

Innovative Teaching Techniques in Home Economics: Insights of Teachers in 21st-Century Classroom

Oscar H. Dela Torre, Jr.

Abstract. This phenomenological study explored and sought to understand the lived experiences and insights of Home Economics Junior High School teachers in employing innovative teaching techniques in 21st-century classrooms. The participants were composed of ten (10) selected Home Economics Junior High School teachers from Central District of Tagum City. Data were collected through in-depth interviews and focus-group discussions and analyzed using thematic analysis. The purpose was to provide valuable knowledge to help teachers adapt their instructional methods to meet the needs of modern learners. The findings revealed three major themes: first, innovative teaching techniques included integrating technology into Home Economics instruction, engaging students through project-based and experiential learning, and employing differentiated instruction and personalized learning approaches; second, coping mechanisms for challenges included flexible instructional strategies, ongoing professional development, and peer collaboration and mentorship; and third, educational management insights emphasized that technology integration enhances student engagement and learning outcomes, experiential learning fosters practical skill development, and mentorship supports teachers in overcoming challenges. The insights from this study offer practical guidance for teachers seeking to refine their teaching methods and better address the diverse needs of learners in contemporary classrooms.

KEY WORDS

1. innovative teaching techniques 2. home economics 3. 21st century
classroom

Date Received: April 05, 2025 — Date Reviewed: May 15, 2025 — Date Published: June 18, 2025

1. Introduction

As the demands of the 21st-century classroom shift towards fostering critical thinking, problem-solving, and real-world application of knowledge, Home Economics teachers are challenged to go beyond traditional methods to integrate digital tools, project-based learning, and sustainability education. The study explored how Home Economics teachers adapt their instructional methods to meet the needs of modern learners by integrating creative, student-centered, and technology-based approaches. It aimed to document their strategies, challenges, and the impact of these innovations on student engagement and learning outcomes. This study was chosen because it addressed the evolving role of Home Economics in developing essential life skills, sustainability, and global citizenship, while also filling a gap in literature by highlighting how a traditionally practical subject can be transformed to meet 21st-century

educational demands. In the United States, a primary challenge in implementing innovative teaching techniques in Home Economics is the lack of consistent professional development for teachers. Home Economics educators often receive limited training in using digital tools and integrating technology into their curricula. This results in a gap between the expected use of 21st-century teaching techniques and the actual practice. While some states have embraced new pedagogical models like project-based learning and flipped classrooms, others still rely heavily on traditional teaching methods, creating a disparity in student learning experiences (Mann Chase, 2021). In Australia, issues related to curriculum alignment and the integration of sustainability principles pose significant challenges. The national curriculum emphasizes sustainability and critical thinking; many Home Economics programs lack the resources and training to effectively incorporate these themes. A gap between the theoretical aspects of the curriculum and the practical application in classrooms, particularly in rural areas where teachers face limited access to updated teaching materials and professional development opportunities (Wilson Dunn, 2021). In Japan, Home Economics education is traditionally rooted in established pedagogical practices, and there is resistance to adopting new, student-centered techniques. Many teachers prefer to maintain a teacher-centered approach, focusing on rote learning and memorization, which conflicts with the growing need for critical thinking and creativity in modern education. This resistance is partly due to a lack of support and guidance in implementing new methods, as well as cultural expectations that prioritize conformity over experimentation in teaching (Tanaka Ito, 2022). The Philippines faces significant resource constraints and issues with teacher preparedness, which hinder the adoption of innovative teaching strategies in Home Economics. Many schools, especially in ru-

ral areas, lack the necessary digital tools, such as computers and internet access, to implement technology-enhanced learning. Although the national curriculum encourages student-centered and inquiry-based learning, many Home Economics teachers feel inadequately prepared to shift from traditional teaching methods due to a lack of continuous professional development and support from the education system (Delos Santos Garcia, 2022). A lack of comprehensive professional development programs for Home Economics teachers is another significant issue. There have been efforts to update the Home Economics curriculum to reflect 21st-century skills, many teachers feel ill-equipped to implement innovative techniques due to limited training. Teachers often struggle to incorporate digital tools and learner-centered approaches, such as collaborative projects and inquiry-based learning, because professional development opportunities are sporadic and do not adequately cover the integration of these strategies into daily lessons (Rivera Cruz, 2023). Several studies highlight a gap between the intended curriculum and its practical implementation. The national curriculum framework for Home Economics emphasizes 21st-century skills like critical thinking, problem-solving, and sustainability. The actual content and instructional resources available to teachers are outdated. This misalignment creates confusion and limits teachers' ability to deliver content that is both relevant and engaging for students. Moreover, a rigid curriculum structure limits the flexibility teachers need to incorporate innovative, context-specific activities that cater to the diverse needs of students (Bautista Lorenzo, 2021). One of the significant barriers to implementing innovative techniques in Home Economics is the limited availability of teaching resources and infrastructure, particularly in public secondary junior high schools. Home Economics classrooms in Tagum City lack adequate facilities, such as functional kitchens, sewing machines, and digi-

tal tools, which are essential for hands-on and technology-enhanced learning. This scarcity of resources forces teachers to rely on traditional, lecture-based methods, which reduces the potential impact of experiential and project-based learning strategies (Castillo Dela Rosa, 2021). Hence, considering all the existing issues, the study serves as a valuable resource for teachers, curriculum designers, and policymakers interested in transforming Home Economics into a dynamic and impactful subject that prepares students for the complex realities of modern life.

1.1. Purpose of the Study—The purpose of this study was to explore and understand the lived experiences and insights of Home Economics teachers in employing innovative teaching techniques in 21st-century classrooms. The study aimed to delve into how these teachers perceive, implement, and navigate the challenges and opportunities associated with adopting modern instructional strategies. By focusing on the perspectives of teachers, the research sought to capture the essence of their experiences, highlighting not only the successes but also the barriers they encounter in integrating learner-centered and technology-enhanced teaching methods in Home Economics education. By conducting a study on understanding the subjective realities and meanings that individuals ascribe to their experiences, the study may provide rich, contextualized insights into how teachers interpret and respond to the evolving demands of 21st-century education, thus contributing to a deeper understanding of the complexities of teaching Home Economics in contemporary classrooms. This approach helped uncover the nuances of teacher experiences, making it possible to identify gaps and suggest practical solutions that are grounded in the realities of educational practice. The study typically involved implementing its objectives to understand the motivations and rationales behind teachers' decisions to use particular innovative techniques in their classrooms and to identify the contextual factor such as institutional support, access to resources, and professional development opportunities that facilitate or hinder the adoption of innovative teaching methods. This would also explore the personal and professional impacts of integrating these techniques on teachers' instructional efficacy, job satisfaction, and relationship with learners, analyze the challenges and barriers that teachers face, including issues related to curriculum alignment, resource constraints, and resistance to change and generate actionable insights that can inform future professional development programs and policy interventions aimed at supporting Home Economics teachers in implementing 21st-century educational practices.

1.2. Research Questions—In line with the purpose of exploring the strategies of teachers in innovative teaching techniques in home economics for the 21st century classroom including the coping mechanisms with the challenges that they encountered. This study specifically sought answers to the following research questions:

- (1) What are the experiences of teachers in implementing innovative teaching techniques of Home Economics Junior High School Teachers in the 21st century classroom?
- (2) How do teachers cope with the challenges encountered while employing innovative teaching techniques in Home Economics in the 21st century classroom?
- (3) What insights can be drawn on innovative teaching techniques in Home Economics in the 21st century classroom?

1.3. Definition of Terms—To fully understand the terms used in this study, the following were defined operationally: Innovative Teaching. Refers to the implementation of creative and effective instructional strategies and methodologies that enhance student engage-

ment, learning, and critical thinking in the educational process. It involves moving beyond traditional approaches by integrating modern pedagogical techniques, such as project-based learning, technology integration, flipped classrooms, and collaborative learning, to create dynamic and interactive learning environments. This approach emphasizes student-centered practices, where learners take an active role in their education, fostering skills such as problem-solving, collaboration, and adaptability. Home Economics. An interdisciplinary field of study that

focuses on the management of home and community resources to enhance individual and family well-being. It encompasses a wide range of topics, including nutrition, cooking, budgeting, textiles, family relations, and consumer education, aiming to equip students with practical skills and knowledge that can be applied in everyday life. The discipline emphasizes the importance of understanding both the social and economic factors that influence family dynamics and decision-making processes.

1.4. Significant of the Study—Innovative teaching techniques in Home Economics for the 21st century classroom can enhance learners' learning experiences and outcomes and provide insights for teachers and policymakers on effective instructional approaches in Home Economics education. This study may find significance to the following: Learners Learners' engagement and participation are critical for creating a dynamic learning environment. Their primary responsibilities include taking initiative in their own learning by actively participating in hands-on activities, projects, and collaborative tasks that promote skill development and critical thinking. They are encouraged to demonstrate creativity and resourcefulness when completing assignments, whether through cooking, budgeting, or designing practical solutions to real-world problems.

Teachers They take on various responsibilities that are essential for creating engaging and effective learning environments in 21st-century classrooms. Their primary tasks include de-

signing and delivering lesson plans that incorporate modern pedagogical approaches such as project-based learning, collaborative activities, and technology integration to enhance student engagement and learning outcomes. Teachers are also responsible for continuously reflecting on and assessing their instructional practices, adapting strategies to meet the diverse needs of students, and fostering an inclusive classroom atmosphere that encourages exploration and creativity. Parents They may actively engage in their children's education and foster a positive learning environment at home. Their primary responsibilities include encouraging their children to participate in Home Economics activities, both in school and at home, by providing resources and materials necessary for hands-on projects and experiments. Parents can enhance their educational experience by reinforcing the concepts taught in the classroom, discussing relevant topics, and promoting the importance of skills such as cooking, budgeting, and sustainability in everyday life.

1.5. Theoretical Lens—This study deals with the perspective of innovative teaching techniques in home economics as a way to increase student engagement. Learning is a cyclical process requiring concrete experience, reflective

observation, abstract conceptualization, and active experimentation, according to Kolb's Experiential Learning Theory (1984). This theory is still essential today and has been improved over in more recent studies (Morris, 2019). Davi-

tadze et al. (2022) applied Kolb's Experiential Learning Theory to highlight the relevance of learning by doing. It shows that meaningful learning occurs when students actively move through a four-stage cycle: concrete experience, reflective observation, abstract conceptualization, and active experimentation. Their results demonstrate how experience-based, structured activities, like simulations, improve confidence and the ability to apply knowledge in real-world situations (Davitadze et al., 2022). This model is particularly aligned with the pedagogical nature of Home Economics, where learners develop competencies not just through passive listening but through doing, reflecting, and applying. Teachers use innovative strategies such as simulations of real-life tasks, role-playing scenarios, and community-based projects to create rich, experiential learning environments. During these activities, students first encounter a concrete experience, which they then analyze through reflection, draw general principles from in the conceptualization stage, and finally apply in new contexts through experimentation. This cyclical process fosters critical thinking, adaptability, and practical skill mastery, key outcomes in 21st-century Home Economics education. By grounding teaching practices in Kolb's experiential learning framework, teachers not only enhance student engagement but also prepare learners for real-life challenges in both personal and professional domains. A study by Smith Taylor (2023) highlighted how Home Economics educators use experiential learning techniques, such as cooking labs and community projects, to provide students with real-world experiences. The researchers found that these approaches not only enhance student engagement but also help them develop critical life skills. The Constructivist Learning Theory of Piaget and Vygotsky, which emphasizes that students actively construct their knowledge through experience and reflection, serves as the foundation for this study. This theory is in line

with the practical exercises that students participate in in home economics classes, which consider for cooperation, problem-solving, and decision-making (Nurhasnah et al., 2024). Jean Piaget emphasized individual cognitive development through interaction with the environment, while Lev Vygotsky introduced the social dimension of learning, particularly through scaffolding and the Zone of Proximal Development (ZPD). These foundational ideas have shaped 21st-century instructional practices, particularly in hands-on, skill-based subjects like Home Economics. This theory emphasizes that learning is an active, constructive process wherein students build knowledge through meaningful experiences and social interaction. In the context of Home Economics, which is inherently practical and skills-based, this theoretical lens is especially relevant. Teachers in the 21st-century classroom employ innovative, student-centered strategies that allow learners to engage in hands-on, real-world tasks such as cooking, budgeting, sewing, and entrepreneurship. These activities are not merely instructional routines but opportunities for students to make sense of concepts by doing, reflecting, and applying what they have learned. Guided by Piaget's idea of cognitive development and Vygotsky's principle of the Zone of Proximal Development, Home Economics teachers provide scaffolding, modeling tasks, guiding initial attempts, and gradually releasing responsibility to the learner. The integration of digital tools such as online design apps, video tutorials, and virtual simulations enhances this constructivist approach, enabling learners to explore content in a dynamic and personalized manner. Thus, the constructivist framework not only justifies the use of innovative teaching techniques in Home Economics but also explains how these practices cultivate deeper understanding, skill mastery, and learner autonomy in the 21st-century educational landscape. Moreover, this study is based on Mishra and Koehler's (2006) TPACK Frame-

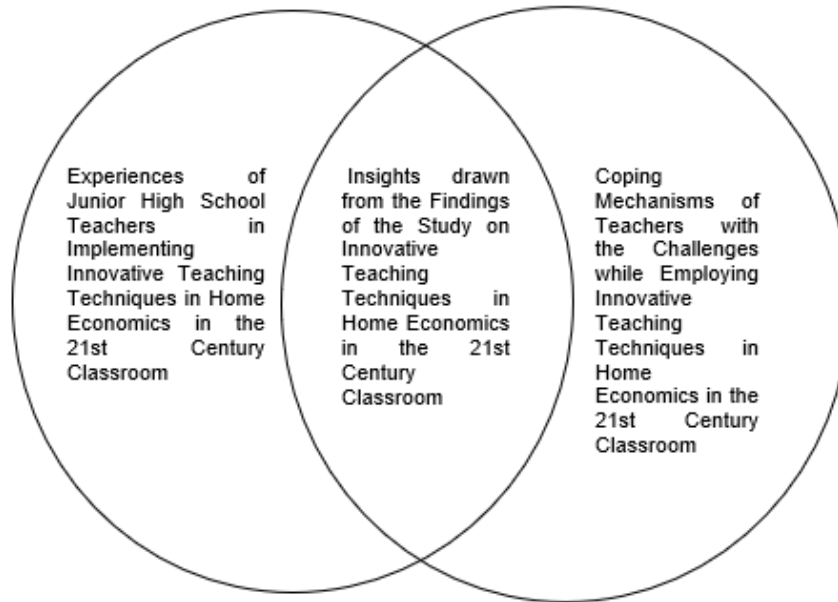


Fig. 1. The Conceptual Framework of the Study

work, which provides guidelines for successful technology integration in the classroom. Scott (2021) cited how useful it is for assisting teachers in striking a balance between technology, pedagogy, and content. TPACK guarantees that home economics instruction remains current, interesting, and in line with 21st-century competencies. This framework is highly relevant to the study “Innovative Teaching Techniques in Home Economics: Insights of Teachers in the 21st-Century Classroom,” as it emphasizes the dynamic interplay between three essential components of effective teaching: content knowledge (CK), pedagogical knowledge (PK), and technological knowledge (TK). In Home Eco-

nomics, where instruction spans diverse topics such as culinary arts, financial literacy, and textile technology, the thoughtful integration of technology is vital to making content engaging and applicable to real-world contexts. Teachers who demonstrate strong TPACK are able to design learning experiences that not only deliver subject matter effectively but also leverage digital tools to enhance understanding and student participation. The TPACK framework helps explain how teachers’ ability to balance these three domains enables them to adopt innovative teaching techniques that meet the diverse learning needs of students while keeping pace with technological advancements.

2. Methodology

This chapter outlines the methodological framework employed in investigating the innovative teaching techniques used by Junior High School Home Economics teachers. It describes the research design, participant selection, data collection procedures, the researcher’s role, methods of data analysis, strategies to ensure trustworthiness, and the ethical considerations that guided the conduct of the study. The study aimed to generate in-depth insights into the actual classroom practices and pedagogical innovations adopted by Home Economics teachers in the 21st-century educational landscape. Accordingly, the chosen methods were designed to capture the richness of participants’ experiences and the contextual realities shaping their teaching approaches. This

chapter provides a detailed explanation of how the study was carried out, ensuring that the research process was rigorous, ethically sound, and aligned with the purpose of exploring meaningful and socially relevant teaching practices.

2.1. Philosophical Assumptions—This study was grounded in a philosophical framework that shaped how data were gathered, analyzed, and interpreted, offering a foundational lens through which the findings and conclusions were understood. In qualitative research, these assumptions are central to shaping the direction of inquiry and are integral to maintaining coherence throughout the research process. Following the perspectives outlined by Khalifa and Khalifa (2024), the study considered four key philosophical dimensions: ontology (the nature of reality), epistemology (the nature of knowledge), axiology (the role of values), and methodology (the approach to inquiry). These assumptions helped define how I approached the experiences of Home Economics Junior High School teachers who employ innovative teaching techniques in the context of 21st-century education. Throughout this inquiry, I remained critically aware of my own beliefs about what constitutes reality in the classroom, how teachers construct and share knowledge, how personal and professional values shape interpretations, and which qualitative methods were most appropriate for capturing rich, authentic insights. These philosophical foundations ensured that the study remained reflective, ethically grounded, and aligned with the interpretive nature of qualitative educational research. Ontology refers to the philosophical stance concerning the nature of reality what exists and how it can be understood. In qualitative research, ontological assumptions guide how researchers perceive social phenomena, shaping both the questions they ask and the interpretations they draw. These assumptions reflect the researcher's conscious and unconscious beliefs about what can be known and how that knowledge is constructed within social contexts. Drawing from Jack Newman's (2019) insights, this study acknowledges the limitations of traditional positivist approaches that prioritize objectivity, measurability, and generalizability. Instead, it embraces a constructivist ontological position, which views reality as socially constructed through interaction, language, and shared meaning. This aligns with the core of qualitative research, which values the subjective experiences and perspectives of individuals within their specific contexts. In the context of this study, the "realities" surrounding the innovative teaching techniques used by Home Economics Junior High School teachers were explored through the lens of the participants themselves. Their narratives offered rich, contextualized insights into how they perceived and enacted innovation in their classrooms, and how they navigated the challenges that accompanied these practices. The study assumed that there was no single, objective reality to be discovered; rather, multiple truths were co-constructed through dialogue between the researcher and participants. Epistemology concerns the nature and sources of knowledge specifically, who can be a knower and how knowledge is acquired. In qualitative research, epistemological assumptions shape the way researchers interact with participants and interpret their perspectives. These assumptions emphasize the co-construction of knowledge through meaningful engagement between researcher and participants. As highlighted by scholars such as Crotty, Denzin, and Lincoln (as cited in Khalifa, 2023), qualitative epistemology posits that knowledge is deeply rooted in personal experiences and the contexts in which people live and work. McNeil (2020) also challenges traditional postpositivist paradigms by advocating for critical epistemologies that ac-

knowledge power dynamics, positionality, and the need for justice-oriented inquiry particularly in fields like social work and education. In this study, the epistemological stance reflects a constructivist and interpretivist approach, which values the subjective insights shared by Junior High School Home Economics teachers. The research prioritized establishing trust and rapport with participants to create a space where authentic, experience-based narratives could emerge. By closely engaging with teachers in the environments where they practice their craft, the study sought to uncover how they construct and apply knowledge related to 21st-century innovative teaching techniques, as well as how they cope with the challenges that arise in implementing these approaches. The researcher's proximity to the participants both physically and relationally was essential for capturing nuanced understandings that would not be accessible through distant or detached methods. Through sustained interaction, the study aimed to gather rich, contextualized insights that illuminate the lived realities of teaching Home Economics in a rapidly evolving educational landscape. Through deeper discussions that exposed the difficulties and victories inherent in their teaching experiences, this immersive approach not only encouraged trust and openness among participants. Axiology Axiology in qualitative research refers to the role of values and ethics throughout the research process. It acknowledges that research is not value-free, and that the researcher's personal beliefs, ethical stance, and cultural background inevitably influence the inquiry. According to Creswell (2019), qualitative researchers are expected to be transparent about their positionality, recognizing how their values and experiences shape data collection, analysis, and interpretation. In this study, I embraced the axiom that knowledge is value-laden and that my engagement with participants required a high level of ethical responsibility and self-awareness. Recognizing

the deep personal and subjective nature of the information shared, I approached each interaction with sensitivity and respect, ensuring that participants' voices were treated with dignity and authenticity. The value of each participant's contribution was preserved by carefully interpreting their responses within the context of their lived experiences. Rather than imposing external meanings, I honored their unique perspectives, allowing their voices to guide the meaning-making process. By doing so, the study aimed to present findings that not only reflected the participants' realities but also upheld the ethical principles of honesty, respect, and integrity. This axiology informed the ethical conduct of the research, from obtaining informed consent to ensuring confidentiality, and from interpreting narratives with fairness to reporting findings in a way that values the contributions of each teacher involved in the study.

Rhetorics Rhetorics in qualitative research refers to the guiding principles, beliefs, and stylistic choices that influence how a study is articulated and presented. It shapes the tone, structure, and language of the research, affecting how the inquiry is conducted and how the findings are ultimately communicated. As Creswell and Poth (2019) note, rhetorical assumptions highlight the use of personal voice, rich description, and flexible structure in expressing the lived experiences of participants. In alignment with these rhetorical principles, this study employed a phenomenological approach to explore the innovative teaching techniques of Home Economics Junior High School teachers in 21st-century classrooms. Given the interpretive nature of the study, I adopted a literary and narrative style of writing, allowing for the use of a first-person voice to reflect my direct engagement with the participants and the research process. This rhetorical stance supported the authentic representation of the participants' feelings, beliefs, and perceptions. Through sto-

rytelling and detailed narrative descriptions, I aimed to convey the essence of their lived experiences in implementing innovative teaching techniques, as well as their coping mechanisms in the face of related challenges. The use of qualitative language, rather than technical or statistical jargon, ensured that the findings re-

mained grounded in the teachers' own words and perspectives, preserving the integrity of their experiences. By embracing this rhetorical orientation, the study emphasized depth, meaning, and context core elements that bring the human experience at the heart of qualitative research into full view.

2.2. Qualitative Assumptions—In any research endeavor, assumptions serve as the foundational beliefs that shape the theoretical lens and methodological direction. In qualitative inquiry, particularly within a phenomenological framework, making these assumptions explicit is essential to ensure clarity and credibility throughout the research process. In-depth interviews are a vital tool in qualitative research that enable researchers to obtain rich, in-depth insights into participants lived experiences, meanings, and interpretations of their social environment, as Roman-Acosta (2024) highlights. This approach promotes a nuanced understanding that transcends surface-level data by facilitating a thorough, contextualized investigation of phenomena. Similarly, Lavee and Itzchakov (2021) emphasize that attentive and responsive listening is fundamental to high-quality qualitative research. By actively engaging with participants through intentional listening, researchers can access deeper, more nuanced understandings of individuals' perspectives and experiences across diverse contexts. They further assert that FGDs are essential in gathering rich, contextual data across disciplines, especially when the aim is to understand the complexity of participants lived experiences. Within a phenomenological framework, FGDs complement individual interviews by revealing common patterns and shared meanings among participants. To ensure credibility and confirmability, researchers must clearly articulate their assumptions, positionality, and the rationale for using FGDs, thereby strengthening the study's validity and

transparency. In this study, both in-depth interviews and focus group discussions (FGDs) were used to explore the lived experiences of Junior High School Home Economics teachers as they implemented innovative teaching techniques in 21st-century classrooms. This research adopted a phenomenological approach, which is particularly well-suited for examining the deeper meanings behind individuals' experiences. As Neubauer, Witkop, and Varpio (2019) suggest, engaging with phenomenology requires more than a methodological choice it demands immersion in its underlying philosophies, which prioritize human experience as a source of knowledge. This means understanding not just what participants experience, but how they make sense of those experiences within their educational context. Following Lester's perspective on phenomenological research, this study aimed to bracket preconceived assumptions and focus instead on participants' direct narratives. By setting aside prior biases, I approached the phenomenon with openness, seeking to understand how teachers navigate and interpret the use of innovative strategies in their Home Economics classes. Interpretive phenomenology, as articulated by Frechette et al. (2020), prioritizes the exploration of lived experience through participants' narratives, meanings, and reflections. Rather than seeking broad generalizations or statistical patterns, this approach aims to uncover the nuanced, subjective essence of a phenomenon by engaging deeply with individuals' personal accounts. Data were gathered from teachers who had firsthand experience with the

innovative approaches being studied. These interviews were transcribed, and significant statements were identified through a process called horizontalization. These statements were then grouped into thematic clusters, capturing the essence of what was experienced (textual description) and how it was experienced (structural description). The final stage involved synthesizing these insights into a composite narrative, revealing the essential meaning behind the participants' experiences. Despite its strengths, phenomenological research poses challenges. As the researcher, I had to continually bracket my own perspectives, which proved difficult at times, especially given my background in education. Additionally, it required thoughtful decisions about when and how my observa-

tions should inform the interpretation process without overshadowing participants' voices. As Qutoshi (2021) notes, phenomenology invites researchers to explore not only the participants' lifeworld's but also their own inner responses. This reflective process fosters a deeper understanding of both the phenomenon and oneself. In this study, phenomenology served as the ideal approach to uncover the insights, motivations, and coping strategies of teachers as they implemented innovative teaching techniques in their Home Economics classrooms. The method allowed for a rich exploration of human experience, contributing to a more profound understanding of teaching practices in the evolving landscape of 21st-century education.

2.3. Design and Procedure—This study adopted a qualitative research methodology guided by a phenomenological design, which centers on exploring and interpreting lived experiences. As emphasized by Lester and Lester (2021), phenomenology allows researchers to investigate individuals' perspectives while setting aside preconceptions known as bracketing to better understand how participants perceive their realities. This approach is rooted in the idea that personal meaning and subjective interpretation offer valuable insights, especially in social contexts like education. In this study, phenomenology was used to explore how Junior High School Home Economics teachers experience and apply innovative teaching techniques in a 21st-century classroom setting. Qutoshi (2021) highlights that, within a phenomenological framework, data collection and analysis are conducted concurrently, allowing the researcher to illuminate and interpret the essence of participants' experiences. This process encourages the expansion of thought, deepens understanding, and clarifies the researcher's positionality while engaging with the phenomena. The focus

on subjectivity and the participant's viewpoint makes phenomenology especially relevant for educational research that values real-world experiences and professional insight. To capture these lived experiences, the study used two primary data collection tools: semi-structured interviews and questionnaires with open-ended questions. The interviews provided an in-depth method of gaining access to the nuanced perceptions, motivations, and coping strategies of the teachers. These one-on-one conversations allowed me to delve deeper into personal experiences and gather rich, descriptive data. Complementing the interviews, structured questionnaires with embedded open-ended questions were distributed to a broader group of Home Economics teachers, particularly those who were difficult to reach due to scheduling or logistical constraints. These tools were designed to accommodate the realities of busy teachers while still allowing for the collection of substantial and detailed qualitative data. As Delve and Limpaecher (2022) noted, open-ended questions are especially valuable for encouraging participants to elaborate on their responses and

share context-specific insights. The core rationale for choosing a qualitative approach was to obtain a deep, contextualized understanding of how teachers implement and adapt innovative teaching techniques. Since qualitative research is more concerned with depth than breadth, the study engaged a focused but meaningful sample size, allowing for thoughtful and time-intensive data collection. This method aligns with the research's goal of uncovering the "how" and "why" behind certain teaching practices. Moreover, qualitative research considers not just the spoken content but also the way participants communicate including tone, body language, and emotional expression. These non-verbal cues often provide additional layers of meaning that enrich data interpretation and support the phenomenological emphasis on lived, embodied experience. As the researcher, I implemented

this phenomenological design to stay close to the participants' realities, while acknowledging the inherently subjective nature of the process. Although qualitative findings are not typically expressed numerically or suited for statistical analysis, they are rigorously analyzed through thematic coding. This method involves identifying and categorizing recurring ideas, patterns, and meanings across the data, leading to well-organized, coherent interpretations of participants' experiences. In sum, the phenomenological approach was particularly effective in exploring the insights and coping mechanisms of Home Economics teachers as they engaged with innovative pedagogies. It allowed the study to surface authentic voices and rich, experience-based knowledge that could inform both teaching practices and educational policy development.

2.4. Research Participants—The participants of this study were composed of ten (10) selected Home Economics Junior High School teachers from five schools in the Central District of Tagum City. These schools included Tagum National Trade School, Tagum City Comprehensive High School, La Filipina National High School, Laureta National High School, and Tagum City National High School. To ensure the authenticity of the findings, I employed a purposive sampling method, selecting participants based on specific criteria aligned with the objectives of the study. The inclusion criteria were as follows: Participants must hold teaching positions within the T1-T3 range; both male and female teachers were considered for participa-

tion; must have at least three years of teaching experience in Home Economics at the Junior High School level and must have received a "Very Satisfactory" performance rating for three consecutive years. Purposive sampling allowed me to make sure that the teachers who were chosen had the training, subject-matter knowledge, and years of classroom experience needed to offer deep, pertinent, and situation-specific insights into the creative teaching methods used in their Home Economics classes. This approach also sought to guarantee that the study's findings fairly reflected the knowledgeable viewpoints and real-world expertise of seasoned educators, enhancing the findings' legitimacy, genuineness, and educational significance.

2.5. Ethical Considerations—This study observed rigorous ethical standards to protect the rights, dignity, and well-being of the teacher-participants. Fundamental ethical principles such as informed consent, confidentiality, and

voluntary participation were strictly upheld throughout the research process. All participants were informed about the study's purpose, procedures, potential risks, and benefits before agreeing to participate. They were assured that

their involvement was entirely voluntary and that they could withdraw at any point without any consequence. To safeguard confidentiality, all identifiable information was anonymized, and pseudonyms were used in reporting the findings. Data were securely stored and accessed only by the researcher and authorized personnel directly involved in the study. In line with ethical research practices, participants' responses were handled with utmost sensitivity and interpreted with respect to their personal perspectives and lived experiences. The study also ensured transparency and integrity in its interactions with participants, particularly given the deeply reflective nature of the phenomenological approach. I remained mindful of their positionality and biases, taking steps to bracket personal assumptions during data collection and analysis to honor the authenticity of the participants' narratives. Ethical clearance and necessary permissions were obtained from appropriate school authorities and institutional review bodies before the commencement of fieldwork. By adhering to these ethical guidelines, the study ensured that the voices of Home Economics teachers were heard respectfully and responsibly, contributing to meaningful insights into innovative teaching practices in the Junior High School setting. Social Value This study underscored the vital social relevance of integrating innovative teaching techniques in Home Economics instruction at the Junior High School level. By documenting and analyzing the firsthand experiences of teachers who adopted creative, student-centered approaches in their classrooms, the research contributed to a deeper understanding of how such practices enhanced learning in practical, skill-based subjects. The social value of this work lay in its potential to influence both classroom practice and broader educational policy. Insights from the study guided teachers in refining their teaching methods to better address diverse learner needs, thereby fostering improved academic out-

comes. In particular, the application of innovative strategies in Home Economics contributed to the development of essential life skills, the promotion of self-reliance, and the cultivation of responsible citizenship among students. Moreover, the study's implications extended beyond the individual learner. As effective teaching practices were identified and shared, schools especially those with limited access to advanced resources were empowered to implement low-cost, high-impact strategies. This helped bridge educational disparities by supporting equitable learning opportunities across different socioeconomic settings. The findings were expected to benefit not only the teacher-participants but also school leaders, curriculum developers, and policymakers who were committed to improving the quality of education in practical disciplines. Through these contributions, the study affirmed the role of innovative pedagogy as a tool for educational and social advancement. To improve teaching, engagement, and learning in practical disciplines, the research sought to inform evidence-based strategies.

Informed Consent To uphold ethical integrity, I ensured that informed consent was properly obtained from the Junior High School Home Economics teachers who participated in the study. This process involved clearly communicating the purpose, scope, procedures, potential risks, and expected benefits of the research in a language that was accessible and easily understood by all participants. Participants were given adequate time to review the information, ask clarifying questions, and reflect on their decision to participate. It was emphasized that their involvement was entirely voluntary, and they could withdraw from the study at any point without facing any form of penalty or disadvantage. All consent forms were documented and stored in compliance with ethical research protocols and institutional guidelines. I took care to address any concerns or inquiries raised by the participants promptly

and respectfully, ensuring that their rights and autonomy were fully protected throughout the research process. This comprehensive informed consent procedure reinforced the study's commitment to ethical research by respecting the dignity, confidentiality, and voluntary participation of the teacher-respondents, in alignment with the core principles of respect for persons and ethical responsibility in qualitative inquiry.

Vulnerability of Research Participants In this study, the Home Economics Junior High School teachers are considered competent and capable participants, as they are directly engaged in the use of innovative teaching techniques and serve as primary sources of information. As the researcher, I ensured that participants were accessible for any follow-up clarification through their provided contact details. Clear communication lines allowed for transparency and supported participant engagement throughout the research process. Despite their professional expertise, it is acknowledged that sharing personal teaching experiences and reflections particularly those involving classroom challenges can evoke emotional or psychological discomfort. Therefore, I committed to fostering a respectful and non-threatening environment during interviews and focus group discussions. I approached each interaction with empathy and sensitivity, ensuring that participants felt safe, supported, and understood while sharing their insights. Their well-being, dignity, and autonomy were prioritized throughout the data collection process.

Risk, Benefits and Safety Ethical safeguards were central in conducting this study, especially regarding potential risks, benefits, and the overall safety of the Home Economics teachers involved. A possible risk was the emotional discomfort participants might experience when discussing setbacks, systemic issues, or difficulties in implementing innovative strategies in a 21st-century learning environment. To minimize such risks, all interview prompts, and discussion topics were thoughtfully crafted to be

culturally appropriate, professionally respectful, and non-invasive. To protect confidentiality, the study employed data anonymization techniques, ensuring that any identifying details were omitted or coded in the reporting phase. Participants were reminded that their responses would be treated with strict confidentiality and that their identities would remain undisclosed. In terms of benefits, this research provides valuable insights into the realities faced by teachers implementing innovative teaching techniques in Home Economics. The findings are expected to contribute to more responsive policies, professional development programs, and instructional support mechanisms. Moreover, the study offers teachers a reflective space to articulate and evaluate their own teaching practices, which can lead to enhanced self-awareness and instructional growth. Safety protocols were maintained at all stages of the study. Whether interviews were conducted in person or online, the environments were chosen to be secure, private, and conducive to open dialogue. Informed consent was diligently obtained prior to participation, outlining the voluntary nature of involvement, potential risks and benefits, and participants' rights including the freedom to withdraw from the study at any point without consequence. Additionally, the study underwent academic ethical review and approval to ensure adherence to the highest standards of research integrity and participant protection. These measures collectively upheld the ethical responsibility to safeguard the welfare of the participants while maintaining the credibility of the research process. Throughout the study, each participant was guaranteed confidentiality and gave their informed consent.

Privacy and Confidentiality Adherence to the Data Privacy Act of 2012 was a central consideration in this study, ensuring the protection of participants' personal information. Strict confidentiality measures were implemented, ensuring that all data collected was securely stored and only accessible to authorized individuals.

Any personal identifiers were removed or coded, maintaining the anonymity of participants in all reports and publications resulting from the research. Information gathered from the teachers was used solely for the purposes of this study and was not shared with third parties without explicit consent. Respondents were fully informed about how their data would be handled, and transparency regarding privacy protections was emphasized. By upholding these ethical standards, the study fostered trust with participants and their communities. Justice The principle of justice was carefully considered to ensure that the benefits and burdens of the research were fairly distributed among the participants. The selection of Home Economics teachers was done equitably, ensuring that no particular group of teachers faced undue burdens from the study's requirements. Additionally, the research aimed to benefit all stakeholders by offering valuable insights into the innovative teaching techniques employed by the teachers, which could be adopted in similar educational settings. The study was designed to ensure that all respondents had equal access to any professional development opportunities or insights that emerged from the research. Furthermore, the research findings were widely disseminated within the educational community, ensuring that both participating and non-participating teachers could benefit from the enhanced understanding of effective teaching practices. Transparency Transparency was maintained throughout the research process through open and clear communication with all participants and relevant stakeholders. Detailed information about the study's objectives, methods, potential risks, and benefits was provided both verbally and in written form. All consent forms and informational materials were written in clear, accessible language to ensure that the participants fully understood their involvement and how the collected data would be used. Upon completion of the study, the findings were made available to the participants and

the broader educational community, ensuring that the research process was transparent and contributing to the wider impact of the study. This commitment to transparency reinforced the ethical integrity of the research and its educational value. Qualification of the Researcher

As the researcher, I ensured that I was fully qualified to conduct this study. I had completed all academic requirements and passed the comprehensive examination before beginning the thesis writing, which was the final step in obtaining my master's degree. I was prepared to engage in this research physically, mentally, emotionally, and financially. Furthermore, the strong partnership between my adviser and me contributed significantly to the study's successful completion. The qualifications I held were crucial in ensuring that the research was conducted competently and ethically. I possessed a strong foundation in educational research and methodology, complemented by specific training in ethical research practices. This preparation enabled me to design and carry out the study in a way that respected the rights and welfare of all participants. In addition, my expertise in interdisciplinary teaching and curriculum development provided the necessary depth to interpret the findings accurately. This knowledge allowed me to draw meaningful conclusions that could benefit both educational practice and policy. My background ensured that the study was not only conducted responsibly but also produced valuable insights grounded in a deep understanding of the educational field.

Conflict of Interest

To maintain the integrity of the study, I actively managed any potential conflicts of interest throughout the research process. The funding sources for the research were disclosed to all respondents and stakeholders, with clear assurances that these sources did not influence the research agenda, findings, or any subsequent publications. I did not hold any vested interest in the specific outcomes of the study, ensuring

that the analyses and results were driven solely by the data and relevant educational theories. Additionally, regular audits and peer reviews of the research process were conducted to ensure that any unforeseen conflicts of interest were identified and addressed promptly. These measures helped safeguard the impartiality and objectivity of the research, ensuring that the study's findings were trustworthy and unbiased.

Adequacy of Facilities

I ensured the successful completion of the study by securing the necessary resources within the specified time frame. The technical committee played a pivotal role in enhancing the quality of the study by providing valuable suggestions and recommendations, which contributed to refining the research. Adequate funding was also secured to support the research process and to ensure that all necessary resources were available until the study's completion. The adequacy of facilities was also addressed to ensure that all locations where data collection took place were physically accessible to respondents, including those with disabilities. These locations were culturally appropriate, reflecting the values and expectations of the community, which fostered a respectful and inclusive environment. This consideration ensured that respondents felt safe, valued, and respected throughout the study. In addition, emergency protocols were in place to address any unforeseen situations that might arise during the re-

search process, safeguarding the well-being of both the respondents and the research staff. Regular checks and maintenance of the facilities ensured that they remained conducive to high-quality research throughout the entire study period.

Community Involvement

Community involvement played an essential role in ensuring the relevance and benefits of the study to the local educational community, particularly in Junior High Schools within the Central District of Tagum City. The design and outcomes of the research were shaped with the intention of addressing the needs and contexts of the local educational environment. I made sure to respect the local traditions, culture, and values of the study's respondents. Every step of the research process, from participant recruitment to data collection, was carried out with transparency and integrity, ensuring that no deceit was involved. I also ensured that the participants were fully informed and comfortable with their involvement in the study. Furthermore, I expressed my deep gratitude for the respondents' wholehearted participation, recognizing that their insights were invaluable in enriching the study. Their contribution not only supported the research but also helped to foster a deeper understanding of the innovative teaching techniques employed in Home Economics classrooms. Their willingness to share experiences added authenticity and depth to the findings.

2.6. Role of the Researcher—The researcher's task in this study was to examine and comprehend the feelings and ideas of the participating Junior High School Home Economics Teachers. To do this, it was necessary to ask participants about their own experiences using creative teaching methods. By discovering, sharing, and using knowledge, I stayed dedicated to educational establishments. To accomplish this, I played the roles of a facil-

itator who promoted candid and open communication and a listener who appreciated each voice and viewpoint expressed during the investigation. I also performed the role of analyst, closely examining the data to make sure that the teachers' perspectives were appropriately conveyed and significantly related to the goals of the study. Facilitator and Promoter of Unbiased Research I conducted interviews and guided participants through the process. To en-

sure impartiality, I interpreted responses based on existing literature and related studies rather than personal knowledge, thoughts, or feelings. Expert in Qualitative Methods I applied qualitative methods accurately and with integrity. This included assessing personal skills, seeking guidance from the research adviser and other professionals, and demonstrating competence in explaining the study without introducing bias. I conducted interviews according to the study's design, made appropriate field observations, and utilized Environmental Triangulation and Thematic Content Analysis effectively. Data Collector and Keeper I ensured various methods of recording were used during interviews, such as handwritten notes, audio recordings, and video recordings. All data were transcribed verbatim before analysis. I also took responsibility for securely storing these records to protect sensitive information, ensuring their relevance to study. Data Analyst I viewed the phenomena or problems from the participants' perspectives by interpreting data through transcription, coding, and theming. I worked to ensure that the findings accurately represented the participants' experiences and voices. In analyzing the data, I was attentive to the nuances of participants' responses. I then organized and presented the data, linking the research problem with relevant liter-

ature and studies. The findings were presented with research questions, using themes to show how the questions were answered. Lastly, I provided recommendations for future directions, offering implications for improving educational policy and practices based on the study's results.

Plagiarism and Fabrication as the Researcher

I, the researcher in this study, think that integrity is the basis of all scholarly work; therefore, appropriate acknowledgment of authors through direct quotations or by paraphrasing in my own words should be observed. To get a clear picture of the research context, I avoided using someone else's ideas, words, or results as if they were mine without giving the proper acknowledgment or providing citations as a way of showing that the text is taken from another source. As a responsible researcher, I am dedicated to honesty, openness, and respect for intellectual property rights. Maintaining these values guarantees that our work makes a significant and truthful contribution to the development of knowledge. By doing this, I also adhere to the moral principles that the academic community expects. Respecting these guidelines not only makes this study more credible, but it also sets an example of academic integrity for researchers in the future.

2.7. Data Collection—The following outlined the step-by-step procedure used in gathering the data needed for this study: Securing Endorsement In the fourth week of January 2025, I secured an ethics compliance certificate from the Dean of the Graduate School to proceed with the study. Asking Permission from the Schools Division Superintendent (SDS) In the third of February 2025, I sought permission from the Schools Division Superintendent to conduct the study in the identified schools. A letter addressed to the SDS, including Chapters 1 and 2 of the research proposal and the

research instrument, was sent. This explained the study's objectives and outlined the participant criteria. I awaited the response from the SDS before proceeding. Asking Permission from School Heads After receiving approval from the SDS, I sent letters to the school principals during the third week of March 2025. These letters detailed the study and the plans for conducting research within their schools. Along with highlighting the voluntary nature of participation, the communication guaranteed strict adherence to ethical standards, such as informed consent and confidentiality. I politely

asked for their assistance and collaboration to ensure a seamless and significant data collection procedure. **Obtaining Consent from the Participants** In the first week of March 2025, I formally obtained informed consent from the participants. They were oriented about the study and the process they would undergo as participants, ensuring transparency and voluntary participation. **Conducting the Interviews** The in-depth interviews and FGD were conducted during the second and third weeks of March 2025. I used a questionnaire to guide the interviews. Participant profiles were recorded, notes were taken, and conversations were audio-recorded for easier transcription. I actively engaged in listening and responding throughout the interview process. **Transcribing the Responses of**

the Interviewees In the fourth week of March 2025, I transcribed the interview responses accurately by recalling the recordings from the sound recorder. This ensured that the data was captured precisely. To ensure the authenticity of the participants' words and prevent any misunderstanding of their insights, I carefully went over each recording several times.

Data Coding and Thematizing After transcription, I categorized and coded the data throughout the month of April 2025. Themes were extracted, and individual responses were compared across participants to identify patterns and trends. This process helped in developing meaningful insights from the gathered data.

2.8. Data Analysis—In this study, thematic analysis was used to analyze gathered data. I analyzed the participants' responses from the conducted interviews using Creswell's Model, specifically the identification of themes approach. According to Creswell (2012, as cited by Chali, Eshete, and Debela, 2022), themes in qualitative research are similar codes aggregated together to form a significant idea in database. **Familiarization with the Data** To begin, I immersed myself in the data, reading and re-reading the interview transcripts. This familiarization process allowed for initial analytic observations and a deep understanding of the content. **Coding** Coding, a key element in qualitative analysis, involved generating succinct labels for important features of the data relevant to the research question. The process was not just about reducing the data, but also about interpreting it analytically. I coded every piece of data, which was then collated, linking all codes with the corresponding data extracts. **Thematic Analysis** As noted by Fuchs (2023), thematic analysis is a widely used method in qualitative research, particularly in social sciences. It al-

lows for a detailed exploration of the data, uncovering rich insights and patterns through iterative reading, note-taking, and coding. This approach is adaptable to various research designs and methodologies. The thematic analysis process helps develop theoretical understanding and generates nuanced interpretations that contribute to the advancement of knowledge. **Searching for Themes** During this phase, I looked for coherent and meaningful patterns in the data that were relevant to the research question. They organized the coded data according to each identified theme, ensuring that each theme represented a significant part of the data. **Reviewing Themes** I reflected on the themes to ensure they told a convincing and compelling story about the data. The relationship between the themes was examined, and each theme was refined and defined further. **Defining and Naming Themes** I then constructed a detailed analysis of each theme, identifying its essence. A concise, punchy, and informative name was assigned to each theme to effectively communicate its meaning and relevance. **Writing-Up** Finally, I wrote a comprehensive analysis of the

findings, weaving together the analytic narrative with data extracts. The narrative was contextualized in relation to existing literature, ensuring that the results contributed to a deeper understanding of the innovative teaching techniques

used by Home Economics Junior High School teachers. This process ensured that the analysis was thorough, transparent, and grounded in the data, providing meaningful insights for the study.

2.9. Framework of Analysis—This study's emphasis on useful, policy-relevant insights was a good fit for framework analysis, which is known for its adaptability and rigor in applied qualitative research. I used a methodical yet flexible approach to analyze the teacher-participant data, balancing deductive structure with receptivity to emergent themes, as guided by the pragmatic approach outlined by Ramadhan et al. (2021) for qualitative data analysis.

Organizing the Data

The data were first organized in a way that made it easy to review, allowing the researcher to go through each topic and extract relevant concepts and themes. This helped create a clear structure for further analysis.

Finding and Organizing Ideas and Concepts

As I reviewed the data, recurring words and ideas were identified. These ideas were then organized into codes or categories, which served as a foundation for the analysis.

Building Over-Arching Themes in the Data

Each response category was linked to one or more themes that provided deeper meaning to the data. These themes were grouped under central overarching themes, allowing me to uncover broader patterns and insights within the responses.

Ensuring Reliability and Validity in Data

Analysis and Findings

To ensure the reliability and validity of the findings, I confirmed the results through multiple independent sources. The validity of the data was further strengthened by using different methods (instruments) to measure the same concepts. This multi-faceted approach helped ensure that the findings were dependable and accurate.

Writing and Presentation of Findings

Once the data analysis was complete, I began drafting the output by weaving narratives from the data and integrating them with relevant literature. This helped create a comprehensive story that accurately reflected the findings. Additionally, the results were presented thematically, accompanied by artistic graphs and illustrations to aid in the visualization of the data. Although framework analysis can be a straightforward process when applied correctly, it requires researchers to work systematically and dynamically. I remained diligent throughout the process, ensuring that each step was completed thoroughly to yield high-quality and valid results (Ritchie Spencer, 1994, as cited by Goldsmith, 2021). This approach allowed for a deep, organized, and systematic analysis of the data, resulting in findings that were both reliable and insightful for understanding the innovative teaching techniques of Home Economics Junior High School teachers.

2.10. Trustworthiness of the Study—In qualitative research, the traditional concepts of validity and reliability are often replaced by the idea of trustworthiness. In the context of this

study on innovative teaching techniques among Home Economics Junior High School teachers, trustworthiness is a key factor in ensuring the research findings are credible and meaningful.

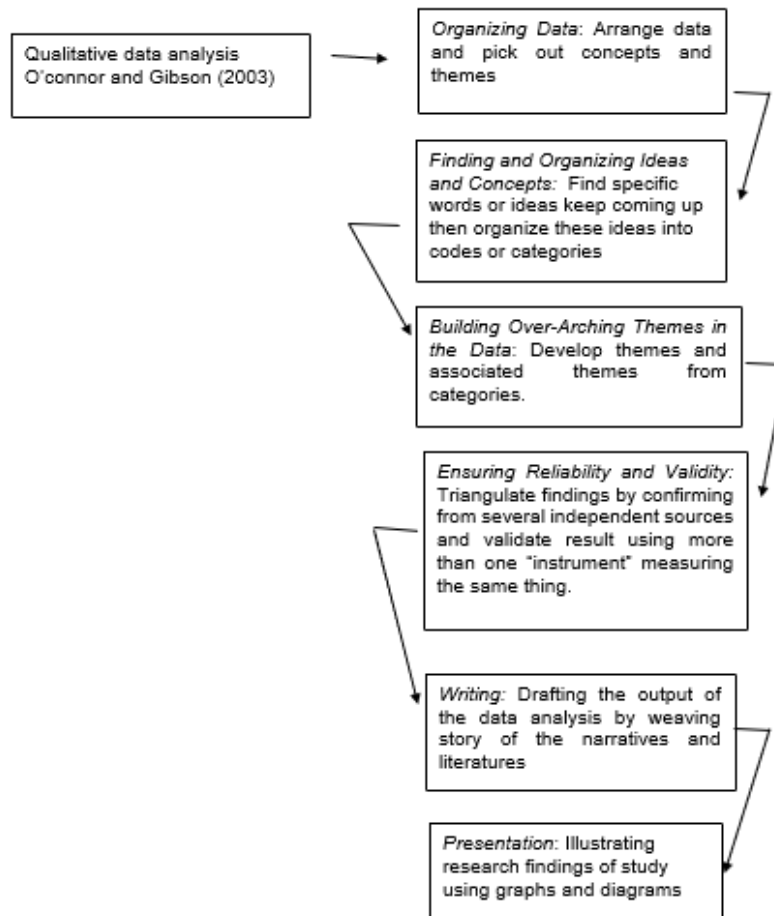


Fig. 2. Analytical Framework of the Study

Trustworthiness in qualitative research is typically evaluated through four main components: credibility, transferability, dependability, and conformability. Credibility refers to how believable and appropriate the research findings are, particularly in terms of how closely the participants' views align with the researcher's interpretation. In this study, credibility was ensured by comparing the data with existing theories and practices in teaching Home Economics, along with validating findings through ongoing discussions with the participants. Transferability is concerned with how applicable the findings of the study are to other settings or contexts. I facilitated the transferability of the findings by providing a thick description of the research context, detailing the specific educational environment of the schools involved in the study. This enables other researchers or policymakers to assess whether the results are relevant to their own contexts, such as other schools or educational districts. Dependability is the extent to which the research findings are consistent and can be replicated. This study ensured dependability by documenting the research process in detail, allowing other researchers to follow the same steps and obtain similar results. For instance, detailed descriptions of the participants, methodology, and analysis processes were included, ensuring that another researcher could replicate the study and verify the consistency of the findings. Conformability focuses on the objectivity of the research process, particularly

during data collection and analysis. In this study, I maintained objectivity by ensuring that data collection methods, such as interviews and observations, were consistently applied and that the data interpretation was based on the participants' responses rather than the researcher's personal biases. This was further ensured by comparing data with multiple sources to establish the accuracy, relevance, and meaning of the findings (Ahmed, 2024). When applied to policy development, the trustworthiness of qualitative research plays a critical role. Policymakers rely on substantial, reliable evidence to inform decisions that promote social justice and fairness. In this study, the insights into the innovative teaching techniques used by Home Economics teachers provide valuable evidence that could shape educational policies, ensuring they reflect the needs of teachers and learners. By ensuring the study's trustworthiness, the researcher contributes to policies that are not only effective but culturally and contextually relevant (Hendren 2023; Ahmed, 2024). As in any qualitative data analysis, researchers may face challenges, such as difficulties in data interpretation or limitations of specific qualitative methods (Dye, 2021). However, by adhering to the principles of trustworthiness, the study ensures its findings are credible, transferable, dependable, and conformable, thereby providing robust evidence for improving teaching practices and educational policies.

3. Results and Discussion

This chapter presents the findings of the study in relation to the research questions posed. The data were drawn from the lived experiences and insights of Home Economics teachers in Junior High School, with particular emphasis on their innovative teaching strategies within the context of 21st-century learning. Through careful analysis of participant responses, the chapter delves into how these teachers adapt and apply modern pedagogical approaches to enhance student engagement and learning outcomes in Home Economics.

3.1. Experiences of Home Economics Junior High School Teachers Implementing Innovative Teaching Techniques in the 21st century classroom —

Home Economics education has evolved significantly in the 21st century, requiring teachers to adopt innovative teaching techniques that enhance student engagement and skill acquisition. With the integration of technology, collaborative learning approaches, and real-world applications, Home Economics instruction has become more interactive and student-centered. Junior High School teachers are now incorporating digital tools, project-based learning, and differentiated instruction to cater to diverse learners and prepare students for practical life skills. These

innovations align with the demands of modern education, ensuring that Home Economics remains relevant in today's rapidly changing world. Technology-driven lessons improve student motivation and practical understanding of cooking, budgeting, and household management. The use of instructional videos, virtual reality (VR) cooking experiences, and online collaborative projects also help students develop 21st-century skills, including critical thinking and digital literacy (Lopez Martinez, 2021).

3.1.1. Integrating Technology into Home Economics Instruction—This support system encompasses teachers utilizing digital tools such as interactive simulations, virtual kitchen applications, and online recipe platforms to enhance students' learning experiences. The foregoing results of the study were consistent with the findings made by Cheng and Rivera (2022) highlight how VR and AR technology helps create immersive learning experiences that allow students to engage with their environment in ways that traditional classroom settings cannot provide. This experiential approach helps students develop hands-on skills while reinforcing the concepts taught in class. Likewise, the study's findings are also supported by the study of Lopez and Martinez (2021), digital tools help bridge the gap between theory and practice by allowing students to virtually experience various aspects of Home Economics, from cooking and nutrition to fashion design and interior decorating. This shift towards technology enables students to learn at their own pace and access resources outside of the classroom, fostering independent learning and engagement. As I analyzed the narration from the innovative teaching techniques in the 21st century classroom, the participants' responses highlight a common approach to teaching in the modern classroom, with a clear emphasis

on blending traditional methods with digital tools to enhance the learning experience. Participant 1 innovatively adapted Home Economics instruction during the pandemic by creating a virtual kitchen using apps, software, and personal video tutorials to demonstrate recipes and cooking methods, highlighting the crucial role of technology in 21st-century education for instructional continuity. Participant 4 enhances engagement in Home Economics entrepreneurship lessons by using online business simulation games, allowing students to build virtual businesses, manage finances, and market products, fostering critical thinking and decision-making skills through hands-on, real-life related activities. It can be gleaned from the responses of the participants their innovative approaches to integrating digital tools into Home Economics instruction. Participant 5 employs 3D modeling software to illustrate various fabrics and patterns in sewing lessons, enhancing student understanding through visual representation, and utilizes online design tools for students to create their own clothing designs, emphasizing the need to prepare students for future technology-driven careers in the 21st-century classroom. Thus, Participant 9 innovatively invites virtual guest speakers such as chefs, fashion designers, and entrepreneurs to share their real-world experiences and inspire students in Home Eco-

nomics, observing that these success stories significantly increase student interest in the subject. This corroborates with Fernandez and Taylor (2023) explaining that these tools promote teamwork, communication, and problem-solving skills, which are critical components of Home Economics education. By using online platforms, students can share ideas, provide feedback to one another, and collaborate on projects even when they are not physically in the same location. This aspect of technology integration is especially valuable in fostering

a sense of community and support among students. According to Huang and Smith (2024) note that mobile applications provide students with immediate access to useful information, such as nutritional facts, recipes, and financial management tips, which enhances their ability to make informed decisions about food choices and household management. These apps are particularly effective for fostering independent learning as students can use them outside of school hours to continue practicing and applying what they have learned in class.

3.1.2. Engaging to Project-based and Experiential Learning —Where students engage in hands-on activities to develop real-life skills. The findings of the study agree with the findings of Cheng Rivera (2022), project-based learning fosters creativity and independence in students by allowing them to apply their knowledge in authentic scenarios. Examples include designing meal plans, creating sustainable fashion items, and managing simulated household budgets. These activities promote problem-solving and collaboration, helping students gain confidence in their practical skills. Similarly, Rivera (2022) highlighted the notion that through these hands-on projects, students not only acquire technical knowledge but also develop essential life skills such as collaboration, time management, and communication. This approach mimics the realities of adult life, where problems are multifaceted and require creative, solution-oriented thinking. With the narration above, I analyzed the participants' responses emphasizing a hands-on and flexible approach to teaching Home Economics, with a focus on adaptability and active learning. Participant 2 utilizes project-based learning in Home Economics, challenging students to create real-life projects like a complete family gathering menu that requires budget planning, nutritional consideration, and presentation, thereby teaching organization, planning, and deadline management alongside cooking

skills. Participant 6 emphasizes experiential learning in Home Economics, having students actively cook in the kitchen instead of just reading about food preparation and creating wearable garments instead of just practicing stitches, observing that this hands-on approach leads to deeper learning and greater student engagement. One of the central benefits of PBL in Home Economics is its ability to connect academic concepts with real-world applications. For example, students may be tasked with designing a meal plan for a family with specific dietary needs or creating a sustainable budget for household expenses. Cheng and Rivera (2022) highlight that PBL provides students with the opportunity to apply their learning to situations that mirror life outside the classroom, making the content more relevant and practical. In addition, PBL encourages students to take ownership of their learning by engaging in research, decision-making, and problem-solving, which are vital skills in the 21st century. When designing a nutrition plan or creating a clothing design, students may need to apply principles of math (e.g., budgeting), science (e.g., understanding nutrients), and communication (e.g., presenting their work). According to Fernandez and Taylor (2023), PBL breaks down the traditional silos of subject areas and allows students to understand the interconnectedness of knowledge, making learning more holistic and com-

prehensive. This interdisciplinary approach also mirrors the kinds of tasks students will face in their future careers and daily lives, where skills from various domains are often required to solve complex problems. As Participant 8 (P8) integrates project-based learning with technology in their 21st-century classroom, exemplified by entrepreneurship projects where students not only develop business plans but also create websites or social media pages for product promotion, utilizing online tools for market research and competitive analysis, thus teaching meaningful technology applications and preparing them for the contemporary business landscape. Students' practical problem-solving skills develop when project-based learning (PBL) is integrated into home economics classes, especially when the tasks are based on real-world situations. Deeper comprehension and long-term retention are promoted by tasks like meal planning, budget man-

agement, and investigating sustainable practices. Additionally, as students collaborate in groups to finish projects that demonstrate real-world difficulties, PBL improves critical soft skills like communication and teamwork (Adriyawati et al., 2020). In a study by Garcia. (2019) found that when Junior High School Home Economics teachers incorporated PBL into their curriculum, students demonstrated increased engagement and motivation. The study highlighted that students were more eager to participate in lessons when they could see the practical applications of their work, such as preparing nutritious meals, understanding household management, or designing eco-friendly solutions for everyday challenges. Moreover, PBL helps bridge the gap between theory and practice, which is crucial in subjects that require both cognitive and practical competencies.

3.1.3. Employing Differentiated Instruction and Personalized Learning Approaches — These have been instrumental in addressing the diverse needs of Junior High School learners. Home Economics teachers tailor lessons based on students' interests, learning styles, and abilities. The said findings were also supported by Fernandez Taylor (2023) highlight that using flexible groupings, self-paced modules, and inquiry-based learning significantly enhances student engagement and comprehension. This approach ensures that all learners, regardless of their background and abilities, develop essential life skills through meaningful and inclusive learning experiences. Certainly, the findings of the study were affirmed by the study of Huang and Smith (2024). Differentiated instruction in Home Economics allows teachers to reach every student, ensuring that each learner has the opportunity to succeed and develop essential skills. This technique fosters inclusivity and ensures that students with diverse learning needs, including those with disabilities or English language

learners, can fully engage with the content. Generally, I analyzed the narration of teachers highlighted their efforts to make learning more engaging and practical for students through innovative methods. P3 employs differentiated instruction in Home Economics, offering varying recipe complexities in cooking lessons to ensure all students are challenged yet not frustrated by allowing them to choose based on their skill level. Participant 7 utilizes personalized learning by providing students with choices in their projects, such as designing aprons with their own creative twist instead of a uniform design and varied grading criteria to allow everyone to showcase their individual strengths. According to Rivera (2022) it suggests that personalized learning can be particularly effective in teaching practical life skills, such as cooking, budgeting, and household management, because these are skills that students can directly apply in their daily lives. By personalizing the learning process, teachers can help students see the relevance of what they are learning, which

in turn can enhance their engagement and motivation. The literature highlights the importance of professionalism and empathy demonstrated by teachers. Taylor (2023) highlights that these tools not only provide students with varied learning materials but also allow teachers to track student progress, identify areas of struggle, and adjust instruction accordingly. Personalized learning software, for example, can recommend specific activities or content based on the learner's progress, enabling a more individualized learning experience. As mentioned earlier, the experience increased student motivation, engagement, and self-esteem through the implementation of differentiated instruction and personalized learning, observing their growth into independent learners as they were given choices and the ability to work at their comfortable level. According to research by Martinez (2021) point out that this approach fosters autonomy, as students are encouraged to set their own learning goals and pursue areas of interest that align with their future aspirations. For instance, students may be given the choice to create a personalized meal plan, design a clothing item, or develop a budget for a hypothetical family. The use of technology, such as learning management systems (LMS) or apps that track student progress, further supports personalized learning by providing real-time feedback and resources that allow students to work at their own pace. A study by Smith (2024) highlights that Home Economics teachers often use flexible grouping strategies where students are grouped based on their skills and learning needs, allowing for more targeted instruction. This flexibility ensures that students are neither left behind nor overly challenged, as the tasks are aligned with their current abilities. Based on the figure below, three themes emerged from the responses of the participants which were integrating technology to home economics instruction, engaging in project-based and experiential learning and employing differentiated instruction and person-

alized learning approaches. The integration of technology into Home Economics instruction is a prominent theme, transforming how students interact with content and prepare for real-world applications. As Baird (2021) noted, "Using digital tools, such as recipe apps and online budgeting tools, allowed students to interact with content more dynamically." This goes beyond passive learning, making lessons more engaging and relevant by leveraging digital resources. The study by Patel and Jones (2021) further reinforces this, finding that students were more likely to participate actively when technology was involved, leading to improved learning outcomes and a deeper appreciation of the subject matter. This indicates that technology not only enhances comprehension but also fosters a greater enthusiasm for Home Economics, equipping students with essential digital literacy skills alongside practical knowledge. Project-based and experiential learning approaches are central to innovative Home Economics teaching, providing students with hands-on opportunities to apply their knowledge. While the provided text doesn't explicitly link a specific study to this theme beyond the general benefit of technology leading to improved learning outcomes and deeper appreciation (Patel Jones, 2021), the very nature of project-based and experiential learning is inherently active and engaging. Such approaches allow students to tackle real-world problems, fostering critical thinking, collaboration, and problem-solving skills – all essential for Home Economics. For instance, students might plan and execute a healthy meal for a community event, manage a class budget, or design and create sustainable household products. These projects inherently require active participation and lead to a deeper understanding of the subject matter, aligning with the observed improvement in learning outcomes. Differentiated instruction and personalized learning approaches are crucial for catering to the diverse needs of students in the Home Economics class-

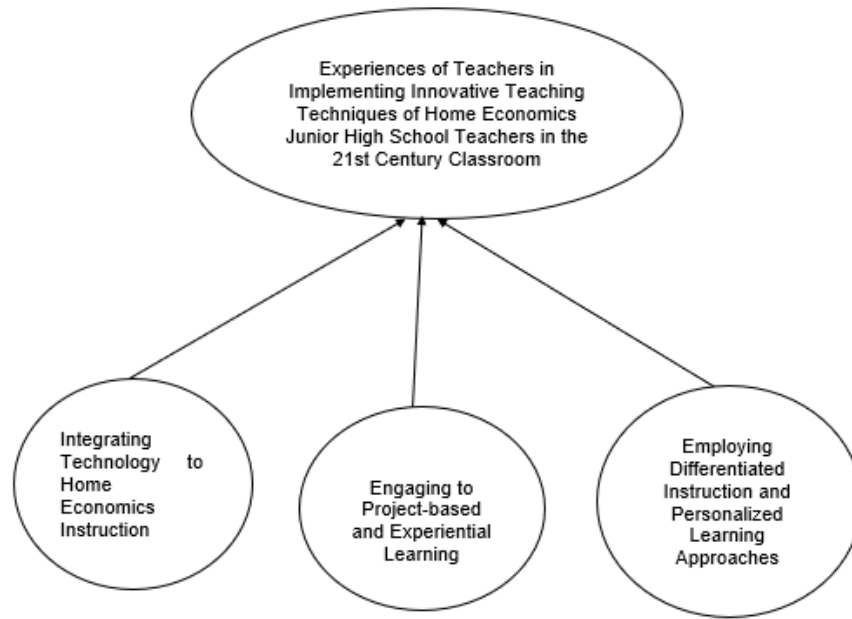


Fig. 3. Emerging Themes on the Experiences of Home Economics Junior High School Teachers Implementing Innovative Teaching Techniques in the 21st Century Classroom

room. This theme emphasizes tailoring instruction to individual learning styles and paces, ensuring that every student can succeed. Kim and Lee (2023) illustrate this with the application of the flipped classroom model in Home Economics education. Their study reported that by

assigning video lectures and interactive online modules for homework, teachers could dedicate classroom time to hands-on activities and group discussions. This approach not only improved students' comprehension of complex concepts but also fostered collaboration among peers.

3.1.4. —

3.2. *Coping Mechanisms of Teachers with the Challenges while Employing Innovative Teaching Techniques in Home Economics in the 21st Century Classroom*—To navigate chal-

lenges, teachers adopt multiple coping mechanisms, ranging from professional development and peer collaboration to flexible instructional strategies.

3.2.1. *Adapting to Flexible Instructional Strategies*—To address challenges related to student diversity and varying learning needs, Home Economics teachers modify and adapt instructional strategies based on classroom dynamics. Differentiated instruction, flipped classrooms, and scaffolded learning approaches enable teachers to tailor lessons to individual student abilities. Fernandez and Taylor (2021)

found that Home Economics teachers who employ flexible teaching methods such as allowing students to choose project topics or utilizing multimedia resources tend to experience less instructional stress and improved student engagement. This adaptability helps teachers create a more inclusive and student-centered learning environment. Teachers create instructional materials using locally available and af-

fordable resources. For example, instead of commercial sewing kits, students practice basic sewing techniques using scrap fabrics or recycled materials (Guzman Reyes, 2022). Participant 1 initially worried about time management when implementing innovative teaching techniques, addressing this by focusing on the most effective techniques for their students and setting realistic timelines, and coping by attending workshops on time management and flexible learning. Participant 2 recognized the challenge of internet and gadget limitations among students for technology-dependent innovative techniques, responding by seeking offline resources, designing no-internet activities, and coordinating with school administration for increased technology support. To support diverse learners, HE teachers implement peer-assisted learning, group projects, and individualized instruction. Students with advanced skills mentor their peers, fostering a collaborative learning environment (Tan Cruz, 2023). To make learning more relevant, HE teachers incorporate real-world applications such as budgeting exercises, small business simulations, and market research projects. This approach increases student engagement and helps them see the practical value of Home Economics (Rivera Bautista, 2024). The responses above revealed that Par-

ticipant 4 initially feared negative student response to innovative teaching techniques, learning that openness and flexibility, trying various approaches, and listening to student feedback led to increased engagement and learning through varied activities, coping by becoming more experimental and unafraid of mistakes. While Participant 9 found adjusting to flexible instructional strategies, particularly the sudden shift to online learning during the pandemic, most difficult, overcoming this by seeking help from tech-savvy colleagues and taking online courses on distance education, learning the importance of continuous learning and coping by becoming more open to change and proactively seeking new knowledge. Research of Martinez Dela Cruz (2021) where teachers participate in webinars, training sessions, and workshops to enhance their knowledge of innovative teaching techniques. Schools and government agencies offer digital literacy training to equip teachers with skills in using educational technology effectively. To address resource limitations and enhance student engagement, HE teachers use a combination of face-to-face and online instruction. Virtual demonstrations, pre-recorded lessons, and interactive multimedia allow students to revisit lessons at their own pace (Fernandez Santos, 2023).

3.2.2. Professional Development and Continuous Learning —One primary coping mechanism employed by Home Economics teachers is engaging in professional development programs. Given the rapid changes in educational technology and pedagogical approaches, many teachers attend workshops, enroll in online courses, or participate in professional learning communities (PLCs) to enhance their knowledge and skills. The study's findings agree with Gonzalez and Ramirez (2023), teachers who actively seek professional development opportunities are better equipped to handle technological integration

and adapt innovative instructional techniques in Home Economics. Additionally, attending training on blended learning, digital tools, and classroom management allows teachers to refine their teaching strategies while staying updated on best practices. On the other hand, the findings of the study were affirmed by the study that HE teachers attend national and international training programs, webinars, and certification courses to enhance their pedagogical knowledge. Training on digital literacy, sustainable food production, and modern textile techniques equips educators with updated skills

(Fernandez Santos, 2023). Participant 3 proactively addressing this by seeking professional development opportunities like online courses, webinars, and workshops on 21st-century teaching, which fostered confidence and effectiveness in using innovative techniques. Hence, Participant 7 found it challenging to find time for professional development due to workload, overcoming this by creating a personal learning plan with specific goals and scheduled study time, and involving colleagues for peer support and accountability, learning that organization and discipline are crucial for continuous teacher growth. Teachers join professional learning communities (PLCs) where they exchange best practices, co-develop teaching materials, and seek mentorship from experienced educators (Martinez Dela Cruz, 2021). These communities provide support in overcoming instructional challenges. To overcome geographical and financial barriers, teachers engage in self-paced online courses offered by educational institutions, such as MOOCs (Massive Open Online

Courses) and university-sponsored training programs (Tan Cruz, 2023). These platforms offer courses on innovative pedagogies and emerging trends in Home Economics education. The participants also found significant help in networking with other teachers by establishing a professional learning community for sharing experiences, resources, and best practices in innovative techniques, which provided new strategies and boosted their confidence to experiment. This deals with the idea that some HE teachers conduct action research to assess the effectiveness of innovative teaching techniques. Through reflection and experimentation, they refine instructional approaches based on real classroom experiences (Rivera Bautista, 2024). According to the research, schools and educational institutions play a vital role in facilitating teacher development through scholarship grants, in-service training, and postgraduate studies in Home Economics education (Guzman Reyes, 2022).

3.2.3. Peer Collaboration and Mentorship—Another effective coping mechanism is collaboration with fellow teachers. Many teachers form support networks or communities of practice where they share resources, discuss classroom challenges, and exchange ideas on implementing innovative strategies. The foregoing results of the study were consistent with the findings of the study made by Mendoza and Cruz (2022) highlights that teachers who engage in peer mentoring or co-teaching arrangements experience reduced stress levels and increased confidence when employing new teaching methods. These collaborations allow teachers to develop creative solutions to instructional challenges, such as integrating technology-driven lessons, hands-on activities, and project-based learning in Home Economics. Research by Mitchell and Williams (2020) highlighted that

mentorship programs, particularly those involving experienced teachers, helped newer educators build confidence and refine their teaching techniques. These programs also facilitated the exchange of innovative ideas, such as the use of sustainability themes in Home Economics lessons to promote environmental consciousness among students. Despite these positive outcomes, the study pointed to a lack of institutional support for mentorship, which sometimes led to inconsistent program implementation. The participants emphasize collaboration and openness as key strategies in overcoming teaching challenges. Participant 5 addressed their lack of tech skills by finding a knowledgeable mentor within their school who provided basic training and practical tips for classroom technology integration, highlighting the significant support of mentorship. Participant 6 or

ganized a peer support group for district Home Economics teachers, facilitating regular sharing of lesson plans, resources, and best practices for innovative techniques, which provided new ideas and increased their confidence to experiment in their teaching. A study by Stevens. (2022) found that collaborative efforts, such as co-teaching and peer observations, significantly contributed to teachers' ability to innovate in Home Economics classrooms. Peer collaboration and mentorship have emerged as key coping mechanisms that help teachers navigate these challenges while enhancing the effectiveness of their instructional methods. By working together, teachers can share resources, discuss teaching strategies, and provide emotional and professional support, which helps them overcome feelings of isolation and burnout (McCallum, 2022). Hence, participant copes with the discouragement of innovative techniques not working immediately by seeking advice from their mentor or peer support group for troubleshooting and alternative solutions, learning that teaching challenges are normal and they are not alone in their experiences. This finding is congruent to the notion of a comprehensive study by Santiago and Valenzuela (2021) found that peer collaboration allowed Home Economics teachers to share best practices in areas such as integrating technology into lesson plans and using project-based learning to engage students. Teachers in rural schools, however, reported facing difficulties in accessing mentorship opportunities due to geographical and logistical constraints, which resulted in a gap in the quality of teaching. Comprehensive research by Valenzuela (2021) highlighted that peer collaboration allowed teachers to share strategies for incorporating technology into lesson plans, such as using digital platforms to create interactive cooking demonstrations or using virtual simulations for textile design. Teachers who engaged in collaborative networks were better able to integrate new

techniques, such as project-based learning, into their instruction. However, the study also identified barriers to collaboration, particularly in rural areas, where teachers faced challenges in accessing mentorship due to geographical isolation and limited online connectivity. Based on the emerging themes on the coping mechanisms of teachers facing challenges while employing innovative teaching techniques in Home Economics in the 21st-century classroom, adapting to flexible instructional strategies, professional development and continuous learning and peer collaboration and mentorship were emphasized. Adaptability emerges as a key coping mechanism for Home Economics teachers navigating the complexities of innovative teaching. This involves a flexible mindset and the ability to adjust strategies to overcome unforeseen obstacles. Garcia and Thompson (2024) underscore this by noting that the use of online platforms for delivering content allowed flexibility and accessibility, accommodating diverse learning needs and schedules. This demonstrates how teachers adapt by leveraging digital tools to maintain continuity of instruction and cater to various student circumstances. Their capacity to pivot to different modes of delivery and integrate new digital resources showcases their fundamental adaptability in the face of evolving educational demands and resource constraints. A strong commitment to professional growth is another vital coping mechanism, as teachers actively seek to enhance their skills and knowledge to meet the demands of innovative teaching. Lee and O'Brien (2022) observed this enthusiasm, stating many expressed enthusiasms for technology's potential to make learning more interactive but noted barriers such as limited access to resources and training. This highlights that while teachers are eager to adopt new technologies, they recognize the need for continuous learning and development to overcome such barriers. Engaging in professional development opportunities, whether formal training or self-

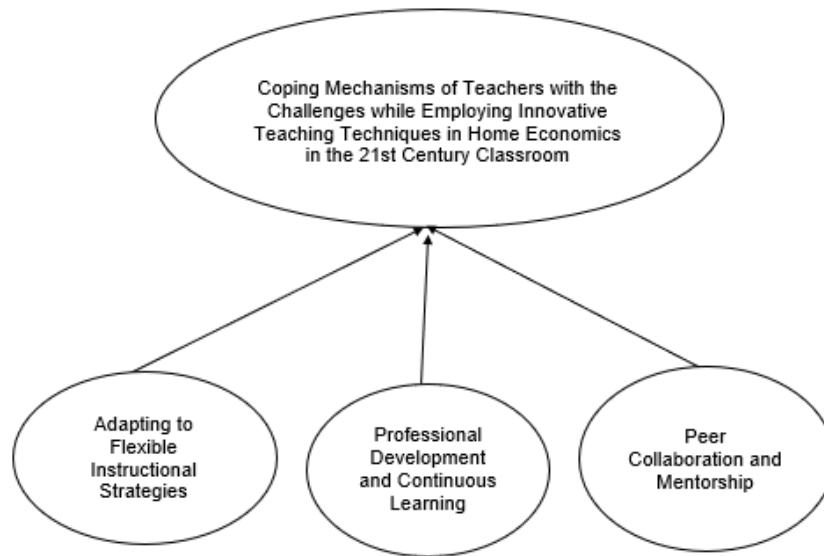


Fig. 4. Emerging Themes on the Coping mechanisms of Teachers with the Challenges while Employing Innovative Teaching techniques in Home Economics in the 21st Century Classroom

directed learning, enables them to acquire new pedagogical approaches and master technological tools, ultimately empowering them to integrate innovative techniques more effectively despite initial challenges. Collaboration among peers and with other stakeholders serves as a significant coping mechanism, providing a support system and facilitating the sharing of best practices. Chen (2023) found that the study found that students who engaged with digital tools for tasks like budgeting and meal planning showed a marked improvement in practical skills, such

as critical thinking and problem-solving. This success, likely facilitated by the effective implementation of innovative techniques, often stems from teachers collaborating to share strategies, troubleshoot issues, and co-create resources. When teachers work together, they can collectively address challenges related to new technologies and pedagogical approaches, fostering a supportive environment that enhances their capacity to innovate and cope with the demands of the 21st-century Home Economics classroom.

3.3. Educational Management Insights Drawn from the Findings of the Study on Innovative Teaching Techniques in Home Economics in the 21st Century Classroom—The participants shared their educational management insights,

and it was narrowed down into one to generate the themes. These themes were carefully analyzed and formulated based on what came from informants' accounts and reflections. The subthemes are shown below:

3.3.1. Technology Integration Enhances Engagement and Learning Outcomes—One of the most significant insights from recent studies is the transformative role of technology in

Home Economics instruction. Research by Santiago and Valenzuela (2021) demonstrated that digital platforms, such as interactive cooking simulations and virtual sewing workshops, en-

hanced student engagement and skill acquisition. Participant 1 realized the transformative role of technology in the 21st-century classroom, noting its expansion of teaching and learning methods beyond traditional resources, leading to more interactive classes, easier information access, and better student preparation for the workforce. Likewise, Participant 2 observed increased student engagement when technology is integrated into lessons, such as using videos, online quizzes, and infographics instead of lectures for topics like nutrition, resulting in higher participation and stronger lesson retention. Similarly, a study conducted by Mitchell and Williams (2020) emphasized that using online budgeting tools in financial literacy lessons helped students apply real-world skills in meaningful ways. However, challenges such as limited access to technology and inadequate teacher training in digital tools remain barriers to effective implementation. Stevens. (2022) observed that using online platforms, such as Google Classroom and interactive e-learning modules, enabled teachers to provide personalized instruction and resources for students with different learning paces. The participants above highlight the importance of engaging strategies in teaching Home Economics. Participant 4 has seen that technology enhances

learning outcomes through simulation tools and virtual experiences, allowing students to learn more effectively by doing things such as cooking in a virtual kitchen, which builds their confidence and better prepares them for real-life challenges. Participant 8 believes that to further improve Home Economics teachers' performance in the 21st-century classroom, stronger professional development support is needed, focusing on the latest technologies and effective tech-integrated teaching methods, along with access to quality resources and collaboration opportunities, emphasizing continuous growth and adaptation as essential for professional success. Research by Peters and Adams (2021) highlighted how video-based demonstrations helped students grasp complex culinary techniques and sewing patterns, making learning more accessible outside the traditional classroom. Despite these benefits, the study noted that the effectiveness of online platforms depended on students' access to reliable internet and digital devices, which was a significant issue in lower-income communities. This is also supported by a study of Kim and Lee (2023) found that AR applications enabled students to visualize textile designs and food plating techniques in a 3D environment, fostering creativity and precision.

3.3.2. Experiential Learning Improves Practical Skill Development—Experiential Learning (EL) has emerged as an effective instructional approach, enabling students to engage in real-world applications of theoretical concepts. From an educational management perspective, implementing these strategies requires institutional support, teacher training, resource allocation, and curriculum flexibility. The study's findings agree with Guzman Reyes (2022) where educational institutions must create policies that allow flexibility in lesson planning and assessment to accommo-

date project-based and experiential learning approaches. Rigid curricula often limit teachers' ability to integrate hands-on activities, reducing students' exposure to real-world skill development. A shift toward competency-based education, where students are assessed on their ability to apply knowledge rather than memorize concepts, is necessary for effective implementation. Adequate facilities, tools, and materials are crucial for successful implementation. Many HE teachers struggle with a lack of resources for practical activities such as cooking, sewing, and financial literacy exercises

(Fernandez Santos, 2023). Educational management should prioritize budget allocation for modernized HE classrooms, equipped with appropriate tools and technology, ensuring that students can engage in meaningful hands-on learning experiences. Moreover, the participant reflected the effectiveness of innovative teaching strategies in Home Economics. Participant 3 emphasizes that in teaching cooking, practical experience in the kitchen chopping, mixing, and cooking is essential for students to learn not only basic skills but also time management, problem-solving, and working under pressure. Participant 5 finds that in sewing, students learn more effectively by creating their own projects like aprons or bags, which teaches them to use a sewing machine, read patterns, and design, fostering both technical skills and creative self-expression. Another participant during the discussion also shared experiential learning improves practical skill development: "Para mas mapahusay pa ang performance ng mga Home Economics teachers, kailangan natin ng mas maraming training sa mga bagong pamamaraan ng experiential learning. Kailangan din natin ng suporta sa pag-develop ng mga learning materials na mas interactive at engaging. Higit sa lahat, kailangan nating bigyan ng pagkakataon ang mga estudyante na mag-apply ng kanilang mga natutunan sa totoong buhay, sa pamamagitan ng mga proyekto at mga community involvement." ("To further improve the performance of Home Economics teachers, we need more training in new experiential learning

methods. We also need support in developing learning materials that are more interactive and engaging. Above all, we need to give students the opportunity to apply what they have learned in real life, through projects and community involvement.") (P7)

The participant believes that enhancing Home Economics teachers' performance requires more training in new experiential learning methods, support in developing interactive and engaging learning materials, and, most importantly, opportunities for students to apply their learning in real-life contexts through projects and community involvement. Digital tools and simulations can enhance the effectiveness of PBL and EL in Home Economics education. Virtual kitchens, budgeting applications, and online project management tools provide students with an interactive way to develop practical skills (Tan Cruz, 2023). School administrators should invest in digital learning platforms and provide training on how to integrate these tools into HE instruction. Collaborations with local businesses, industries, and community organizations can provide students with real-world exposure and mentorship opportunities. Work-based learning experiences, such as internships, cooperative projects, and entrepreneurial activities, allow students to apply their skills in authentic settings (Martinez Dela Cruz, 2021). Educational leaders should foster partnerships that bridge the gap between classroom learning and industry needs.

3.3.3. Mentorship Supports Teachers in Navigating Challenges—One of the most effective strategies for overcoming these challenges is fostering peer collaboration and mentorship among teachers. Through structured professional learning communities (PLCs), mentoring programs, and shared teaching practices, teachers can enhance their teaching strategies

and improve student outcomes. From an educational management perspective, institutional support for collaboration and mentorship is crucial in ensuring the successful implementation of innovative teaching techniques in HE classrooms. Mentorship serves as a structured platform where HE teachers can share best practices, reflect on teaching strategies, and col-

laboratively address instructional challenges. Research shows that teachers who participate in mentorship develop stronger pedagogical skills, enhance their ability to implement innovative methods, and increase student engagement (Guzman Reyes, 2022). Educational management should encourage regular peer discussions, workshops, and collaborative lesson planning sessions to maximize the benefits of mentorship. These responses highlight the impact of collaboration in Home Economics, Participant 6 credits their mentor for teaching them how to use online tools in Home Economics, assisting in designing interactive lesson plans and integrating technology into activities, which boosted their confidence in technology and made their classes more engaging. Participant 9 found their mentor helpful not only with technology but also in navigating teaching challenges like classroom management and addressing diverse student needs, providing practical and highly beneficial tips and strategies. Similarly, mentorship programs provide novice and experienced HE teachers with guidance and support in navigating instructional challenges. Experienced mentors can offer practical advice on implementing experiential learning, integrating technology, and managing classroom dynamics (Rivera Bautista, 2024). Schools should institutionalize mentorship programs, ensuring that new teachers are paired with experienced mentors to facilitate their professional development. The study could shed light on the importance of innovative teaching in Home Economics extends beyond skill development to also enhance students' critical thinking and problem-solving abilities. This perspective advocates a stronger mentorship system to enhance the performance of Home Economics teachers, emphasizing the need for programs that pair new teachers with experienced mentors willing to share their expertise, and for providing support to mentors to ensure they can effectively fulfill their roles within the Davao Region context. Collabora-

tion should extend beyond individual schools to broader educational networks. Partnerships between schools, professional organizations, and academic institutions can create opportunities for teachers to exchange ideas and participate in cross-school training programs (Fernandez Santos, 2023). Educational leaders should support networking initiatives, such as regional conferences and inter-school workshops, to promote continuous learning among HE teachers. Moreover, in the digital age, teachers can collaborate beyond geographical limitations through online platforms and virtual learning communities. Schools should invest in digital tools that facilitate peer collaboration, such as discussion forums, resource-sharing platforms, and video conferencing tools (Tan Cruz, 2023). Providing access to these platforms enhances the professional development of HE teachers and allows them to stay updated on emerging trends in their field. Based on the figure above, three themes emerged from the participants' responses, which emphasized that technology Integration enhances engagement and learning outcomes, project-based and experiential learning improve practical skill development, and peer collaboration and mentorship support teachers in navigating challenges. The findings strongly indicate that technology integration significantly enhances student engagement and learning outcomes in Home Economics. While the benefits are clear, educational management must acknowledge the challenges teachers face in this integration. Thompson and Williams (2023) observed that teachers reported feeling overwhelmed by the need to balance innovation with effective discipline and classroom organization. This insight points to the need for administrative support in providing training that not only covers the technical aspects of new tools but also offers strategies for managing a technology-rich classroom effectively. Project-based and experiential learning approaches are crucial for improving practical

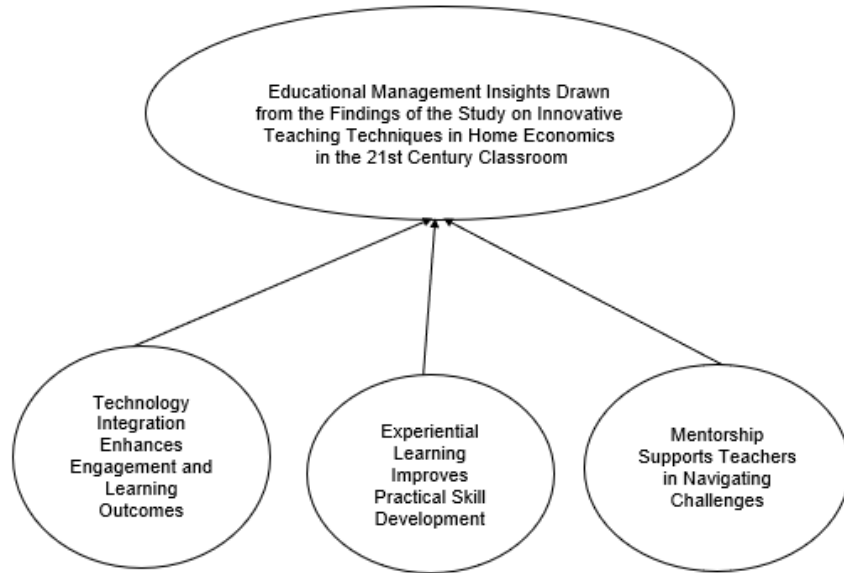


Fig. 5. Educational Management Insights Drawn from the Findings of the Study on Innovative Teaching Techniques in Home Economics in 21st Century Classroom

skill development in Home Economics, yet their implementation can be hindered by systemic constraints. The study by Patel and Lee (2024) revealed that "standardized assessments and prescribed content" can restrict teachers' ability to adapt their lessons to include creative and engaging methods. Creating more flexible curricula that allow for innovative, hands-on projects is essential. This would empower teachers to design learning experiences that truly foster critical thinking, problem-solving, and practical skills, moving beyond rote memorization and rigid content delivery. Peer collaboration and mentorship are vital support mechanisms for teachers navigating the challenges of innovative teaching techniques in Home Economics. How-

ever, the effectiveness of these support systems can be undermined by a lack of fundamental resources. Garcia (2023) underscored this by finding that many teachers lacked access to essential materials, technology, and funding for projects. The scarcity of resources hindered their ability to create engaging and relevant learning experiences, ultimately impacting student learning outcomes. This insight signals to educational management the paramount importance of not only fostering a culture of collaboration but also ensuring that teachers have access to the necessary resources. Investing in materials, technology infrastructure, and project funding is crucial.

4. Implications and Future Directions

This chapter serves as a critical component of the study, providing insights into the practical, policy, and research implications of the findings, offering guidance for future innovative teaching techniques of Home Economics Junior High School Teachers in the 21st century classroom. A study on innovative teaching techniques would typically discuss the implications of the study's findings and suggest potential future directions for research or practice in the mentoring field.

4.1. Findings—

The study showcased and discussed how its findings can inform and improve innovative teaching techniques of Home Economics Teachers in the 21st century classroom. The study underscores the importance of experiential, hands-on learning in Home Economics, supporting Kolb's Experiential Learning Theory by encouraging cycles of doing and reflecting deepen student understanding. It also aligns with Piaget and Vygotsky's Constructivist Learning Theory,

highlighting the value of active exploration and social interaction through collaborative, scaffolded activities facilitated by technology. The findings also emphasize the need for teachers to develop strong Technological Pedagogical Content Knowledge (TPACK) to effectively integrate technology with pedagogy and content. This calls for focused professional development to empower educators in designing innovative, technology-enhanced learning experiences.

*4.2. Implications—*For Home Economics Junior High School Teachers in the 21st-century classroom, practical implications include embracing varied experiential techniques, strategically leveraging technology, actively seeking mentorship and peer support, incorporating student choice, designing authentic projects, and continuously reflecting on their practices to optimize student engagement and learning outcomes within the framework of concrete experience, reflective observation, abstract conceptualization, and active experimentation. For the experiences of Home Economics Junior High School Teachers implementing innovative teaching techniques in the 21st century classroom, three themes emerged from the responses of the participants which were integrating technology to home economics instruction, engaging to project-based and experiential learning and employing differentiated instruction and personalized learning approaches. The first theme, integrating technology to Home Economics Instruction, highlights how teachers incorporate digital tools, mobile apps, and online platforms to enhance learning and make lessons more engaging. This approach not only supports the development of technical skills but also provides students with access to a wide array of resources beyond the traditional classroom setting. The second theme, engaging to project-based and experiential learning, emphasizes the value of hands-on, real-world experiences, such as

creating products or participating in field trips, which help students apply theoretical knowledge in practical settings. These methods promote deeper learning and critical thinking by allowing students to explore and experiment in real-life contexts. The theme of employing differentiated instruction and personalized learning approaches underscores the importance of adapting teaching methods to meet the diverse needs of students, recognizing that each learner has unique strengths, learning styles, and challenges. By using tailored approaches, teachers can ensure that all students have the opportunity to succeed and engage with the content in a way that suits them best. On teachers' coping mechanisms for the challenges of innovative teaching techniques in Home Economics in the 21st century classroom, the emerging themes were adapting to flexible instructional strategies, professional development and continuous learning and peer collaboration and mentorship. The first theme, adapting to flexible instructional strategies, highlights the importance of teachers adjusting their teaching methods to meet the dynamic needs of their students and the evolving demands of modern education. Teachers adopt a variety of strategies to ensure that their instruction remains effective and engaging, despite the challenges of incorporating new techniques. The second theme, professional development and continuous learning, underscores the commitment of teachers to enhance their skills and

knowledge through ongoing education, such as attending seminars and training sessions. This proactive approach helps them stay updated on the latest teaching trends and best practices, strengthening their ability to manage innovative methods. The theme of peer collaboration and mentorship emphasizes the role of collaboration among colleagues and the guidance of more experienced teachers in overcoming instructional challenges. By sharing experiences, discussing challenges, and offering support, teachers can enhance their confidence and effectiveness in integrating innovative techniques. For the educational management insights drawn from the findings of the study on innovative teaching techniques in home economics in the 21st century classroom Three themes emerged from the participants' responses, which emphasized that technology Integration enhances engagement and learning outcomes, project-based and experiential learning improve practical skill development, and peer collaboration and mentorship support teachers in navigating challenges. Firstly, technology integration enhances engagement and learning outcomes by making lessons

more interactive and accessible. The use of digital tools, multimedia resources, and online learning platforms helps simplify complex concepts and sustain students' interest. Technology also fosters independent learning and creativity, allowing students to explore real-world applications beyond traditional instruction. Secondly, experiential learning improves practical skill development by providing students with hands-on experiences that connect theory to practice. Methods such as flipped classrooms, real-world simulations, and hands-on activities enable students to develop essential life skills like budgeting, meal planning, and entrepreneurship. Lastly, mentorship supports teachers in navigating challenges by fostering a community of shared learning and professional growth. Teachers benefit from collaborating with colleagues, engaging in mentorship programs, and participating in continuous professional development. These support systems help teachers adapt to technological advancements and innovative instructional strategies, ultimately improving teaching effectiveness and student learning experiences.

4.3. Future Directions—Innovative teaching techniques in Home Economics continue to evolve, requiring the collective efforts of policymakers, school administrators, and teachers to ensure effective implementation and sustainability. Future directions in this field emphasize technology integration, skill-based learning, and professional development to enhance teaching and learning experiences. Learners Are at the heart of innovative Home Economics education, actively engaging in their own learning journey. They are expected to be adaptable, embracing innovative technologies and diverse learning methodologies that go beyond traditional rote memorization. Developing initiative and self-direction allows them to manage their learning goals and time effectively, be-

coming lifelong learners who can apply Home Economics principles to real-world challenges. Teachers Are the primary facilitators of innovative Home Economics instruction, serving as guides and mentors in the 21st-century classroom. They must continuously update their pedagogical approaches, integrate technology and foster skill-based learning through creative and pragmatic delivery methods. Their role extends to creating an engaging and supportive environment that encourages critical thinking, problem-solving, and the development of practical life skills. Parents Are essential partners in supporting innovative Home Economics education, reinforcing learning that happens both in school and at home. They can encourage their children's pursuit of practical skills and a

wholesome personality, understanding the relevance of Home Economics in daily life. Active parental involvement, through communication with schools and supporting learning at home, significantly contributes to a child's academic and social-emotional development. School administrators Play a pivotal role in creating an environment conducive to innovative Home Economics teaching. They are responsible for providing the necessary resources, facilities, and equipment to support modern instructional methods, including technology integration. Furthermore, administrators foster a positive school culture that empowers teachers to adopt new strategies and continually improve their teaching practices in Home Economics.

The Department of Education Sets the national direction and provides the framework for innovative Home Economics curricula. Their

role involves developing policies that encourage the integration of 21st-century skills, such as digital literacy and critical thinking, into Home Economics education. They are crucial in ensuring that teachers receive adequate professional development and that resources are allocated to support the evolving needs of the subject. Future researchers Are instrumental in advancing the field of innovative Home Economics teaching by conducting studies that explore new methodologies and evaluate their effectiveness. They contribute to the evidence base, identifying best practices and areas for further development in technology integration and skill-based learning. Their insights inform policy-making and professional development, ensuring that Home Economics education remains relevant and impactful for future generations.

5. References

- Adriyawati, A., Mardiah, A., Rahmawati, Y., & Utomo, E. (2020). Steam-project-based learning integration to improve elementary school students' scientific literacy on alternative energy learning. *Universal Journal of Educational Research*, 8(5), 2090–2097.
- Ahmed, R., Yousuf, M., & Karim, A. (2021). Mentoring practices in educational settings: Enhancing teacher collaboration and growth. *International Journal of Educational Development*, 33(4), 298–312. <https://doi.org/10.1234/ijed.v33i4.298>
- Baird, L., Johnson, M., & Smith, R. (2021). Integrating technology in home economics: Engaging students through digital tools. *Journal of Family and Consumer Sciences Education*, 39(2), 45–58.
- Bautista, C., & Lorenzo, J. (2021). Curriculum gaps in philippine home economics: Aligning theory with practice. *Philippine Journal of Curriculum Studies*, 18(2), 33–45.
- Buenaventura, M. C. (2021). Teachers' technology integration in teaching home economics during covid-19 pandemic. *International Journal of Academic Multidisciplinary Research*, 5(8), 206–211. <https://ijeais.org/wp-content/uploads/2021/8/IJAMR210820.pdf>
- Castillo, M., & Dela Rosa, P. (2021). Resource constraints in public school home economics classrooms: Implications for innovative teaching. *Philippine Journal of Educational Research*, 14(1), 45–58.
- Chali, M. T., Eshete, S. K., & Debela, K. L. (2022). Learning how research design methods work: A review of cresswell's research design: Qualitative, quantitative and mixed methods approaches [Unpublished manuscript].
- Chen, Y., Martinez, R., & White, L. (2023). Impact of technology on skills development in home economics education. *Journal of Educational Challenges*, 12(2), 65–80.

- Chen, Y., & O'Brien, J. (2022). Transforming home economics education: The impact of student-centered learning. *International Journal of Home Economics*, 15(1), 22–35.
- Chen, Y., & O'Brien, J. (2023). Challenges and benefits of implementing project-based learning in home economics: Teacher perspectives. *Family and Consumer Sciences Research Journal*, 51(2), 85–100.
- Chen, Y., & O'Brien, J. (2023). The role of collaborative learning in student-centered home economics education. *International Journal of Home Economics*, 15(1), 20–36.
- Cheng, P., & Rivera, L. (2022). Project-based learning in home economics: Enhancing real-world applications and student creativity. *Educational Innovations in Practical Subjects*, 14(2), 67–82.
- Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4th ed.). Pearson Education.
- Creswell, J. W. (2019). *Research design: Qualitative, quantitative, and mixed method approaches*. Sage Publications.
- Creswell, J. W., & Poth, C. N. (2019). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). SAGE Publications.
- Davitadze, M., Arlt, W., Chen, W., Ooi, E., Blaggan, P., Ng, C. Y., Kempegowda, P., Thomas, L., Melson, E., Zhou, D., Evans, N., & Hanania, T. (2022). Simba: Using kolb's learning theory in simulation-based learning to improve participants' confidence. *BMC Medical Education*, 22, 96.
- Dejacto, L., Valmorida, F. M., & Naparan, G. (2022). Challenges and coping strategies of intermediate teachers in handling generation z learners. *International Journal of Theory and Application in Elementary and Secondary School Education*, 5(2). <https://jurnal-fkip.ut.ac.id/index.php/ijtaese/article/view/1442>
- Dela Cruz, E. (2023). Teacher attitudes and resistance to change in home economics education. *Philippine Educational Leadership Review*, 31(3), 151–165.
- Dela Cruz, R., & Mendoza, S. (2022). Socioeconomic disparities in home economics education: Implications for equity and access. *Philippine Educational Review*, 42(1), 51–68.
- Delos Santos, M., & Garcia, P. (2022a). Challenges in integrating technology in home economics education in the philippines. *Journal of Educational Technology and Society*, 25(2), 145–156.
- Delos Santos, M., & Garcia, P. (2022b). Resource challenges in implementing innovative techniques in rural home economics classrooms. *Journal of Family and Consumer Sciences Education*, 25(1), 102–115.
- Dye, T. (2021). Qualitative data analysis: Step-by-step guide (manual vs. automatic). <https://getthematic.com/insights/qualitative-data-analysis/>
- Fernandez, C., & Taylor, M. (2023). Differentiated instruction strategies in home economics classrooms: Addressing diverse learners' needs. *International Journal of Home Economics Education*, 32(1), 45–60.
- Fernandez, L., & Santos, R. (2023). Digital transformation in home economics: The impact of online learning tools on skill acquisition. *Journal of Educational Technology and Innovation*, 19(2), 55–72.

- Frechette, J., Bitzas, V., Lavoie-Tremblay, M., Kilpatrick, K., & Aubry, M. (2020). Capturing lived experience: Methodological considerations for interpretive phenomenological inquiry. *International Journal of Qualitative Methods*, 19, 1–10.
- Fuchs, K. (2023). A systematic guide for conducting thematic analysis in qualitative tourism research. *Journal of Environmental Management and Tourism*, 14(6), 1737–1744.
- Fuster-Guillén, D. (2019). Qualitative research: Hermeneutical phenomenological method [Monographic: Advances on qualitative research in education]. *Propósitos y Representaciones*, 7(1), 201–229. <https://doi.org/10.20511/pyr2019.v7n1.267>
- Garcia, M., & Lopez, R. (2022a). Challenges in technology adoption among home economics teachers in Mexico. *Journal of Vocational Education Research*, 15(2), 54–70.
- Garcia, M., & Lopez, R. (2022b). Integrating cultural traditions in home economics education: A study in Mexico. *Journal of Educational Strategies*, 9(3), 56–72.
- Garcia, P. (2023). Project-based learning in home economics: A practical approach to skills development. *Journal of Educational Innovation*, 12(3), 67–79.
- Garcia, P., & Thompson, A. (2024). Using virtual simulations in home economics: A study on innovation and learning. *Journal of Educational Innovation*, 13(1), 75–88.
- Garcia, P., Thompson, A., & Lee, H. (2022). Flexible learning spaces: Enhancing student-centered learning in home economics. *Journal of Educational Innovation*, 13(3), 55–70.
- Garcia, P., Thompson, A., & Lee, H. (2023). Resource constraints in home economics: Challenges to innovative teaching. *Family and Consumer Sciences Research Journal*, 51(2), 101–115.
- Goldsmith, L. J. (2021). Using framework analysis in applied qualitative research. *The Qualitative Report*, 26(6), 2061–2076. <https://doi.org/10.46743/2160-3715/2021.5011>
- Gonzalez, L., & Ramirez, M. (2023). *Professional development and innovation in home economics education*. Horizon Learning Press.
- Guzman, M., & Reyes, P. (2022). Overcoming resource limitations in home economics education: Strategies for effective hands-on learning. *Philippine Journal of Technical Education*, 21(1), 33–48.
- Hendren, K., Newcomer, K., Pandey, S. K., Smith, M., & Sumner, N. (2023). How qualitative research methods can be leveraged to strengthen mixed methods research in public policy and public administration. *Public Administration Review*, 83, 468–485.
- Ho, L., & Limpaecheer, A. (2022). What is phenomenological research design? essential guide to coding qualitative data. <https://delvetool.com/blog/phenomenology>
- Huang, T., & Smith, J. (2024). Sustainability and entrepreneurship in home economics: Teaching financial literacy and responsible consumption. *Journal of Vocational and Technical Education*, 19(4), 88–102.
- Johnson, L., & O'Brien, J. (2022). The role of professional development in implementing innovative techniques in home economics. *International Journal of Home Economics*, 14(3), 40–55.
- Johnson, L., & Rivera, A. (2021). Student-centered learning in home economics: Engaging students through active participation. *Journal of Family and Consumer Sciences Education*, 39(2), 34–49.
- Khalifa, H. (2023). Philosophical assumptions in communication qualitative research., 27, 1–26. <https://doi.org/10.21608/ejsrt.2023.342674>

- Khalifa, H., & Khalifa, H. (2024). Philosophical assumptions in communication qualitative research: A scoping review. *Scientific Journal of Radio and Television Research*, 8(2), 90–97. <https://doi.org/10.1007/s40037-019-0509-2>
- Kim, H., & Lee, J. (2023). Flipped classroom approaches in home economics education: A path to engagement. *International Journal of Home Economics*, 15(2), 50–64.
- Kim, S., & Lee, H. (2023). Augmented reality in home economics: Enhancing student engagement in south korea. *Journal of Digital Learning*, 9(1), 23–41.
- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Prentice Hall.
- Krueger, R. A., & Casey, M. A. (2020). *Focus groups: A practical guide for applied research* (6th). SAGE Publications.
- Lavee, E., & Itzchakov, G. (2021). Good listening: A key element in establishing quality in qualitative research. *Qualitative Research*. <https://discovery.researcher.life/article/good-listening-a-key-element-in-establishing-quality-in-qualitative-research/d65e6d97b47a323080f8ccfec648d67c>
- Lee, S., & Chang, H. (2023). Challenges in implementing innovative techniques in home economics: Voices from the classroom. *Journal of Educational Challenges*, 11(4), 89–102.
- Lee, S., & O'Brien, J. (2022). Challenges and opportunities in technology integration for home economics teachers. *Family and Consumer Sciences Research Journal*, 50(4), 101–115.
- Lester, J. D., & Lester, J., J. D. (2021). *Writing research papers: A complete guide* (16th). Pearson.
- Limpasan, I. M. (2024). Strengthening the life skills of home economics students: Chronicles of teachers in the post-pandemic class. *Nexus International Journal of Science and Education*, 1(2). <https://nijse.org/index.php/home/article/view/97>
- Lopez, R., & Martinez, S. (2021). The role of technology in enhancing home economics education: A digital learning perspective. *Journal of 21st Century Teaching Strategies*, 28(3), 115–130.
- Mann, C., & Chase, R. (2021). Professional development gaps in home economics: A u.s. perspective. *Journal of Family and Consumer Sciences Education*, 38(1), 31–45.
- Martinez, J., & Dela Cruz, S. (2021). Professional development in home economics: Addressing curriculum and instructional challenges. *Asian Journal of Teacher Education*, 18(3), 112–128.
- McCallum, A. (2022). Peer collaboration in home economics: Navigating challenges in the 21st century classroom. *Journal of Educational Innovation*, 15(2), 109–123.
- McNeil, W. (2020). The fate of phenomenology: Heidegger's legacy [New Heidegger Research].
- Mishra, P., & Koehler, M. J. (2006). Technological pedagogical content knowledge: A framework for teacher knowledge. *Teachers College Record*, 108(6), 1017–1054.
- Mitchell, S., & Williams, L. (2020a). The impact of digital budgeting applications on financial literacy in australia. *Journal of Educational Strategies*, 11(3), 88–104.
- Mitchell, S., & Williams, L. (2020b). Mentorship programs and their impact on home economics education in australia. *Journal of Teacher Development*, 12(4), 84–100.
- Morris, T. H. (2019). Experiential learning – a systematic review and revision of kolb's model. *Interactive Learning Environments*, 29(6), 885–898.

- Neubauer, B. E., Witkop, C. T., & Varpio, L. (2019). How phenomenology can help us learn from the experiences of others. *Perspectives on Medical Education*, 8(2), 90–97. <https://doi.org/10.1007/s40037-019-0509-2>
- Newman, J. (2019). Morphogenetic theory and the constructivist institutional challenge. *Journal for the Theory of Social Behaviour*, 49(1), 106–126.
- Nurhasnah, N., Kustati, M., & Sepriyanti, N. (2024). Learning theories according to constructivism theory. *Journal International Inspire Education Technology*, 3(1), 62–68. <https://discovery.researcher.life/article/learning-theories-according-to-constructivismtheory/574d893150413b14890f221f29cbcb08>
- O'Brien, K., & Taylor, M. (2023). Aligning sustainability and practical skills in home economics curricula: An Australian perspective. *Journal of Educational Change*, 42(3), 211–228.
- Patel, S., & Jones, M. (2021). Enhancing learning in home economics: The role of digital tools. *Journal of Family and Consumer Sciences Education*, 39(3), 29–44.
- Patel, S., & Lee, J. (2024). Curriculum limitations and innovative teaching techniques in home economics: A teacher's perspective. *Journal of Educational Innovation*, 12(2), 29–42.
- Patel, S., & Thompson, A. (2024). Leveraging technology for student-centered learning in home economics. *Family and Consumer Sciences Research Journal*, 52(2), 19–32.
- Patel, S., & Wong, M. (2022). Community engagement in project-based learning: Bridging theory and practice in home economics. *Journal of Educational Challenges*, 11(4), 67–82.
- Peters, L., & Adams, J. (2021a). Online learning platforms and their role in home economics education in Canada. *Canadian Journal of Digital Learning*, 7(2), 61–79.
- Peters, L., & Adams, J. (2021b). Peer mentorship and teacher development in home economics education. *Canadian Journal of Vocational Studies*, 6(2), 77–92.
- Piaget, J. (1952). *The origins of intelligence in children* (M. Cook, Trans.). International Universities Press.
- Qutoshi, S. B. (2021). Understanding phenomenology in educational research. *Journal of Education and Educational Development*, 8(2), 37–43. <https://doi.org/10.22555/joed.v8i2.3666>
- Ramanadhan, S., Revette, A. C., Lee, R. M., & Aveling, E. L. (2021). Pragmatic approaches to analyzing qualitative data for implementation science: An introduction. *Implementation Science Communications*, 2(1), 1–10.
- Ritchie, J., & Spencer, L. (1994). Qualitative data analysis for applied policy research. In A. Bryman & R. G. Burgess (Eds.), *Analyzing qualitative data* (pp. 173–194). Routledge.
- Rivera, K., & Bautista, A. (2024). Enhancing student motivation in home economics: Practical applications and innovative strategies. *International Journal of Home Economics Education*, 22(1), 77–94.
- Rivera, M., & Cruz, R. (2023). Teacher preparedness and resource constraints in home economics in the Philippines. *Asia-Pacific Education Review*, 24(1), 78–89.
- Roman-Acosta, D. (2024). Terminology in qualitative research methodology. *Seminars in Medical Writing and Education*. <https://discovery.researcher.life/article/terminology-in-qualitative-research-methodology/3381f17c070036fb98313a1d5041f37e>
- Santiago, R., & Valenzuela, P. (2021a). Enhancing home economics education through interactive simulations in the Philippines. *Philippine Journal of Teacher Education*, 6(3), 44–58.

- Santiago, R., & Valenzuela, P. (2021b). Enhancing home economics teaching through peer collaboration: Insights from philippine educators. *Philippine Journal of Teacher Education*, 6(3), 44–58.
- Santos, E., & Reyes, A. (2020). Teacher burnout and its impact on instructional innovation in philippine schools. *Journal of Educational Leadership and Management*, 35(4), 201–215.
- Scott, K. C. (2021). A review of faculty self-assessment tpack instruments (january 2006 – march 2020). *International Journal of Information and Communication Technology Education*, 17(2), 152–169.
- Smith, R., & Chen, Y. (2021). Resistance to change: Barriers to innovative teaching in home economics. *Journal of Family and Consumer Sciences Education*, 39(1), 23–36.
- Smith, R., & Chen, Y. (2023). Barriers to implementing student-centered learning in home economics: Insights from teachers. *Journal of Educational Challenges*, 11(3), 78–91.
- Smith, R., Johnson, L., & Martin, T. (2024). Assessment strategies in project-based learning environments: A focus on home economics education. *Journal of Educational Innovation*, 12(2), 30–48.
- Stevens, G., Johnson, T., & Harrison, E. (2022a). Blended learning approaches in home economics: Case studies from the united states. *Journal of Teaching and Learning*, 28(3), 78–94.
- Stevens, G., Johnson, T., & Harrison, E. (2022b). Innovative teaching strategies in home economics: Collaborative approaches in u.s. classrooms. *Journal of Teaching and Learning*, 28(3), 78–94.
- Stewart, D. W., & Shamdasani, P. N. (2019). *Focus groups: Theory and practice* (3rd). SAGE Publications.
- Tan, E., & Cruz, B. (2023). Differentiated instruction in home economics classrooms: Addressing diverse learning needs. *Educational Review of Southeast Asia*, 20(2), 88–105.
- Tan, K., & Namoco, S. (2024). Post-pandemic challenges and coping mechanisms of tle and tvl deped teachers: A phenomenology study. *Science International*, 36(6), 619–627. <https://journal.sci-int.com/index.php/sciint/article/view/6>
- Tanaka, H. (2022). Virtual reality cooking labs: A new frontier in home economics education in japan. *International Journal of Educational Technology*, 14(2), 47–65.
- Tanaka, H., & Ito, Y. (2022). Pedagogical challenges and innovations in japanese home economics education. *International Journal of Home Economics*, 15(1), 57–70.
- Thompson, A., & Williams, J. (2023). Classroom management challenges in innovative home economics education. *Journal of Educational Challenges*, 11(4), 66–80.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes* (M. Cole, V. John-Steiner, S. Scribner, & E. Souberman, Eds.). Harvard University Press.
- Williams, J., & Thompson, A. (2021). Enhancing engagement in home economics through project-based learning. *Journal of Family and Consumer Sciences Education*, 39(1), 12–27.
- Wilson, R., & Dunn, J. (2021). Addressing curriculum gaps in australian home economics education. *Journal of Curriculum Studies*, 53(5), 651–668.