefit vs. Cost of Flexible Learning)
AD 1, Administrator, Male	"We really need to add more systems to have, ano sir, good internet inside the campus."	Institutional Investment and Technical Requirements	Contradictory (Benefit vs. Cost of Flexible Learning)

Accounting for these convergences and divergences involved exploring the meanings participants ascribed to their experiences, consistent with qualitative inquiry (Lim, 2024). This interpretive approach was guided by the Verstehen perspective (Platt, 1985), which emphasizes that individuals' actions and experiences are shaped by their constructed meanings. In this light, convergence or divergence between themes was analyzed not only as structural relationships but also as reflections of how participants conceptualized and negotiated flexible learning.

As previously mentioned, conceptual maps and matrices were employed to visualize connections among themes, sub-themes, and theoretical insights (Daley, 2004; Gale et al., 2013). This iterative mapping and re-mapping process enabled clearer identification of patterns and relationships, allowing for a more nuanced understanding of how flexible learning was perceived and implemented within the institutional context.

Trustworthiness of research

To enhance the trustworthiness of the research, I undertook the following steps to address issues of credibility, transferability, dependability and confirmability (Lincoln and Guba, 1985):

- **Credibility** – The study adopted triangulation through the use of different sources or groups of research participants -- administrators, faculty, and students.
- **Transferability** – I provided a thorough description of the perspectives and experiences of the participants, to the extent that it is ethical and the available data allows it. In this way, the readers can decide for themselves the extent to

which the case and the ensuring findings from the study is applicable to their context.

- **Dependability** – I kept memos of his ideas, thoughts, and feelings towards his observations and interpretations during data collection and analysis to allow for a reflexive audit of the interpretive process. The advising and review process that is built in the university thesis requirement also held in enhancing the study's dependability. The study's analytical process was documented through iterative thematic development, where initial codes were tested against both the Iron Triangle framework and negative cases. This ensured findings reflected the data's complexity rather than presupposed categories.
- **Confirmability** - To enhance conformability, the researcher kept an audit of all his decisions related to the research process i.e., who to interview, what questions to ask, why is a text coded as such, how themes were arrived at in a way and not in another way). The study's findings were also presented in a way that provides the readers an overview of the research process I underwent. In addition, I also asked the feedback of the school leaders to meticulously compare the findings into their current practices. Furthermore, I participated in a research colloquium and presented papers from the study to receive feedback and validations from different researchers all over the country.

Ethical consideration

There are several ethical issues, which the researcher had to take into consideration for this study. The most important one was related with the informed consent of the participants. The participants had been informed ahead of time that there will be no other present during the process unless he/she would like someone

else to be there. The researcher also informed the participants about the location of the interview (or a preferred location of the participant). Participants were given an assurance that they will be given the freedom to answer the question or not. If the participant opted not to answer the question, the interviewer moved on to the next question. Participants were told that while all efforts will be taken to anonymize the participants (i.e, coding their names, using fictitious names, removing any personal data or identifiers in the writeup), complete anonymity cannot be fully assured due to limited sample size. Permission to audio record the interview participant was also sought before the interview is conducted. If the participant does not agree to being recorded, the researcher keeps notes of the participant's answers. Participants were also informed of their right to withdraw their interviews if they want to do so.

The anonymity of participants was protected by numerically coding each participant and interview transcript. All study data, including the survey electronic files, interview recordings, codes of participants, and transcripts, have been kept confidentially. The collected non-print data have been stored in the personal hard drive of the researcher and in a private folder with a strong alphanumeric password. Moreover, all printed data have been in the personal secured cabinet of the researcher with locks.

A note on reflexivity

In this section, I reflected on my position as a researcher and how my role as an insider, having also participated in the implementation of flexible learning (FL) at my school, influenced the conduct of my study and its findings (Jamieson, Govaart, and Pownall, 2023). Being an insider likely shaped the way my participants interacted with me, as well as how I engaged with them. I was familiar with contextual details that

may have influenced both the way I interpreted the data and the interactions during the research process. My prior knowledge of the school's FL implementation context provided me with insights that may have shaped my interpretations, but this familiarity also allowed me to navigate the study more effectively. It is important to note that this reflection should not be construed as a limitation of the study; rather, it offered insight into how my position as a researcher interacted with my role within the educational setting. This interplay, along with the academic context and writing practices expected of a thesis student, played a significant role in shaping my research process and findings.

Chapter IV

PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

In this chapter, I began with the presentation of themes related to the first research question—participants' perspectives on flexible learning and its implementation. This was followed by a discussion of the areas of convergence and divergence. In line with the abductive approach, I identified not only these areas but also classified the relationships between converging themes and the nature of divergence, which became the basis for identifying patterns of convergence and divergence. Further analysis revealed that certain converging themes could be combined to form broader, overarching themes. These broader themes were then carried forward to identify explanatory themes that addressed the third research question. This manner of presentation was chosen to highlight not only the findings but also the research process undertaken in this abductive study (Hulst & Viser, 2023).

Presentation of Results

Viewpoints on Flexible Learning

The following are the themes identified to participants' perspectives on flexible learning, based on my data analysis.

A1. Flexible learning is a combination of Traditional and Digital

Flexible learning is perceived as a multifaceted delivery mode, often incorporating a blend of online instruction, face-to-face interactions and modular teaching. Respondent feedback consistently indicated a recognition of this hybrid

approach, with the expectation of a combination of learning modalities. As one academic leader expressed, *"it's actually the combination of online teaching and learning and limited face to face teaching and learning. (Female, Director for Instructions)"* One faculty similarly described it as *"Flexible learning (sigh) is using either online, face to face, plus modular teaching." (Female, Faculty)*

A2. Flexible learning is a product of pandemic

The global health crisis catalyzed a paradigm shift in education, propelling flexible learning to the forefront of pedagogical innovation. Analysis of respondent data unequivocally indicates that this modality has become the prevailing educational norm. As one Faculty expressed,

> *"It actually became prominent during the pandemic because you know teachers and students are some miles apart so we really have to, uhmmm, observe some of the principles of flexible learning." (Faculty, Male)*

Another academic leader shared the same view:

> *"I think flexible learning is well articulated since the pandemic because during the pandemic most of the students, all of our students actually were required to stay at home and despite quarantine they still had to continue their studies."* Additionally, another respondent simply discussed that *"it aims to address the needs of the students in higher education institutions, especially during the pandemic." (Student Affairs Director, Female)*

A3. Flexible learning attracts potential students

Flexible learning has the potential to ensure that education is delivered continuously, even while students are at home. This idea of flexible learning helps the institution to attract prospective students to enroll. One of the deans mentioned that: *"The benefit is of course we can have many students and also coming from different or far places, that is the number one."* (Dean, Male)

Despite many hesitations and issues related to flexible learning, the school administrators have seen the potential opportunity of this mode of learning to attract prospective students particularly at the graduate level. We can see this in the articulation of one of the academic heads:

> *"Alam mo mas madaming nag-enroll, lalo na sa graduate school. Yung mga iba na medyo malayo na nagtatrabaho. Yun yung mga ilan. Halimbawa yung mga nagtatrabaho natin, yung mga na-encounter natin na working student natin dahil dati pag everyday yung pasok nila, pag-full face to face hindi pwede sa trabaho nila yung aabsent sila ngayon yung iba nilang gagawin ay pwede nilang gawin sa gabi dahil sa flexible learning." (You know, more people enrolled, especially in graduate school. Some of them are already working far away. Those are just a few examples. For instance, our employees, the working students we've encountered. back when classes were held daily and fully face-to-face, they couldn't miss their work. Now, they can do their other tasks at night because of flexible learning.) (Finance Officer, Female)*

Perspectives on Flexible Learning Implementation

The implementation of flexible learning yielded several perspectives from the participants. This section explores the various viewpoints that surround the adoption of flexible learning in the institution.

B.1. Flexible learning is economical for schools and students

Flexible learning eliminates the costs associated with commuting or relocating to study. Additionally, they won't have to pay for things such as food and other expenses related to campus-based education. One of the academic heads cited that through flexible learning, *"…they (students) don't need to come to school then working students can access education." (MIS Head, Male).* One of the student's respondents shared that:

> *…yung sa mga taga malayo nakakatipid po sila, less hassle po and di napo nila kailangang bumiyahe ng ganoon kalayo para mag-aral or makinig sa mga tinuturo ng teacher. (Actually, students living from far place could save money and experience less hassle, they don't need to take transport to study or to listen to teachers' lectures.) (Student, Female)*

B.2 Flexible learning improves teacher's technical skills

The implementation of flexible learning in the institution has become instrumental to help teachers discover their potential and develop their technical skills. One of the faculty respondents' account supported this notion:

> "*And of course another thing is we were able to gain new skills. I used to be very very poor in terms of technology but because of the, you know the*

implementation of flexible learning we became familiar with different platforms". (Faculty, Female)

The adoption of flexible learning enabled them to develop technology-based instructional materials such as video materials, PowerPoint presentation and others. The faculty emphasized that the situation provided them the opportunity to sharpen their creativity, which they used for their classes:.

…We were able to adopt our strategies, we became more creative with our presentations before we just use[d] powerpoint presentation[s] but during the time of pandemic we maximized the use of Google slides, before we are only using PPT but now we were able to make creative presentations using Canva. (Faculty, Male)

B.3 Flexible learning provides learner's freedom and control of their studies

The flexibility that the new mode of instruction provides has enabled some students some degree of control of their learning process. During the interview, one of the student respondents caught my attention when she shared that:

"For one year, I have experienced what we called the flexible learning in our institution. I get to study even if I am at home because of online classes that suffice what I need to finish the course." She also added, *"It gave me an opportunity to address how I wanted to use my freedom in how, when, what and where I learn." (Student, Female)*

This freedom has also enabled them to become more independent learners who are more capable of managing their time. As one of the students mentioned: "*Based on my experience, it enabled and gave me control on my learning and became self-directed since I get to choose a variety of learning modes."* (Student, Female)

Another student claimed: *"For me Sir, as a student, we have the power to use our time wisely especially on making our learning tasks."* (Student, Male)

B.4 Flexible Learning requires acquisition of appropriate technical and pedagogical skills

The incorporation of technology into the teaching and learning process proved to be challenging for some faculty members who were more immersed in the traditional learning approach. This specific concern could have a significant impact on the effectiveness of the learning process and the caliber of instruction. One of the faculty respondents pointed out:

> *"I find flexible learning very challenging especially if you are not really adept in technology and I am not tech-savvy. That's why, perhaps, I'm experiencing challenges in virtual learning."* (Faculty, Male)

This is also reflected in another school head's observation:

> *"...I observed the difficulty in adapting or adaptation of the old faculty or the traditional teacher to adopt the modern approach of teaching and learning".* (Administrator, Male)

Another school head asserted that:

…Some of them don't know how to use the front learners so hindi mo rin magamit actually no? so it's really challenging you have to upload then da-download mo pa yung mga works nila tapos kailangan mong i-adopt lahat ng teaching strategies sa may online learning ganyan. ("Some of them don't know how to use the front learners, so you can't really use it either, right? It's really challenging. You have to upload their work, then you have to download it again. Plus, you have to adapt all your teaching strategies for online learning.") (Administrator, Female)

B. 5 Flexible Learning requires students' access to technology

Low internet connection speed, lack of computer gadgets and equipment can impede the implementation of flexible learning. One of the student respondents pointed out that "t*he issues and challenges in the implementation of flexible learning would be, first on the side of the students wherein some lack in terms of digital device, internet access and load allowance."* (Student, Female)

These technical concerns are very crucial and affect the overall experience of the institution in terms of flexible learning. One faculty stated that "*there are a lot of challenges first of course you have the internet connection both for the students and of course the teacher."* (Faculty, Female)

Another version of this account is:

"More on online class po and sometimes the distance kasi sir ahmm… on Online class, I have encountered a lot of technical issues as well as sa internet

po sir. Ahmm. There are times I wouldn't be able to attend my class due to internet connection sir. (Student, Female)

The importance of connectivity was mentioned by a faculty participant:

" …But the issue on their side is still connectivity. So, if they have slow ah.. speed internet then they cannot connect continuously and using mobile data also is ah… difficult for them because they need money to buy data." (Faculty, Male)

B.6 Flexible Learning increased workload of faculty

The shift to flexible learning has significantly increased the workload of faculty members. Beyond traditional classroom instruction, educators are now required to develop and manage online learning platforms, create engaging digital content, and provide technical support to students. Some faculty members had to "adjust and adopt to the new system," which requires additional effort or work from them. Moreover, the demand for increased accessibility and flexibility in course delivery has led to a substantial increase in faculty workload. One school head mentioned:

…Ah, because there were lots of preparation, like ahhh.. we need to ahh, we need to revise our course outline and we also need to modify our modules for each of the courses that we are teaching and in the tertiary level teachers like me especially a subject specialist who is not really trained in doing module, it is quite challenging. (Admiistrator, Female)

Consequently, the overall workload has expanded considerably, impacting faculty well-being and potentially compromising the quality of instruction if not adequately addressed.

B.7 Flexible mode makes students unmotivated to learn

There is a perception that flexible learning has led to a decrease in learner's motivation in that students are perceived to be not actively engaged in their classes. One of the student respondents has claimed that: *"students are not paying attention and are unmotivated during classes." (Female, Faculty)*

This perceived lack of learner's motivation can be attributed to several reasons. Some say that the flexibility that the mode of instruction provides had also led to procrastination. One student said that:

> "*Flexible learning po siya so combination siya ng online and F2F pag online po kasi sir hindi po namin siya binibigyan ng pansin yung mga gagawin sir kasi online na naman pwede pang mamaya. (Flexible learning is a combination of online and F2F, during online class we are not giving full attention to our classworks because it can be done later.").* (Student, Female)

These accounts give us a clear sense of students becoming reluctant which results in their disconnection from the learning process.

There is also a concern around the quality of teacher's feedback and integrity of online assessments: Another student mentioned that:

“Kapag flexible learning ang ginagawa lang ng professor is nag-grade lang po sila without checking the quality or if the person siya ba yung gumawa.” (In flexible learning mode, teachers are giving grades to student’s work without checking the quality of the content and if it is really the student who did the task). (Student, Female)

The online mode of instruction was also seen as limited for teaching skills-based courses. Another student shared:

…Uhmm sir, sa tingin ko sir, sakin naman sir parang okay lang naman, ala naman sir sa akin. Uhmm ano lang medyo hindi ko lang talaga maintindihan pag online halimbawa yung ano na ngang subject yun sir, halimbawa forensic. Diba sir may laboratory kami, kailangan ng actual pero ino-online lang nila sir yun para maintindihan which is hindi name ma-absorb sir kasi nga online. ("Uhmm, sir, I think, for me sir, it's okay. I don't have any problems with it, sir. Uhmm, it's just that I don't really understand it when it’s online classes. For example, what was that subject again, sir, forensic science? Sir, we have a laboratory where we need to do actual experiments, but ut we can't really absorb it well because it's online) (Student, Male)

Areas of Convergences:

These themes on FL and its implementation were subjected to further analysis to unravel their interrelationships with one another. An analysis of these

interrelationships between these themes appear to converge around three broader areas: (1) access, (2) technical skills and resources, and (3) investment and cost.

C.1. Access: FL provides greater access to students

At its core, flexible learning offers learners the autonomy to determine the pace, time, and location of their studies. As other respondents claimed that *"this approach… it allows our students to learn at their [own] pace".* The freedom has enabled individuals to balance education with personal and professional commitments, thereby attracting a wider pool of potential students, including working students. Moreover, the students also benefit from cost savings related to transportation, accommodation, and potentially reduced time away from employment. This economic advantage further strengthens the appeal of flexible learning, making education a more viable and accessible option for a broader learner population. The convergence of these factors—increased flexibility, learner autonomy, and economic benefits — makes teaching and learning more accessible to more learners.

As shown on Table 9, themes on the issue of economic affordability, learners' autonomy and learning opportunity for non-traditional learners all contribute to the idea of flexible learning providing greater access to learners.

Table 9. Convergence around issue of access

Theme	Nature of the relationship between themes	Thematic convergence
B.1 Flexible learning is economical for schools and students	Contributive to broader theme	C1: FL provides greater access to students
B. 3. Flexible learning provides learners freedom and control of their studies		
A.3 Flexible Learning Attracts Potential Students		

C.2 Skills and access to technology: FL requires technical skills and resources for effective implementation

The study indicates that successful implementation of flexible learning is intrinsically linked to two requirements: the acquisition of appropriate technical and

pedagogical skills by educators, and the availability of technological resources to students. These elements mutually reinforce each other, forming a supportive relationship that underpins the efficacy of this educational model.

On one hand, faculty must possess a robust understanding of technology to design effective online learning environments, create engaging digital content, and facilitate student interaction in virtual spaces. As one teacher explained:

> "...*Aside from that we have to learn new applications to support our LMS, there had been some internal software and there were third parties applications that we had to use like kahoot, uhm Frontlearner, skype, Google meet among others."*

Pedagogical expertise is equally essential to adapt teaching strategies to the online format, ensuring that learning outcomes are achieved despite the physical distance:

> *"I was able to add more activities for them to do at home, no? Rather than having [them do it] face to face because, okay, in the module there are mini-tasks." (Faculty, Male)*

However, these skills are rendered ineffective without students having adequate access to technology. Devices such as computers, tablets, or smartphones, as well as reliable internet connectivity, are prerequisites for students to participate fully in online learning. As one participant shared:

> *"The issues and challenges in the implementation of flexible learning in [the college] would be, first on the side of the students wherein some lack in terms of digital device, internet access and load allowance."*

The absence of technological access among students creates a significant barrier to the successful implementation of flexible learning. Thus, a concerted effort to address both of these dimensions is imperative to optimize the potential of this educational approach. Table 10 shows how a synergistic relationship between technical and pedagogical skills in flexible learning (B4) and access to technology (B5) spell out the need for these human and physical resources in the effective implementation of flexible learning.

Table 10. Convergence around issue of required resources for FL implementation

Themes	**Nature of the relationship between themes**	**Thematic convergence**
B.4 Flexible Learning requires acquisition of appropriate technical and pedagogical skills	Mutual reinforcement	C2: FL requires technical skills and resources for effective implementation
B.5 Flexible Learning requires students' access to technology		

C.3 Investment and cost: FL requires additional investment for the educational institution

Implementing flexible learning is not without its financial challenges. Institutions face significant costs in areas like faculty training, technology upgrades, and potentially increased salaries to accommodate the added workload associated with "modifying [the] modules for each of the courses that [the faculty members] are teaching".

In addition, flexible learning requires additional expenses in technological infrastructure:

> *…We also ah upgrade some infrastructure especially on the network side ah we add more ISP ah or the internet service providers so we also added ah.. a lot of access point so teacher can do their class online and we also ah.. added some servers to install the LMS that the school is using today.*

This view was echoed by another participant:

> *…In-update natin yung mga internet natin dati medyo mabagal yung internet natin pero ngayon sa flexible learning dahil yun yung kailangan natin sa online instruction natin so in-upgrade natin yung mga mababagal nating internet hindi lang yun at nagdagdag pa tayo ng mga unit bukod sa computer nagdagdag tayo pati na rin yung mga modem natin na mababagal dati yung mga CPU natin 3 in 1 (3 monitor sa isang CPU unit) ngayon nag-upgrade na tayo ng 1:1 (1 montior: 1 CPU) ("We have upgraded our internet connections. Previously, our internet was quite slow, but with the shift to flexible learning, we realized that we needed faster speeds for online instruction. As a result, we upgraded our slow internet connections. Not only that, but we also increased the number of*

units. In addition to computers, we added more modems. Previously, our CPUs were 3-in-1 (three monitors connected to one CPU unit). Now, we have upgraded to a 1:1 ratio (one monitor per CPU unit)."

On the other hand, these additional requirements can impact other essential areas of the university, like delivery of student support services or academic resources not previously done. One respondent indicated that:

"So, we had to do other options to deliver the student services like to go to their places and bring the module that are printed and it is also difficult because we have to go to different locations so you know uhmm."

Table 11 summarized how this thematic area of convergence was derived from the given data.

Table 11. Convergence around investment and cost

Themes	**Nature of the relationship between themes**	**Thematic convergence**
C.2 FL requires technical skills and resources for effective implementation		

B.6 Flexible learning increased workloads of the faculty	Contributive to convergent theme	C3: FL requires additional skills and investment for the educational institution

For a summary of the areas of thematic convergences identified in the study, see table below.

Table 12. Thematic convergences on access and investments

Theme	**Relationship with each other**	**Thematic convergence**
B.1 Flexible learning is economical for schools and students	Contributive to convergent theme	C1. FL provides greater access to students
B. 3. Flexible learning provides learner's freedom and control of their studies		
A.3 Flexible Learning Attracts Potential Students		

C.2 FL requires technical skills and resources for effective implementation	Contributive to convergent theme	C.3. FL requires additional skills and investment for the educational institution
B.6 Flexible learning increased workloads of the faculty		

The findings indicated two major areas of thematic convergence. On one hand, flexible learning (FL) enhanced access by being cost-effective, granting students greater autonomy, and attracting potential learners, which converged into the theme of FL providing greater access to students (C1). On the other hand, its implementation necessitated technical competencies, institutional resources, and inevitably increased faculty workload, converging into the theme of FL requiring additional skills and investment for the educational institution (C3). Taken together, these insights highlighted the dual nature of FL—while it broadened opportunities for learners, it simultaneously placed substantial demands on educators and institutions.

Areas of Divergences

The next phase of the discussion focused on the identified divergences between thematic perspectives using Iron Triangle Theory as a lens for interpretation.

D.1 Flexible learning provides greater access to students vs. Flexible mode makes students unmotivated to learn

The advent of flexible learning in the college had broadened access to a wider range of learners. As one respondent emphasized: *"The benefit is of course we can have many students and also coming from different or far places, that is the number one."* This aligns with the observation that enrollment numbers, particularly in graduate programs, have increased substantially.

However, the allure of autonomy and self-paced learning has also raised concerns about potential declines in student motivation. It is noticeable to the sharing of one of the respondents: *"Not only that students are not paying attention and are unmotivated during classes."*

Another account frankly discussed that:

"Hindi po namin siya binibigyan ng pansin yung mga gagawin sir kasi online na naman pwede pang mamaya kaya hindi kami natututukan ng maayos ng teachers.(We don't pay much attention to the tasks, sir, because it's online anyway, and we can do it later, so the teachers are not able to properly monitor us)".

While the promise of flexibility is enticing, concerns about its impact on student motivation persist (Table 13).

Table 13. Divergence between learners' access and poor motivation

Theme	Nature of divergence	Theme
Flexible learning provides greater access to students (C1)	Contradictory (positive vs negative aspect of FL)	Flexible mode makes students unmotivated to learn (B7)

D.2 Flexible learning improves teachers' technical skills vs. Flexible learning increased workloads of the faculty

The implementation of flexible learning has presented a dual-faceted impact on faculty. On one hand, it has undeniably fostered the development of robust technical skills. One of the respondents corroborated this finding in this statement:

> *"And of course another thing is we were able to gain new skills. I used to be very very poor in terms of technology but because of the, you know the implementation of flexible learning we became familiar with different platforms".*

The necessity of navigating learning management systems, creating digital content, and utilizing various technological tools has significantly enhanced faculty's technological proficiency. Another respondent shared that: "*We were able to adopt our strategies, we became more creative with our presentation".* This aligns with the perspective that flexible learning is a catalyst for professional growth.

However, this advancement in technical capabilities is counterbalanced by a perceived increase in workload. The demands of designing online courses, facilitating virtual interactions, and providing timely feedback, often coupled with traditional face-to-face responsibilities, have led to feelings of overburdening among faculty. One participant observed that:

> *… There were lots of preparation, like ahhh.. we need to ahh, we need to revise our course outline and we also need to modify our modules for each of the courses that we are teaching and in the tertiary level teachers like me especially a subject specialist who is not really trained in doing module, it is quite challenging.*

Flexible learning has undoubtedly transformed the role of educators, presenting both opportunities and challenges. While it has necessitated the development of robust technical skills, it has also significantly increased workload (Table 14).

Table 14. Divergence between teacher's skills enhancement and increased workload

Theme	Nature of divergence	Theme

B.2 Flexible learning improves teachers' technical skills	Contradictory (benefit vs drawback of FL)	Flexible learning increased workloads of the faculty (B6)

D3. FL provides greater access to students (C1) vs FL requires additional skills and investment for the educational institution (C3)

Flexible learning has undeniably expanded educational opportunities, making it accessible to students who might otherwise be excluded. It's a promising approach that breaks down traditional barriers like location and time constraints. It can be seen from the sharing of one of the respondents that "*many potential students became attracted because of this mode*."

While greater access provided by flexible learning brings exciting possibilities for expanding access to education, it also requires additional skills from the teachers. Implementing effective flexible learning requires upskilling of faculty members, ensuring students access to technology, all of which entail additional investments on the university's part. This is evident from the respondents' feedback:*"we really need to add more systems to have ano sir, good internet inside the campus."*

Table 15. Divergence between student access and additional resources for the educational institution

Theme	Nature of divergence	Theme
FL provides greater access to students (C1)	Contradictory (benefit vs cost of FL)	FL requires additional skills and investment for the educational institution (C3)

Account for Convergences

The study showed that themes converged around the following broad themes:

- C1. FL provides greater access to students
- C.3. FL requires additional skills and investment for the educational institution

It is argued that the relationship between these themes of convergence can be considered as conditional interdependence as well as contradictory. It indicates conditional interdependence in the sense that FL provides an opportunity for educational institutions by offering flexibility, which in turn, leads to affordances and greater opportunities for students to study. However, they also recognize that for these affordances to be realized, educational institutions need to re-train their teachers, orient their students, and provide additional technologies which involve additional costs.

In addition, the relationship between the two perspectives may also be contradictory and thus producing tension -- a dilemma between access and cost identified in the Iron Triangle framework. While access may bring benefits to learners, it may create additional costs, which depending on the institutional context, may be an additional burden for them (Table 16).

Table 16. Relationship between themes on access and investment

Convergent themes	**Relationship with each other**	**Explanatory themes**
C1. FL provides greater access to students.	Conditional interdependence (accessibility subject to investments) and Contradictory (benefits vs cost)	A.1 FL is a combination of the traditional and digital
C.3. FL requires additional skills and investment for the educational institution		

Explanatory themes

1. Account for convergences

The analysis has shown that the stakeholders' perspectives converged along the following thematic areas:

C1. FL provides greater access to students
C.3. FL requires additional skills and investment for the educational institution

In ascertaining which thematic view of FL explains the converging themes, I analyzed how the other themes can potentially explain stakeholders' agreement on certain aspects of FL. I asked myself which underlying belief or condition unifies these perspectives. It is argued that the complementary and contradictory relationship between the two themes from which the other perspectives converge can be understood in terms of the following broader theme or perspectives on FL:A.1 FL is a combination of the traditional and digital

The said theme asserts that FL combines both the traditional aspects and less traditional or new aspects (i.e, digital) of teaching. This implies that for the participants, FL is both familiar and novel. From their perspective, FL is still about teaching and this mode of delivery has allowed them to continue addressing the "needs of the students" in higher education institutions. The flexibility it provides has allowed FL to provide access to students during this challenging period of time. However, its technology mediated nature meant that they recognize that it requires additional investments for effective implementation and investment from all stakeholders. (i.e., "learn new applications to support our LMS…use third parties applications"; address the issue [of] connectivity"). Table 17 provided a summary of the account for the convergent relationships among the themes discussed above.

Table 17. Explanatory theme for convergent perspectives

Convergent themes	**Explanatory themes**
C1. FL provides greater access to students.	

C.3. FL requires additional skills and investment for the educational institution	A.1 FL is a combination of the traditional and digital

2. Account for the Divergences

The study showed that there were divergences in the perspectives of the participants in these areas:

- Flexible learning provides greater access to students (C1) vs Flexible mode makes students unmotivated to learn (B7)
- Flexible learning improves teachers' technical skills (B.2) vs Flexible learning increased workloads of the faculty (B6)
- FL provides greater access to students (C1) vs FL requires additional investment for the educational institution (C3)

These divergences can be understood in the context of the Iron Triangle of Education — a model that underscores the balancing act between access, quality, and cost in educational delivery. As previously discussed, the framework argues that enhancing one of these dimensions often results in trade-offs with the other two. Upon closer examination of the specific aspects of flexible learning (FL) implementation discussed by participants in each theme, I was able to classify them according to the theory's key elements: cost, access, and quality. In ascertaining the existence of these tensions, I examined the institution's responses to the conflicts. The actions taken by the College to address these issues suggest that such tensions were indeed present. I discuss the tensions gleaned from the areas of divergences as follows.

Access vs Quality: Flexible learning provides greater access to students (C1) (access) vs Flexible mode makes students unmotivated to learn (B7) (quality)

One of the key tensions identified in flexible learning is the balance between providing greater access to students (C1) and maintaining their motivation and engagement in learning (B7). On the one hand, flexible learning offers greater access by allowing students to learn at their own pace and in their own time, especially during a time of widespread disruption. It removes barriers such as geographical limitations and rigid schedules, making education more inclusive and adaptable. However, despite this enhanced accessibility, the study revealed that students often feel unmotivated or disengaged in flexible learning environments, leading to concerns about the overall quality of education. To address this tension, educational institutions have implemented various initiatives aimed at improving student engagement while preserving accessibility. For example, the College introduced **sectioning or tutorial systems** to provide more personalized support and a structured learning environment, mimicking traditional classroom dynamics. Additionally, **interactive learning activities** that promote interaction between learners and content, peer collaboration, and student-teacher engagement have been introduced. These activities are designed to foster a sense of community and accountability, helping students remain motivated and invested in their learning. The College also tried to implement enhanced **feedback systems** to ensure that students receive timely and constructive input from their instructors, further supporting their learning journey.

However, these efforts have not always been consistent across acadmeic units or programs. While some students benefit from these tailored initiatives, others still experienced disengagement due to inconsistencies in implementation. The lack of

uniformity in how these solutions are applied suggests that the institution was still grappling with fully addressing the motivational challenges posed by flexible learning. Besides, implementing these initiatives to the fullest would entail additional staff work and consequently an increased cost.

Quality vs Cost: Flexible learning improves teachers' technical skills (B.2) vs Flexible learning increased workloads of the faculty (B6)

One of the tensions identified in flexible learning is the improvement of teachers' technical skills (B.2), enhancing the quality of education, versus the increased workload it places on faculty (B.6), impacting the cost of their time and energy. On the positive side, flexible learning has pushed teachers to develop digital competencies, making them more versatile and capable of delivering quality education through digital tools. However, this shift has come with a significant rise in workloads, as faculty members are now tasked with not only adapting their teaching methods but also managing new technologies, creating digital content, and providing ongoing support to students. To alleviate this burden, the school introduced an **interdisciplinary team approach**, intended to foster collaboration among faculty members and distribute tasks more evenly. However, the planned **mentor-mentee system**, which would have paired experienced and less-experienced faculty for support, failed to materialize, leaving many teachers to navigate the challenges on their own, further intensifying the workload. As previously mentioned, all these additional efforts needed to take advantage of the full potential that accessibility could provide would also require additional work and resources.

Access vs. Cost: FL provides greater access to students (C1) vs FL requires additional investment for the educational institution (C3)

A significant tension in flexible learning is the balance between providing greater access to students (C1) and the additional investment required from educational institutions (C3). While flexible learning broadens access by allowing students to engage from various locations and on their own schedules, it demands substantial financial investments in technology, infrastructure, and training. In response, the school purchased a Learning Management System (LMS) to streamline online education, but its full implementation did not materialize due to constraints in faculty skills and overall readiness. This gap in technological adoption left a significant portion of the expenses unutilized, with the institution bearing the costs without achieving the desired outcome of enhanced access and efficiency in the learning process. This third divergence sums up the tension between the benefits of access and the additional expenses associated with taking advantage of such benefits.

Explanatory theme

To establish the explanatory theme for the divergences, I tried to interrogate the points of divergence, the tensions identified, the institutional response to these conflicts, and the persistent problems of the college. I then asked myself which of these themes could account for the divergent perspectives and the institution's inability to establish a more coherent direction.

The Iron Triangle Theory specifies that tensions inherently exist between cost, access and quality and that trade offs have to be implemented to address these conflicts. Distance educational institutions tend to manage these tensions through a negotiation of the elements involved. For instance, the increasing number of students arising from widened accessibility can be addressed by cost-saving strategies like resource sharing and parenting with other institutions, adoption of open source technologies and educational resources, etc (UNESCO 2016). However, it appears that the school still encountered a lot of problems (e..g, unmotivated students, increased workload for faculty members) despite some efforts to address the issues of increased student numbers and cost. The fact that the educational institution did not fully go the distance in addressing this tension can be attributed to the perspective that FL is just a temporary solution and may not warrant long-term investment.

The tensions in flexible learning seem to arise largely from stakeholders' perspectives that FL is a product of the pandemic (A2) and is viewed as an emergency response rather than a long-term educational strategy. This view led to a lack of commitment and investment in fully integrating flexible learning practices, as many perceived it as a temporary solution rather than a permanent shift. Consequently, institutions faced challenges in balancing the need for greater access with the financial and logistical demands of implementing and sustaining flexible learning systems, resulting in inconsistencies and underutilized resources (Table 18).

Table 18. Account for Diverging Themes

Divergences	Tensions	Explanation for outcome
Flexible learning provides greater access to students (C1) (access) vs Flexible mode makes students unmotivated to learn (B7) (quality)	Access vs Quality	FL is a product of the pandemic (A2)
Flexible learning improves teachers' technical skills (B.2) (quality) vs Flexible learning increased workloads of the faculty (B6) (cost)	Quality vs Cost	
FL provides greater access to students (C1) (access) vs FL requires additional investment for the educational institution (C3)	Access vs Cost	

Discussion of the findings

The thematic findings of this study reinforce and extend the growing body of research on Flexible Learning (FL) implementation in educational institutions. One key theme identified is the enhancement of student autonomy through personalized and self-directed learning experiences. This finding is strongly supported by Boelens, Voet, and De Wever (2018), who emphasized that flexible learning environments promote learner-centered pedagogies that adapt to individual learning paces and styles. In this study, participants shared how the flexibility in scheduling and content delivery allowed them to manage their own learning, echoing similar observations in prior studies on blended and online education modalities (Hrastinski, 2019).

Another prominent perspective is on the role of FL in widening access to education, particularly for students constrained by geography, finances, or personal responsibilities. This aligns with Means et al. (2013), who documented how flexible delivery formats such as online and hybrid courses make higher education more accessible to non-traditional learners. In the context of this research, several students noted that FL enabled them to continue their education despite transportation limitations and caregiving responsibilities, affirming what Baticulon et al. (2021) observed in the Philippine higher education context during the pandemic.

The third theme highlights the complex cost dynamics of FL implementation: while students generally perceive FL as cost-saving (e.g., no transportation or boarding costs), institutions face considerable expenses related to technology upgrades, faculty upskilling, and platform maintenance. This finding resonates with Hodges et al. (2020), who noted that emergency remote teaching (a form of FL) demanded rapid investments in digital infrastructure and human resources, often without corresponding increases in budget allocations. Similarly, Adnan and Anwar (2020) emphasized that while online learning mitigated financial barriers for students, it created new burdens for institutions, especially in developing countries.

The transition to flexible learning (FL) during the COVID-19 pandemic introduced several challenges, with faculty resistance to new teaching methods and increased workload being one of the most significant. As Rapanta et al. (2020) and Hodges et al. (2020) observed, many educators faced difficulties in adapting to online and hybrid teaching models, which disrupted their established pedagogical practices. This resistance was rooted in concerns about digital literacy, a lack of sufficient resources, and the fear that the personal, interactive nature of face-to-face teaching

would be lost. These challenges were exacerbated by the need for educators to rapidly integrate unfamiliar technologies into their teaching. According to Hodges et al. (2020), overcoming this resistance requires a combination of professional development, institutional support, and a shift toward more learner-centered approaches that emphasize flexibility and adaptability in teaching.

Alongside challenges faced by faculty, the perspective of digital equity emerged as a significant barrier to access, particularly for students in low-income or rural areas. As highlighted by Baticulon et al. (2021) and Adnan and Anwar (2020), unequal access to technology—such as reliable internet connections and adequate devices—limited many students' ability to participate fully in online learning. This disparity not only hindered learning outcomes but also deepened existing educational inequalities. Addressing digital equity, therefore, is critical to ensuring that all students have the resources and support they need to succeed in a flexible learning environment. Both Baticulon et al. (2021) and Adnan and Anwar (2020) stress the importance of providing students with the necessary digital tools and skills to navigate online education, highlighting the need for systemic change in how digital access is distributed.

Aside from extending previous studies, the study has shown that the participants converge and diverge and it is in the divergences where tensions between issues of access, costs and quality arise (Daniel, 2012), Adopting the Iron Triangle Theory has allowed the study to have deepened understanding of FL implementation beyond describing the perceptions and experiences of faculty, students or administrators. It was able to do this by not treating the three elements as inherently conflicting objects as assumed in a functionalist perspective but socially constructed

realities that can be associated with relational perspectives that are grounded on the participants' contexts.

Rather than treating the three elements as the primary domain of each sector, the study has also indicated that conflicts between the elements can also arise within a sector. For example, the study found that while administrators appreciate the increased access provided by FL to more students, they also recognize the additional investment and costs required for implementing it. This duality within the sector indicates the complexity of the tensions as previously framed (Nsamba et al 2021). Using the Iron Triangle Theory has allowed the study to go beyond describing the issues and challenge

The response of the actors to these tensions indicate their efforts at addressing these conflicts. Initiatives such as the implementation of tutorial systems, improved feedback mechanisms, and interactive learning activities served as strategic responses to manage the complex interplay between access, quality, and cost, as previously mentioned. These were not random or superficial interventions; rather, they reflected the administration’s interpretation of and reaction to the dilemmas that are embedded in the varying stakeholder concerns.

The interpretivist approach taken by study towards the relationship between the three elements is grounded in the study’s assumption that meanings are relational—they are formed through stakeholder interactions and institutional responses within a given educational context. In this light, the study verified the presence of tensions by analyzing how stakeholder experiences and institutional strategies co-constructed the meaning and practice of FL. This demonstrates that tensions are not just a matter of

opposing opinions, but are also shaped by relationally constructed meanings that influence educational decision-making and outcomes.

This interpretivist approach has enabled the study to take into account the role of perspectives of FL itself in explaining the tensions, rather than assume the elements as inherently conflicting. Examining the convergences in participants' views reveals how their shared understanding of flexible learning (FL) both enabled and constrained its adoption within the educational institution. Participants recognized FL's potential to expand access to education while acknowledging the need for adjustments and additional efforts, indicating an awareness of both the opportunities and the manageable challenges associated with its implementation. This awareness gave rise to a central explanatory theme: that flexible learning represents a combination of traditional teaching and digital technologies. Having appreciation for FL's affordance in expanding access provides a motivational reason for engaging in it while the recognition of the institutional adjustments it requires meant that the decision was not uninformed but was made with an awareness of its demands. This perspective suggests that the institution possessed a sufficient foundation and initial capacity to pursue flexible learning initiatives.

However, this interpretation carries with it some limitations. Conceptualizing FL merely as the integration of traditional practices with digital tools risks reducing technology to a passive role, overlooking its capacity to reshape teaching and learning processes fundamentally. As Garrison, Anderson, and Archer (2000) and Mishra and Koehler (2006) argue, technology is not just a delivery mechanism but an active agent that transforms learning environments. By maintaining a view of technology as simply supplementary, the institution's understanding of flexible learning can be seen as

limited. This surface-level conception of FL may have contributed to its inability to fully anticipate or address the deeper systemic changes needed to implement FL effectively.

The previous discussion also indicates that the emergence and even persistence of the tensions arise out of the interplay between divergent as well as convergent perspectives. As previously mentioned, the tensions which were validated through the institutional efforts taken to address such challenges, were not fully addressed because FL was viewed in the end as a temporary instructional approach resulting from the pandemic. While this provides an account for those divergences and emergence of tensions, the convergent perspectives and their subsequent explanatory theme also provide a different but contributory account of the tensions. The convergent perspectives in the case appears to have provided an account both for the initiation of FL implementation but also an additional account of the lack of adequate response for the resulting tensions or dilemmas.

Recognizing both the convergences and divergences in participants' meanings highlights critical implications for practice. Educational leaders must engage in meaning-making work, managing and aligning diverse interpretations of flexible learning to create a coherent and shared institutional vision. Furthermore, leadership must adopt a transformative approach—one that not only embraces technological changes but also reimagines pedagogical frameworks to navigate the uncertainties of educational innovation. Fostering collaboration, critical reflection, and a shared sense of purpose becomes essential in moving beyond surface-level integration and realizing the deeper potential of flexible learning environments.

This insight offers a novel contribution to the discourse on Flexible Learning by highlighting the critical role of meaning-making and leadership in both initiating and sustaining FL, particularly in navigating the tensions inherent in its implementation.

While the study has contributed to a more interpretivist understanding of these tensions, the study's data has not been able to explain the trade-offs between these elements, wherein a reconfiguration in one affects the others. A longitudinal study in the future can help examine these aspects.

Chapter V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This study examined the tensions between issues of access, quality, and cost during the implementation of flexible learning (FL) in an educational institution. By identifying converging and divergent perspectives on FL, the study explored how these perspectives help unpack such tensions and the degree to which they are addressed.

Using the Iron Triangle Theory as an analytical lens, the findings show that convergent perspectives—such as recognizing FL's potential to improve access and efficiency—provide a shared sense of purpose that supports its adoption. Divergent perspectives—such as differing views on workload implications and the long-term viability of FL—highlight persistent tensions, particularly when FL is perceived as a temporary, pandemic-driven solution. These perspectives explain the Iron Triangle to the extent that they reveal how stakeholders' interpretations influence the balance (or imbalance) between access, cost, and quality. However, they do not fully resolve these tensions, as some challenges remain embedded in institutional structures and resource constraints.

The study suggests two key implications. First, implementing FL is as much a process of meaning-making as it is a pedagogical, technical, or logistical undertaking. Stakeholder interpretations influence the level of engagement and commitment, which in turn affects how tensions are managed. Second, while leadership that aligns and mobilizes stakeholders is important, such alignment may only partially address the inherent trade-offs among access, cost, and quality.

In sum, the findings offer a relational perspective on the Iron Triangle in the context of FL. The dimensions of access, quality, and cost are not static, but are shaped by ongoing interaction, negotiation, and institutional priorities. While convergent and divergent perspectives provide valuable insight into why certain tensions persist or are mitigated, they explain the Iron Triangle only insofar as they reveal the underlying social and organizational processes—without eliminating the trade-offs entirely.

The following recommendations have been formulated to address the challenges and tensions identified in the implementation of flexible learning.

Educational organizations should make deliberate efforts to understand the diverse perspectives of stakeholders on Flexible Learning (FL). This can be achieved by establishing structured feedback mechanisms such as regular surveys, focus group discussions, and stakeholder consultations. By systematically gathering and analyzing these perspectives, institutions can better anticipate potential tensions among access, cost, and quality and respond with informed, context-appropriate strategies. Moreover, integrating the analysis of stakeholder perspectives into institutional policy and planning can help ensure that workload management, resource allocation, and professional development programs are aligned with the needs and realities of both students and faculty. This alignment can foster greater acceptance, engagement, and sustainability in FL implementation.

Further research is needed to build on these findings. A longitudinal study is recommended to examine how changes in one dimension of the Iron Triangle—such as expanding access—affect the other two dimensions of cost and quality over time. This will provide valuable insights into the long-term implications and sustainability of FL initiatives. Additionally, quantitative research should be undertaken

to investigate the relationships between specific stakeholder perspectives and the tensions they perceive. Such empirical evidence will not only deepen the understanding of the dynamics in FL implementation but will also inform the development of targeted interventions that educational organizations can employ to address these challenges effectively.

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Appendices

APPENDIX A

Interview Guide Questions

Set A: For Faculty

1. What is flexible learning for you? What are your views/perspectives on flexible learning as a teaching modality?
2. What is your experience of flexible learning here at the institution, particularly in terms of teaching delivery and workload?
3. What can you say about the implementation of flexible learning in the institution, especially in relation to your teaching practice and students' learning?
4. What, for you, are the issues and/or challenges in the implementation of flexible learning in the institution, such as instructional, technological, or resource-related concerns?
5. What changes in the institution have taken place/are taking place as a result of the adoption of flexible learning, particularly in teaching strategies and faculty support?
6. What do you think is needed for the successful implementation of flexible learning in the institution, especially in terms of faculty training, resources, and support systems?

Set B: For Students

1. What is flexible learning for you? What are your views/perspectives on flexible learning as a learner?
2. What is your experience of flexible learning here at the institution, particularly in your classes and academic requirements?

3. What can you say about the implementation of flexible learning in the institution, especially in terms of your learning opportunities and personal circumstances?
4. What are the issues and/or challenges in the implementation of flexible learning in the institution, such as access to resources, time management, or engagement in classes?
5. What changes in the institution have taken place/are taking place as a result of the adoption of flexible learning, particularly in terms of student services and classroom delivery?
6. What do you think is needed for the successful implementation of flexible learning in the institution, especially to improve student access, learning experiences, and support?

Set C: For Administrators

1. What is flexible learning for you? What are your views/perspectives on flexible learning from an institutional management standpoint?
2. What is your experience of flexible learning here at the institution, particularly in terms of policy-making, program implementation, and institutional planning?
3. What can you say about the implementation of flexible learning in the institution, particularly for academic quality, institutional competitiveness, and student outcomes?
4. What are the issues and/or challenges in the implementation of flexible learning in the institution, such as infrastructure, funding, or administrative concerns?
5. What changes in the institution have taken place/are taking place as a result of the adoption of flexible learning, particularly in governance, academic policies, and support structures?

6. What do you think is needed for the successful implementation of flexible learning in the institution, particularly in terms of policies, investments, and institutional commitment?