

Teacher Collaboration in Relation to Instructional Efficacy of Public Secondary Home Economics Teachers

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Abstract. This study investigated the relationship between teacher collaboration and instructional efficacy among 73 public secondary Home Economics teachers in Cluster 15, Division of Davao City. The primary objectives were to determine the extent of collaboration across three indicators, assess the level of instructional efficacy across four domains, evaluate the significance of their relationship, and identify which collaborative indicators significantly influence teaching effectiveness. Furthermore, the study sought to provide empirical evidence on how collaborative practices contribute to improved instructional outcomes in the context of public secondary education. The methodology employed a quantitative-correlational research design utilizing descriptive, correlational, and regression analyses. Respondents were selected through random sampling ensure representativeness. Data were gathered using a validated five-point Likert scale survey and analyzed through mean scores, Pearson's r correlation, and Multiple Linear Regression. These statistical tools enabled a comprehensive examination of both the degree of association and predictive influence between variables. Findings revealed that both teacher collaboration and instructional efficacy reached a "Very High" level, indicating that these practices are consistently demonstrated among respondents. Peer Support and Knowledge Sharing emerged as the highest collaboration indicator, while Instructional Adaptability and Innovation led the efficacy domains. Statistical tests confirmed a strong positive relationship, leading to the rejection of the null hypothesis. Regression analysis showed that collaboration predicts 49.2% of the variance in instructional efficacy, with Collaborative Planning and Lesson Design identified as the strongest predictor. The study recommends sustaining professional learning communities and strengthening institutional support systems. Administrators and DepEd officials may institutionalize structured time for collaborative planning and provide capacity-building workshops to enhance instructional quality and student learning outcomes.

KEY WORDS

1. teacher collaboration
2. instructional efficacy
3. public secondary home economics teachers

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1. Introduction

Teacher efficacy in Home Economics education is essential as it enables teachers to confidently deliver practical, skills-based instruction in areas such as food preparation, livelihood skills, and household management. High teacher efficacy enhances student competence, engagement, and real-life application of skills necessary for independent living and entrepreneurship. Relatively, teacher collaboration has long been recognized as a powerful driver of teacher efficacy, as it fosters the sharing of best practices, mutual support, and collective problem-solving among educators. Through collaborative planning, knowledge sharing, and team-based efforts, teachers build confidence in their instructional strategies and develop a stronger sense of competence in addressing diverse learner needs. When educators actively engage in co-planning, resource sharing, and reflective dialogue, they not only strengthen their own teaching practices but also enrich the learning experiences of their learners. Despite the recognized benefits, many Home Economics institutions still encounter structural and organizational barriers to instructional efficacy in content delivery and pedagogical strategies, classroom management and learner engagement, achievement of learning outcomes, and instructional adaptability and innovation. In this context, limited opportunities for sustained teacher collaboration further constrain the exchange of practical teaching approaches, contextualized resources, and reflective practices essential in skill-based instruction.

While collaboration holds transformative promise in enhancing teaching and learning, its inconsistent implementation poses a significant barrier to achieving instructional efficacy. Effective teacher collaboration fosters peer support and knowledge sharing, co-planning and lesson designing, and team-based reflective practice, all of which are essential for improving

instructional strategies and learner outcomes (Vangrieken et al., 2020). However, when collaboration is irregular, superficial, or limited to administrative compliance, teachers often fail to develop the collective expertise needed to address diverse learner needs and innovate in pedagogy. This inconsistency weakens the potential of collaboration to support instructional efficacy, which relies on teachers' ability to deliver lessons effectively, manage and engage learners meaningfully, adapt, innovate and align practices with learning goals (Ronfeldt et al., 2021). Thus, while collaboration can empower teachers to elevate their practice, its fragmented application constrains its impact, leaving instructional challenges unresolved and limiting opportunities for sustainable professional growth.

Globally, the imperative to strengthen teacher collaboration forms a cornerstone of educational quality improvement. International assessments and policy frameworks increasingly promote Professional Learning Communities (PLCs) as effective models of collaborative practice in schools (Khasawneh et al., 2023). For instance, in the Maldives, a recent study revealed moderate-to-low levels of teacher collaboration, yet a measurable positive influence on teaching effectiveness was identified demonstrating both the challenge and the untapped potential of collaborative practice in global settings (Nasir & Mydin, 2023).

Similarly, in Finland, teacher collaboration has been institutionalized through nationwide PLC frameworks that emphasize co-teaching and curriculum integration, leading to stronger instructional efficacy and sustained educational reforms (Soini et al., 2021). Despite PLCs being widely advocated, barriers such as time constraints, inadequate structural support, and limited clarity on collaborative modalities persist in many countries.

In the Philippine educational landscape, teacher collaboration remains central to several reform initiatives, particularly within K–12 and

Home Economics streams. Schools and districts have promoted collaborative teaching strategies and PLCs to address instructional challenges in technical-vocational subjects. However, analyses of local schools such as those in secondary Home Economics departments in Metro Manila and Luzon report mixed outcomes, often limited by scheduling conflicts, lack of formal collaboration time, and insufficient administrative advocacy for co-planning. For example, in Quezon City public secondary schools, collaborative lesson planning in Technology and Livelihood Education (TLE) subjects has been piloted, yet teachers report difficulty sustaining practices without institutional incentives or dedicated collaboration hours (Pascual & Villanueva, 2021).

In addition, in Mindoro's provincial high schools, Home Economics teachers engage in informal peer mentoring and resource-sharing, but the absence of structured PLC frameworks results in inconsistent instructional outcomes (De Guzman, 2022). These examples illustrate that while collaboration is a recognized reform priority, systemic barriers continue to hinder its full potential in enhancing instructional efficacy.

In the Davao Region, Home Economics educators face unique contextual challenges regarding collaboration. Many public high schools struggle to coordinate joint planning sessions due to limited staffing and resource constraints. For instance, in some secondary schools such as the Davao del Norte Vocational-Technical Schools, Home Economics teachers frequently manage multiple subject loads, limiting opportunities for focused peer interaction. In such settings, teacher collaboration tends to be informal and sporadic which often limited to occasional peer consultations rather than structured, reflective collaboration that could enhance instructional efficacy. Without institutionalized schedules or collaborative norms, potential gains in teaching quality remain unrealized.

In the secondary schools of Cluster 15, Division of Davao City, disparities in access to

instructional materials and laboratory facilities further widen the gap in collaborative practice, as teachers lack common resources to anchor joint lesson planning. Some schools within the cluster also report minimal administrative support for professional learning communities, resulting in low motivation to sustain collaborative initiatives. Furthermore, the absence of systematic monitoring and evaluation mechanisms makes it difficult to assess the impact of existing collaboration efforts on teaching performance and student learning outcomes.

Given the uneven global and local implementation of teacher collaboration, especially in the Home Economics domain and regions like Davao, a clear research gap emerges specifically on the lack of focused empirical study investigating how structured teacher collaboration specifically influences instructional efficacy in Home Economics settings. Existing literature largely addresses broader education contexts or general subjects, but seldom the technical-pedagogical field of Home Economics and its real-world constraints. This study, therefore, fills an essential gap by examining the mechanisms and outcomes of teacher collaboration in Home Economics within the Philippine and more specifically Davao context.

1.1. Theoretical/Conceptual Framework of the Study—This study is primarily anchored on the Professional Learning Community (PLC) theory, developed by DuFour and colleagues, which argues that sustained teacher collaboration in structured communities of practice leads to improved teaching and learning outcomes. It is grounded on the belief that when teachers share responsibility for learner achievement, engage in continuous dialogue, and analyze classroom practices collectively, instructional efficacy improves. Contemporary research shows that PLCs enhance teachers' confidence, foster innovative pedagogical practices, and strengthen accountability for learning outcomes (Hairon & Tan, 2019). In Home Eco-

Conceptual Framework Showing the Variables of the Study

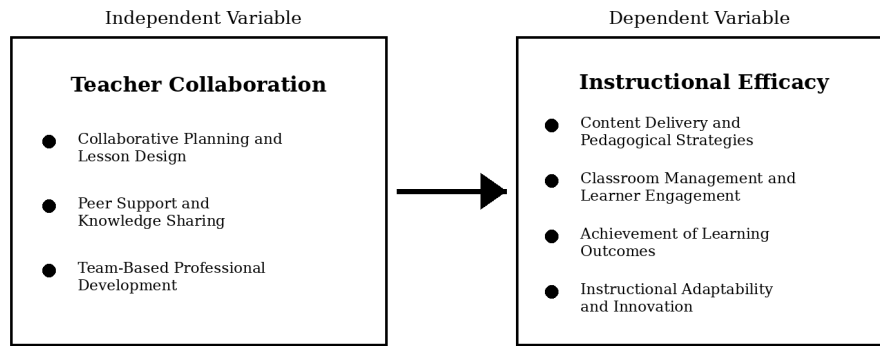


Fig. 1. Conceptual paradigm showing the variables of the study

nomics, PLCs provide a venue for teachers to exchange resources, discuss challenges in integrating practical life skills, and co-design strategies that directly influence learners' mastery of competencies (Stoll & Louis, 2022).

Another theory that supports the main theory is the Distributed Leadership Theory suggests that leadership responsibilities are shared across a school system, recognizing teachers as co-leaders in instructional improvement. This model supports the idea that collaboration among teachers is not only beneficial but essential in building collective capacity and improving teaching practices. Empirical studies highlight that distributed leadership enhances teacher empowerment, fosters professional trust, and leads to more effective instructional innovations (Tian et al., 2020). In the context of Home Economics, distributed leadership ensures that expertise from different teachers is mobilized, enabling shared ownership of curriculum implementation and innovative approaches to skill-based education, which in turn bolsters instructional efficacy (Nguyen et al., 2021).

Another relevant theory is Vygotsky's Social Constructivist Theory emphasizes that learning is a socially mediated process, where knowledge is co-constructed through interaction and collaboration. In the teaching pro-

fession, this perspective highlights the importance of collective engagement among educators to improve instructional efficacy. Recent studies note that teacher collaboration fosters reflective dialogue, shared problem-solving, and joint curriculum planning that enhance instructional quality and learner outcomes (Chen & Yu, 2021). Within Home Economics, where applied skills and contextualized teaching are essential, collaborative practices align with constructivist principles by allowing teachers to co-develop learner-centered strategies and adapt to diverse learner needs (Zhang & Cui, 2020).

The conceptual framework of the study is shown in Figure 1. The independent variable is the teacher collaboration of public secondary Home Economics teachers in Cluster 15, Division of Davao City in terms of Collaborative Planning and Lesson Design, Peer Support and Knowledge Sharing, and Team-Based Professional Development. On the other hand, the dependent variable is the instructional efficacy of public secondary Home Economics teachers in Cluster 15, Division of Davao City in terms of Content Delivery and Pedagogical Strategies, Classroom Management and Learner Engagement, Achievement of Learning Outcomes, and Instructional Adaptability and Innovation.

2. Methodology

This chapter discusses the research methods in conducting the study which are considered strategies or techniques utilized in the collection of data evidence for analysis in order to uncover new information or create better understanding of a topic. Contents of this chapter include the research design, research respondents of the study, research instrument and the data gathering procedures.

2.1. Research Design—This study employed a quantitative-correlational research design, which was appropriate for determining the degree of association between two key constructs, specifically teacher collaboration and instructional efficacy within the context of Home Economics education. A correlational design allowed the researcher to examine how patterns of collaborative practices among teachers, such as collaborative planning, peer knowledge sharing, and professional development, related to different dimensions of instructional efficacy including pedagogical strategies, classroom engagement, and adaptability (Creswell & Creswell, 2019). This approach provided a structured framework to capture relationships among variables without manipulating them, aligning with the natural school setting where collaboration and instructional practices occurred organically (Saunders et al., 2019). The choice of design thus supported the objective of identifying associations and predictive indicators between the two variables, enabling meaningful interpretation of how collaboration informed instructional outcomes in Home Economics.

Additionally, the design was grounded in a descriptive-correlational orientation, enabling the study not only to measure the extent of collaboration and efficacy but also to describe the prevailing practices in the target schools. By integrating description with correlation, the study provided both an overview of existing practices and insights into their interconnections, which was vital in educational research aiming to inform professional development and policy interventions (Kumar, 2019). This dual approach en-

sured that the design captured the multifaceted realities of teaching while maintaining methodological rigor. Consequently, the study was positioned to generate evidence-based findings that could inform strategies for enhancing teacher collaboration and, ultimately, instructional quality in Home Economics education (Cohen et al., 2021).

2.2. Ethical Considerations—This study adhered strictly to the established protocols and standard guidelines required for conducting research, particularly in managing respondents' data. The survey questionnaire, along with supporting documentation from authors, was submitted for thorough evaluation. Following approval from the Ethics Committee, the researcher proceeded with the study.

Social Value. The ethical foundation of research required that studies generated social value, ensuring that findings contributed to the advancement of knowledge and improvement of practice in the community where the research was conducted. In this study, examining the relationship between teacher collaboration and instructional efficacy had practical relevance for improving Home Economics education, as it informed school leaders and policymakers about strategies that enhanced teaching practices and learner outcomes. Ethical guidelines emphasized that research must avoid being trivial and instead yield outcomes that could benefit individuals and institutions beyond the academic exercise (Cohen et al., 2021). By focusing on teacher collaboration, the study aligned with the broader goal of enhancing professional development, instructional quality, and ultimately,

learners' holistic competencies.

Informed Consent. Informed consent was a cornerstone of ethical research, ensuring that participants willingly engaged in the study with full awareness of its purpose, procedures, and implications. During the presentation, permission was also respectfully sought from participants before proceeding with any data collection or discussion to reaffirm their voluntary participation. In the context of this study, teachers were provided with clear information about the research objectives, the voluntary nature of their participation, and their right to withdraw at any point without penalty. Best practices stressed the need for plain and accessible language in consent forms to avoid misunderstandings and to promote autonomy (Saunders et al., 2019). This safeguarded participants' freedom of choice and respected their professional integrity, which was particularly important when studying collaboration practices that might otherwise be perceived as sensitive or evaluative.

Vulnerability of Research Participants. Although public secondary teachers were not typically considered highly vulnerable populations, the study recognized that they might still face vulnerabilities related to professional hierarchy, workload, and fear of administrative judgment. Ethical research required acknowledging and mitigating such risks by ensuring anonymity and emphasizing that findings would not be used for evaluative or punitive purposes. Studies highlighted the importance of identifying subtle vulnerabilities that could impact participants' willingness to respond honestly (Fleming & Zegwaard, 2019; Cohen et al., 2021). By fostering an environment of trust, the study safeguarded teachers from potential coercion or unintended harm.

Privacy and Confidentiality. Protecting privacy and confidentiality was vital in research involving educators, especially when responses might reflect on their professional practices. The study adhered to ethical protocols by

anonymizing data, using codes instead of names, and ensuring that all information was securely stored and only accessible to the research team. Ethical frameworks stressed the responsibility of researchers to prevent the misuse of data and to ensure that findings could not be traced back to individual participants (Bryman, 2021). This respect for confidentiality reassured participants that their professional reputation and dignity would remain safeguarded throughout and after the study.

The Risk, Benefits & Safety. The study upheld the principle of risk-benefit analysis, ensuring that the benefits of advancing knowledge in Home Economics education outweighed any minimal risks. Risks were limited to potential discomfort in self-reflection on teaching practices, but these were mitigated through confidentiality and voluntary participation. The anticipated benefits included providing evidence that strengthened collaboration strategies, enhanced instructional practices, and informed school leadership (Resnik, 2020). Ethical research mandated minimizing risks while maximizing benefits for participants and society (Kumar, 2019). By carefully balancing these elements, the study ensured that participant safety and professional well-being remained prioritized.

Justice. The principle of justice in research required equitable selection of participants, ensuring that the burdens and benefits of research were fairly distributed. In this study, justice was observed by treating all teachers equally, without bias based on age, gender, or years of service (Saunders et al., 2019). Ethical frameworks highlighted that fairness in inclusion protected participants from discrimination while ensuring that findings reflected the diversity of the teaching workforce (Cohen et al., 2021). By applying this principle, the study ensured that outcomes were representative and could contribute meaningfully to the broader teaching community.

Transparency. Transparency involved open

communication about the study's objectives, processes, and potential outcomes, ensuring that participants, stakeholders, and the academic community were informed. It also included clear disclosure of funding sources, conflicts of interest, and the intended dissemination of findings. Scholars stressed that transparency strengthened the credibility of research and built trust among participants and stakeholders (Bryman, 2021; Resnik, 2020). For this study, transparency ensured that the research process was accountable, ethical, and aligned with professional standards.

Qualification of the Researcher. The qualification of the researcher was an ethical consideration, as only trained and competent individuals were expected to conduct studies involving human participants. In this study, the researcher's background in education and familiarity with Home Economics pedagogy ensured a knowledgeable and sensitive approach to data collection and interpretation. Additionally, the researcher completed all the necessary prerequisites to proceed with thesis writing. Moreover, the researcher was bound by professional codes of conduct and had undergone training in research ethics, ensuring compliance with ethics committee requirements (Fleming & Zegwaard, 2019). This ethical dimension guaranteed that participants could trust the researcher to act with professionalism and uphold ethical standards.

Adequacy of Facilities. Ensuring the adequacy of facilities was an ethical obligation to provide participants with a safe, organized, and conducive environment for research participation. This included secure data handling systems (e.g., password-protected files and restricted access), appropriate and comfortable venues for orientation or consent-taking, and reliable tools for gathering and storing information such as validated questionnaires and digital recording devices. Ethical research guidelines emphasized that adequate facilities not only protect participants but also strengthen the credi-

bility and trustworthiness of the research process (World Health Organization, 2022). In this study, ensuring proper facilities demonstrated respect for participant welfare and supported the validity of the research process. Practically, this meant scheduling sessions in accessible locations, ensuring minimal disruption during data collection, and providing clear instructions and assistance when needed. Additionally, backup systems and contingency measures were prepared to prevent data loss and to maintain the integrity and continuity of the research activities.

Community Involvement. Finally, community involvement enhanced the ethical integrity of the study by ensuring that research outcomes resonated with the needs and priorities of the educational community. Engaging teachers and school leaders not only as participants but also as beneficiaries of the findings reflected participatory ethics, where stakeholders played a role in shaping how knowledge was used. Studies argued that community engagement fostered trust, ownership, and the practical application of findings (Bryman, 2021; Cohen et al., 2021). In this study, community involvement ensured that the benefits of understanding teacher collaboration and instructional efficacy extended beyond academic inquiry to actual improvements in Home Economics education.

2.3. Research Respondents—The respondents of the study were composed of Home Economics and Technology and Livelihood Education (HE/TLE) public secondary school teachers from Cluster 15, Division of Davao City, which consisted of a total population of 90 teachers. Out of this population, 73 teachers were selected as respondents through random sampling, determined using Slovin's formula to ensure an appropriate and representative sample size. The selection of Cluster 15 as the research setting provided a contextualized understanding of the teaching dynamics within this division, making the findings relevant to the actual ed-

educational environment in which these teachers operated. Employing probability sampling techniques such as Slovin's formula enhanced the reliability and validity of the results by reducing sampling bias and ensuring that each teacher had an equal chance of being included in the study (Kumar, 2019).

The sample included both male and female teachers within the age range of 25 to 55 years, representing a demographic with adequate maturity and professional exposure to provide valuable insights on technological integration and pedagogical competence. On average, these teachers had at least one year of teaching experience, making them credible informants regarding the interaction between long-term instructional practices and the adoption of emerging technologies. Engaging respondents with such profiles ensured that the data reflected both professional expertise and lived teaching experiences within the classroom setting (Saunders et al., 2019).

In addition, all respondents held at least a bachelor's degree in secondary education, a qualification that guaranteed foundational training in pedagogy, curriculum planning, and classroom management. This academic background reinforced the reliability of their perspectives, as they possessed both theoretical knowledge and practical teaching experience relevant to the study's focus on pedagogical competence (Creswell & Creswell, 2019). Their specialization in Home Economics ensured that the findings were contextualized in a subject area that integrates technical proficiency with life skills education. By selecting participants who met these qualifications, the study not only maintained methodological rigor but also strengthened the credibility and applicability of its findings within the Division of Davao City. Ul-

timately, the chosen respondents embodied a representative group capable of offering meaningful perspectives on how technological integration influenced pedagogical competence.

2.4. Research Instruments—Developing effective research instruments was a vital component of the research process, as these tools provided the means to gather accurate and relevant data from participants. Well-designed instruments ensured the credibility and precision of findings by systematically capturing the variables under investigation in a structured format (Kumar, 2019). They also established standardized procedures for data collection, which in turn improved reliability and made it possible to compare results across similar studies in the educational field (Cohen et al., 2021). For this study, the primary data-gathering tool was a survey questionnaire, specifically constructed to measure the two main variables of interest: teacher collaboration and instructional efficacy among public secondary Home Economics teachers in Cluster 15, Division of Davao City.

The questionnaire was organized into two main sections. The first section focused on measuring the extent of teacher collaboration, particularly in the areas of collaborative planning and lesson design, peer support and knowledge sharing, and team-based professional development. To ensure the appropriateness and validity of the items, the instrument drew from established and peer-reviewed studies, such as the work of Vangrieken et al. (2020). Responses were assessed using a five-point Likert scale, with five (5) representing the highest level of agreement and one (1) the lowest. The scale, including its descriptions and interpretations, provided a clear framework for analyzing data, ensuring that responses were consistently and meaningfully evaluated.

The second section of the questionnaire centered on evaluating the level of instructional

efficacy of public secondary Home Economics teachers in Cluster 15, Division of Davao City.

Scale for Part I: Teacher Collaboration

Range	Descriptive Equivalent	Interpretation
4.20-5.00	Very High	The Teacher Collaboration of public secondary Home Economics teachers is always evident.
3.40-4.19	High	The Teacher Collaboration of public secondary Home Economics teachers is often evident.
2.60-3.39	Moderate	The Teacher Collaboration of public secondary Home Economics teachers is sometimes evident.
1.80-2.59	Low	The Teacher Collaboration of public secondary Home Economics teachers is seldom evident.
1.00-1.79	Very Low	The Teacher Collaboration of public secondary Home Economics teachers is not evident.

Scale for Part II: Instructional Efficacy

Range	Descriptive Level	Interpretation
4.20-5.00	Very High	The Instructional Efficacy of public secondary Home Economics teachers is always evident.
3.40-4.19	High	The Instructional Efficacy of public secondary Home Economics teachers is often evident.
2.60-3.39	Moderate	The Instructional Efficacy of public secondary Home Economics teachers is sometimes evident.
1.80-2.59	Low	The Instructional Efficacy of public secondary Home Economics teachers is seldom evident.
1.00-1.79	Very Low	The Instructional Efficacy of public secondary Home Economics teachers is not evident.

This portion was structured to measure teachers' effectiveness in carrying out their instructional responsibilities through key indicators such as content delivery and pedagogical strategies, classroom management and learner engagement, achievement of learning outcomes, and instructional adaptability and innovation. These dimensions were recognized as essential aspects of effective teaching since they reflected the teacher's capacity to plan, implement, and

assess instruction in ways that fostered meaningful and lasting learning experiences. Similar to the first section, responses were gauged using a five-point Likert scale, where five (5) represented the highest and one (1) the lowest. The corresponding scale, with its descriptions and interpretations, provided a systematic framework for analyzing results, ensuring clarity and consistency in data interpretation.

To ensure the validity and reliability of the questionnaire, the items were carefully adapted from established and peer-reviewed studies to confirm that they accurately measured the constructs of teacher collaboration and instructional efficacy. Validity was reinforced through expert validation, where specialists in Home Economics education and research methodology together with the panel members of this study reviewed the instrument for clarity, relevance, and

alignment with the research objectives. Reliability, on the other hand, was secured by subjecting the instrument to a pilot test with 30 HE teachers situated from Cluster 13 which was beyond the cluster of the respondents of the study. The reliability analysis indicates that the instrument demonstrates good internal consistency, with a Cronbach's alpha of 0.823 across 35 items, suggesting that the variables are highly reliable for measuring the constructs. Additionally, all

30 cases were valid with no exclusions, ensuring that the results are based on complete and consistent data. Valid and reliable instruments enhanced the credibility of findings and supported their applicability in broader contexts (Kumar, 2019; Creswell & Creswell, 2019).

2.5. Data Gathering Procedure—In the initial phase of the data collection process, the researcher prepared and submitted a formal letter of request for authorization from the Dean of the Graduate School to secure institutional approval for the conduct of the study. Upon obtaining this clearance, another communication was addressed to the Schools Division Superintendent of the Division of Davao City, coursed through the appropriate channels, particularly the Office of Public Schools District Supervisors (PSDS) overseeing the identified schools. These formal procedures were necessary to ensure compliance with organizational protocols and to affirm the legitimacy of the research undertaking. Once the necessary permissions were granted, the finalized survey questionnaire was prepared for administration among the selected respondents.

Following the acquisition of authorization, the actual distribution of survey instruments commenced. The researcher personally administered the questionnaires to the targeted Home Economics teachers in Cluster 15 of Davao City, under the supervision and guidance of the respective school principals. This approach ensured that the process of data collection was orderly, transparent, and respectful of the institutional environment. After the respondents accomplished the survey, the researcher collected the completed instruments promptly to secure the responses and to maintain the integrity of the data. Such a methodical approach safeguarded against data loss and underscored the responsibility of the researcher in handling research materials.

In the final stage, the collected data were subjected to statistical analysis with the assis-

tance of a qualified statistician. The analysis employed the methodologies outlined in the preceding sections of the study, thereby ensuring consistency between the research design and data treatment. The outcomes of the statistical procedures were interpreted in light of the study's objectives, providing meaningful insights into the relationship between teacher collaboration and instructional efficacy. These findings served as the empirical foundation for drawing conclusions and making recommendations that contributed to both theory and practice in the field of Home Economics education.

2.6. Statistical Treatment— The study used the respondents' collected data for analysis. The following statistical tools were used in the analysis and interpretation of the responses in this study to uncover meaningful insights from collected data.

Mean. To determine the extent of teacher collaboration and the level of instructional efficacy, descriptive statistics such as the mean were used for summarizing teachers' responses across indicators such as collaborative planning and lesson design, peer support and knowledge sharing, team-based professional development, content delivery and pedagogical strategies, classroom management and learner engagement, achievement of learning outcomes, and instructional adaptability and innovation. This descriptive approach provided a clear profile of the data and helped identify emerging patterns and trends that reflected the collaborative practices of teachers and their corresponding instructional efficacy levels (Creswell & Creswell, 2019). The results derived from mean scores formed the foundation for understanding how teachers' collaborative engagements contributed to effective teaching practices in Home Economics.

Pearson R Correlation. Beyond descriptive measures, the study applied inferential statistics to test the relationship between the two core variables, namely teacher collaboration and in-

structional efficacy. Pearson R Correlation analysis was used to examine whether significant associations existed between collaboration indicators such as collaborative planning and lesson design, peer support and knowledge sharing, and team-based professional development, and instructional efficacy. This directly aligned with the third research objective, which sought to establish whether improvements in collaboration were connected to enhanced instructional effectiveness. By employing this inferential approach, the study provided empirical evidence to confirm or reject hypothesized linkages, ensuring that conclusions rested on statistically validated relationships rather than descriptive observations alone (Gay et al., 2020).

Multiple Linear Regression. To further determine whether specific indicators of teacher collaboration significantly influenced instructional efficacy, the study employed Multiple Linear Regression (MLR). This statistical procedure allowed the identification of predictors

such as collaborative planning and lesson design, peer support and knowledge sharing, and team-based professional development that exerted measurable effects on instructional efficacy practices. Through MLR, the study enhanced its explanatory power by pinpointing which collaborative dimensions contributed most strongly to teaching effectiveness in Home Economics. This, in turn, provided a solid basis for crafting professional development programs and policy interventions that prioritized the most impactful aspects of teacher collaboration (Saunders et al., 2019).

In sum, the systematic use of descriptive, correlational, and regression analyses ensured methodological rigor and yielded meaningful insights into how teacher collaboration influenced and strengthened instructional efficacy among Home Economics teachers in Cluster 15, Division of Davao City.

3. Results and Discussion

This chapter presents the results and discussions based on the data gathered after the conduct of this study. This includes the interpretation of the data and the repercussions of the findings of the study. The deliberations presented in this chapter are aligned to the statement of the problem cited in the previous chapters of this study.

3.1. Extent of Teacher Collaboration of Public Secondary Home Economics Teachers— The extent of teacher collaboration among public secondary Home Economics teachers is a vital dimension in understanding how instructional practices are collectively enhanced within the school setting. Given the practical and applied nature of Home Economics education, collaborative efforts among teachers play a significant role in ensuring consistency, relevance, and effectiveness of instruction. Assessing the extent of such collaboration provides meaningful insights into how teachers work together

to improve learner engagement, optimize resource utilization, and achieve desired learning outcomes. Thus, the following indicators are presented to systematically evaluate the level of teacher collaboration in this study.

Summary of the Extent of Teacher Collaboration of Public Secondary Home Economics Teachers. Shown in Table 1 is the summary of the extent of teacher collaboration of public secondary Home Economics teachers in Cluster 15, Division of Davao City across three key indicators such as the collaborative planning and lesson design, peer support and knowledge sharing, and team-based professional development.

Table 1. Summary of the Extent of Teacher Collaboration of Public Secondary Home Economics Teachers

Indicators	Mean	SD	Descriptive Level
Collaborative Planning and Lesson Design	4.40	0.50	Very High
Peer Support and Knowledge Sharing	4.65	0.38	Very High
Team-Based Professional Development	4.64	0.39	Very High
Overall	4.56	0.34	Very High

The overall mean score of 4.56 with a standard deviation (SD) of 0.34 as presented in Table 4, interpreted as Very High, means that the teacher collaboration of public secondary Home Economics teachers in Cluster 15, Division of Davao City is always evident. This indicates that teachers demonstrate a strong level of collaboration in their professional practices. This further suggests that collaborative engagement is deeply embedded in the teaching culture of the participating schools, allowing educators to collectively plan instruction, share knowledge, and participate in professional learning activities. Contemporary educational research emphasizes that teacher collaboration significantly contributes to improved instructional quality, professional learning, and student outcomes because it fosters collective responsibility and shared expertise among educators (OECD, 2020; Ronfeldt et al., 2021).

Among the indicators, Peer Support and Knowledge Sharing obtained the highest mean score of 4.65 with an SD of 0.38. This means that the teacher collaboration of public secondary Home Economics teachers in terms of peer support and knowledge sharing in Cluster 15, Division of Davao City is always evident. This indicates that HE teachers frequently engage in collegial interactions that involve sharing teaching strategies, exchanging resources, and providing professional feedback. This finding further suggests that teachers strongly value peer-to-peer learning as a mechanism for improving their instructional practices and expanding professional knowledge. Research indicates that collaborative knowledge sharing enables

teachers to access diverse perspectives, refine instructional approaches, and strengthen professional communities within schools (Admiraal et al., 2021). The prominence of this indicator implies that teachers recognize the importance of continuous professional dialogue and collective reflection in enhancing teaching effectiveness.

Meanwhile, Team-Based Professional Development, which obtained a mean score of 4.64 with an SD of 0.39, also demonstrates a very high level of collaborative engagement in professional learning activities. This means that the teacher collaboration of public secondary Home Economics teachers in terms of team-based professional development in Cluster 15, Division of Davao City is always evident. This finding indicates that HE teachers actively participate in group training, workshops, and collaborative learning sessions that enhance their teaching competencies and instructional strategies. Team-based professional development is widely regarded as an effective approach to teacher learning because it promotes shared reflection, collective problem-solving, and the application of new teaching strategies in classroom practice (Sims et al., 2021). Also, professional learning conducted collaboratively often leads to greater adoption of innovative instructional practices and sustained professional growth among teachers (Cordingley et al., 2020).

Furthermore, Collaborative Planning and Lesson Design registered the lowest mean score of 4.40 with an SD of 0.50, although it is still interpreted as Very High. This means that the teacher collaboration of public secondary Home Economics teachers in terms of collab-

orative planning and lesson design in Cluster 15, Division of Davao City is always evident. This result suggests that teachers actively engage in collaborative planning processes, but such practices may occur slightly less frequently compared with peer support and professional development activities. Collaborative lesson planning typically requires structured time, coordinated schedules, and institutional support, which may influence the consistency of its implementation (Hargreaves & O'Connor, 2021). In addition, collaborative planning remains an essential component of effective instructional practice because it allows teachers to align learning objectives, develop coherent instructional strategies, and implement innovative teaching approaches (Darling-Hammond et al., 2020). Thus, despite being the lowest-ranked indicator, the result still reflects a strong collaborative environment among teachers.

3.2. Level of Instructional Efficacy of Public Secondary Home Economics Teachers—The level of instructional efficacy among public secondary Home Economics teachers is a crucial factor in determining the quality and effectiveness of teaching and learning processes in the classroom. Instructional efficacy reflects teachers' confidence and capability in delivering content, managing classroom dynamics, engaging learners, and adapting strategies to meet diverse educational needs. In the context of Home Economics, where instruction is highly practical and skill-based, a strong sense of efficacy enables teachers to facilitate meaningful learning experiences that bridge theory and real-life application. Evaluating the level of instructional efficacy provides valuable insights into how well teachers perform their roles in fostering student competence and achieving intended learning outcomes. Thus, the following indicators are presented to assess the level of instructional

efficacy in this study.

Summary of the Level of Instructional Efficacy of Public Secondary Home Economics Teachers. Shown in Table 2 is the summary of the level of instructional efficacy of public secondary Home Economics teachers in Cluster 15, Division of Davao City across four key indicators such as the content delivery and pedagogical strategies, classroom management and learner engagement, achievement of learning outcomes, and instructional adaptability and innovation.

The data presented in Table 9 summarize the level of instructional efficacy of public secondary Home Economics teachers in Cluster 15, Division of Davao City across four key dimensions such as the content delivery and pedagogical strategies, classroom management and learner engagement, achievement of learning outcomes, and instructional adaptability and innovation. The table shows an overall mean score of 4.57, a standard deviation (SD) of 0.33, and interpreted as Very High, which means that the instructional efficacy of public secondary Home Economics teachers in Cluster 15, Division of Davao City is always evident. This analysis indicates that these HE teachers demonstrate a strong level of instructional competence across the identified domains. This further suggests that the HE teachers are able to effectively deliver subject content, manage classroom environments, facilitate student learning, and adapt instructional practices to respond to diverse classroom situations. Instructional efficacy plays a significant role in promoting student engagement and improving educational outcomes because teachers who exhibit strong instructional capabilities are more likely to implement effective teaching strategies and sustain productive learning environments (Hattie, 2023).

Table 2. Summary of the Level of Instructional Efficacy of Public Secondary Home Economics Teachers

Indicators	Mean		Descriptive Level
Content Delivery and Pedagogical Strategies	4.50	0.45	Very High
Classroom Management and Learner Engagement	4.53	0.47	Very High
Achievement of Learning Outcomes	4.59	0.37	Very High
Instructional Adaptability and Innovation	4.64	0.34	Very High
Overall	4.57	0.33	Very High

Among the four indicators, instructional adaptability and innovation obtained the highest mean score of 4.64, an SD of 0.34, and interpreted as Very High. This means that the instructional efficacy of public secondary Home Economics teachers in terms of instructional adaptability and innovation in Cluster 15, Division of Davao City is always evident. This finding indicates that the HE teachers frequently modify their teaching approaches and integrate innovative strategies to address classroom challenges and diverse learner needs. Instructional adaptability is considered an essential characteristic of effective teaching because it enables educators to adjust lesson delivery, incorporate new pedagogical methods, and respond to varying student abilities and learning styles (Redecker & Punie, 2020). Teachers who demonstrate adaptability and innovation are more capable of creating engaging learning environments and improving students' academic performance, particularly in dynamic and technology-driven educational settings (Schleicher, 2020).

The second-highest indicator, achievement of learning outcomes, recorded a mean score of 4.59, an SD of 0.37, and also interpreted as Very High. This means that the instructional efficacy of public secondary Home Economics teachers in terms of achievement of learning outcomes in Cluster 15, Division of Davao City is always evident. This result implies that the HE teachers are effective in ensuring that students attain the intended learning competencies and curricular objectives in Home Economics. Achieving learning outcomes requires teachers to align instructional activities, learning objec-

tives, and assessment methods to ensure that students acquire the necessary knowledge and skills (Brookhart, 2021). Clear learning goals, formative assessment, and continuous feedback significantly contribute to the successful attainment of learning outcomes and overall student achievement (Wiliam, 2021).

Similarly, classroom management and learner engagement obtained a mean score of 4.53 with an SD of 0.47, indicating a Very High level of instructional efficacy in maintaining an organized classroom environment and promoting active student participation. This means that the instructional efficacy of public secondary Home Economics teachers in terms of classroom management and learner engagement in Cluster 15, Division of Davao City is always evident. This indicates that the HE teachers are able to maintain conducive learning environments that support student participation and engagement. Effective classroom management is crucial for establishing a positive learning climate where students remain focused, motivated, and actively involved in learning activities (Emmer & Sabornie, 2021). In addition, well-managed classrooms enhance students' academic engagement and minimize disruptions, allowing teachers to maximize instructional time and facilitate effective learning experiences (Wang et al., 2021).

Meanwhile, content delivery and pedagogical strategies registered the lowest mean score of 4.50 with an SD of 0.45, although it remains within the Very High descriptive level. This means that the instructional efficacy of public secondary Home Economics teachers in terms

Table 3. Significant Relationship between Teacher Collaboration and Instructional Efficacy of Public Secondary Home Economics Teachers

Teacher Collaboration	Instructional Efficacy (Dependent Variable)									
	Content Delivery		Classroom Management		Learning Outcomes		Adaptability		Overall Efficacy	
	r	p	r	p	r	p	r	p	r	p
Collaborative Planning and Lesson Design	.507	.000	.521	.000	.583	.000	.360	.002	.604	.000
Peer Support and Knowledge Sharing	.447	.000	.352	.002	.635	.000	.470	.000	.568	.000
Team-Based Professional Development	.395	.000	.529	.000	.465	.000	.196	.096	.495	.000
Overall	.570	.000	.593	.000	.704	.000	.429	.000	.701	.000

of content delivery and pedagogical strategies in Cluster 15, Division of Davao City is always evident. This indicates that the HE teachers still demonstrate strong competence in presenting lesson content and employing appropriate instructional strategies, but this dimension is slightly lower compared with the other indicators. Effective content delivery involves clear explanations, the use of varied teaching methods, and the integration of instructional materials that help students understand complex concepts (Darling-Hammond et al., 2020). Teachers who employ diverse pedagogical strategies and learner-centered approaches are more likely to improve students' comprehension and knowledge retention (Kim et al., 2021).

The overall correlation coefficient of $r = 0.701$ with a p-value of 0.000 signifies a strong positive and statistically significant relationship between teacher collaboration and instructional efficacy. Since the p-value is lower than the standard level of significance ($p < 0.05$), the null hypothesis is rejected, indicating that higher levels of teacher collaboration are associated with higher levels of instructional efficacy. This result implies that collaborative professional practices among HE teachers in Cluster 15, Division of Davao City contribute meaningfully to improving their instructional competence and effectiveness in classroom teaching. This is consistent with contemporary studies stating that collaborative work among teachers enhances instructional quality by facilitating the exchange

3.3. Significant Relationship between Teacher Collaboration and Instructional Efficacy—Shown in Table 3 is the statistical analysis using Pearson correlation coefficient (r) on the significant relationship between teacher collaboration and instructional efficacy of public secondary HE Teachers in Cluster 15, Division of Davao City. This analysis aims to determine whether the level of collaboration among teachers is associated with their effectiveness in delivering instruction and facilitating student learning. The correlation coefficients (r -values) indicate the strength and direction of the relationships, while the p-values reveal the statistical significance of these relationships.

of knowledge, shared problem-solving, and collective professional growth (Vangrieken et al., 2020; Ronfeldt et al., 2021).

Specifically, Collaborative Planning and Lesson Design obtained a correlation coefficient of $r = 0.604$ with a p-value of 0.000, indicating a strong positive relationship with instructional efficacy. This suggests that HE teachers in Cluster 15, Division of Davao City who frequently collaborate in planning lessons and designing instructional activities tend to demonstrate higher levels of instructional effectiveness. This further suggests that collaborative lesson planning allows HE teachers in Cluster 15, Division of Davao City teachers to share expertise, refine teaching strategies, and develop more effective instructional materials that support student

learning. Research highlights that collaborative instructional planning enhances pedagogical decision-making and promotes reflective teaching practices, ultimately leading to improved teaching performance and student outcomes (Admiraal et al., 2021; Darling-Hammond et al., 2020).

Similarly, Peer Support and Knowledge Sharing showed a correlation coefficient of $r = 0.568$ with a p-value of 0.000, indicating a moderate positive relationship with instructional efficacy. This finding implies that HE teachers in Cluster 15, Division of Davao City who actively seek advice, exchange ideas, and share teaching resources with colleagues tend to exhibit stronger instructional practices. Peer support fosters professional dialogue and continuous learning among educators, allowing them to address instructional challenges more effectively. Educational studies emphasize that knowledge-sharing practices among teachers promote professional learning communities that enhance teaching quality and foster collaborative problem-solving within schools (OECD, 2020; Vangrieken et al., 2020).

Meanwhile, Team-Based Professional Development obtained a correlation coefficient of $r = 0.495$ with a p-value of 0.000, indicating a moderate positive relationship with instructional efficacy. Although it recorded the lowest correlation among the three indicators, the relationship remains statistically significant, suggesting that participation in team-based training and professional development activities contributes to improving teachers' instructional effectiveness. Collaborative professional development enables HE teachers in Cluster 15, Division of Davao City to learn new teaching methods, reflect on their instructional practices, and apply innovative strategies in the classroom. Research indicates that sustained and collaborative professional development significantly enhances teachers' pedagogical knowledge and instructional performance (Sims et al., 2021;

Cordingley et al., 2020). Overall, the findings affirm that teacher collaboration plays a crucial role in strengthening instructional efficacy among educators.

3.4. Regression Analysis of the Teacher Collaboration on Instructional Efficacy of Public Secondary Home Economics Teachers—The results presented in Table 4 show the regression analysis of teacher collaboration as a predictor of instructional efficacy among public secondary Home Economics teachers in Cluster 15, Division of Davao City. The overall regression analysis yielded a correlation coefficient of $R = 0.701$ and a coefficient of determination (R^2) of 0.492, indicating that approximately 49.2% of the variance in instructional efficacy can be explained by teacher collaboration variables.

Furthermore, the F-value of 22.234 with a p-value of 0.000 demonstrates that the regression analysis is statistically significant. This means that teacher collaboration significantly influences instructional efficacy among the respondents. Educational research consistently highlights that collaborative professional practices among teachers contribute to improved instructional performance because they encourage the sharing of knowledge, reflective practice, and collective problem-solving in the teaching process (Vangrieken et al., 2020; Ronfeldt et al., 2021).

Specifically, Collaborative Planning and Lesson Design significantly influence instructional efficacy with an unstandardized coefficient ($B = 0.229$), standardized beta ($\beta = 0.342$), t-value = 3.103, and p-value = 0.003, leading to the rejection of the null hypothesis. Among the predictors of instructional efficacy, this indicator obtained the highest standardized beta coefficient, indicating that collaborative lesson planning has the strongest influence on teachers' instructional efficacy. This finding implies that HE teachers in Cluster 15, Division of Davao City who engage in collaborative planning and lesson design tend to demonstrate higher lev-

Table 4. Regression Analysis of the Teacher Collaboration on Instructional Efficacy of Public Secondary Home Economics Teachers

Predictor	B	Std. Error	Beta	t	Sig.	Decision on H0
(Constant)	1.418	.418		3.394	.001	
Collaborative Planning and Lesson Design	.229	.074	.342	3.103	.003	Reject
Peer Support and Knowledge Sharing	.231	.094	.266	2.444	.017	Reject
Team-Based Professional Development	.231	.080	.270	2.866	.006	Reject

els of instructional effectiveness. Collaborative planning allows educators to exchange instructional ideas, align learning objectives, and refine teaching strategies that improve classroom delivery and student learning outcomes (Ad-

miraal et al., 2021). Also, joint lesson planning strengthens teachers' pedagogical decision-making and promotes continuous professional learning within schools (Darling-Hammond et al., 2020).

Similarly, Team-Based Professional Development also significantly influences the instructional efficacy with $B = 0.231$, $\beta = 0.270$, $t = 2.866$, and $p = 0.006$, indicating a statistically significant positive effect. This result suggests that participation in team-based training activities and collaborative professional development contributes to enhancing HE teachers' instructional competence in Cluster 15, Division of Davao City. Professional development conducted collaboratively enables teachers to acquire new pedagogical skills, reflect on their instructional practices, and adopt innovative teaching strategies (Sims et al., 2021). Additionally, sustained and collaborative professional development improves teachers' instructional knowledge and enhances their ability to implement effective teaching strategies in the classroom (Cordingley et al., 2020).

Sharing also shows a significant effect on instructional efficacy with $B = 0.231$, $\beta = 0.266$, $t = 2.444$, and $p = 0.017$, leading to the rejection of the null hypothesis. This finding indicates that HE teachers in Cluster 15, Division of Davao City who actively engage in exchanging teaching resources, seeking professional advice, and sharing instructional experiences with colleagues tend to exhibit higher levels of instructional effectiveness. Peer collaboration fosters professional dialogue, knowledge exchange, and continuous improvement among educators, which contributes to stronger teaching practices (OECD, 2020). In addition, knowledge-sharing cultures within schools strengthen professional learning communities and enable teachers to improve their instructional strategies through collaborative reflection and shared expertise (Vangrieken et al., 2020).

Meanwhile, Peer Support and Knowledge

4. Summary of Findings, Conclusions and Recommendations

Presented in this chapter are the findings of the study based on the outcome of the gathered data. The conclusions drawn from the findings of the study are likewise outlined in this section. To maximize the significant contribution of this study, the researcher laid down recommendations in this chapter.

4.1. Summary of Findings—Collaboration among teachers enables the exchange of resources, reflective dialogue, and co-planning that enhance the quality of instruction and learner engagement (Vangrieken et al., 2020; Ronfeldt et al., 2021). However, when collaboration is inconsistent, informal, or merely compliance-driven, its potential to build collective expertise and improve instructional efficacy is significantly weakened (Khasawneh et al., 2023). This highlights the need for a focused inquiry into how systematic collaboration can truly enhance instructional quality in Home Economics classrooms. This study investigated the relationship between teacher collaboration and instructional efficacy of public secondary Home Economics teachers in Cluster 15, Division of Davao City. Specifically, the research aimed to determine the extent of teacher collaboration in terms of collaborative planning and lesson design, peer support and knowledge sharing, and team-based professional development. It also examined the level of instructional efficacy of the teachers in terms of content delivery and pedagogical strategies, classroom management and learner engagement, achievement of learning outcomes, and instructional adaptability and innovation. Furthermore, the study sought to determine the significant relationship between teacher collaboration and instructional efficacy and to identify whether teacher collaboration significantly predicts instructional efficacy among the respondents.

The study employed a quantitative research design using descriptive-correlational and regression analysis methods. A survey questionnaire was utilized to gather data from public secondary Home Economics teachers in Cluster 15, Division of Davao City. Statistical tools such as mean, Pearson correlation coefficient, and regression analysis were used to analyze the collected data. These statistical techniques enabled the researcher to describe the extent of teacher collaboration and instructional efficacy, deter-

mine the relationship between the variables, and identify which aspects of teacher collaboration significantly influence instructional efficacy.

The findings revealed that teacher collaboration among the respondents was very high, with peer support and knowledge sharing emerging as the highest-rated indicator. Similarly, the level of instructional efficacy of the teachers was also very high, particularly in terms of instructional adaptability and innovation. The results of the correlation analysis showed a significant positive relationship between teacher collaboration and instructional efficacy, indicating that higher levels of collaboration among teachers are associated with stronger instructional effectiveness. Regression analysis further revealed that teacher collaboration significantly influences instructional efficacy, with collaborative planning and lesson design identified as the strongest predictor.

4.2. Conclusions—Based on the findings of this study, the following conclusions were offered:

The extent of teacher collaboration among public secondary Home Economics teachers in Cluster 15, Division of Davao City is very high. This revealed that HE teachers in Cluster 15, Division of Davao City consistently demonstrate collaborative practices in terms of collaborative planning and lesson design, peer support and knowledge sharing, and team-based professional development. This further indicates that collaborative engagement is strongly embedded in the professional culture of these teachers in the cluster. Among the three indicators, peer support and knowledge sharing obtained the highest level, suggesting that these HE teachers frequently exchange teaching strategies, provide feedback, and support one another in improving instructional practices. This finding implies that these teachers recognize the value of collegial collaboration in enhancing teaching performance and professional growth.

The level of instructional efficacy of public

secondary Home Economics teachers in Cluster 15, Division of Davao City is very high. This revealed that HE teachers in Cluster 15, Division of Davao City demonstrate strong instructional competence in the areas of content delivery and pedagogical strategies, classroom management and learner engagement, achievement of learning outcomes, and instructional adaptability and innovation. Among these indicators, instructional adaptability and innovation obtained the highest level, suggesting that HE teachers in this cluster are highly capable of adjusting instructional strategies and incorporating innovative approaches to address students' learning needs and classroom situations. This further implies that these teachers possess strong confidence and capability in facilitating learning, managing classroom environments, and ensuring that students achieve the intended competencies.

There is a significant relationship between teacher collaboration and instructional efficacy among public secondary Home Economics teachers in Cluster 15, Division of Davao City. This revealed a strong positive relationship, indicating that higher levels of teacher collaboration are associated with higher levels of instructional efficacy. This further implies that HE teachers in this cluster who frequently engage in collaborative professional practices such as sharing ideas, discussing instructional strategies, and participating in collaborative learning activities tend to demonstrate stronger instructional competence.

Teacher collaboration significantly influences the instructional efficacy of public secondary Home Economics teachers in Cluster 15, Division of Davao City. Among the indicators of teacher collaboration, collaborative planning and lesson design emerged as the strongest predictor of instructional efficacy, followed by team-based professional development and peer support and knowledge sharing. This finding indicates that when these HE teachers are actively collaborating in planning lessons, designing in-

structional strategies, and participating in professional development activities, their instructional effectiveness is significantly improved. This further suggests that strengthening collaborative practices among HE teachers in this cluster can contribute to enhancing teaching quality and improving learning outcomes in schools.

4.3. Recommendations—The following interventions were offered based on the conclusions of the study:

Home Economics teachers in Cluster 15, Division of Davao City may sustain and further strengthen collaborative professional practices such as collaborative lesson planning, peer mentoring, and participation in team-based professional development activities. The findings of the study revealed that teacher collaboration significantly influences instructional efficacy; therefore, teachers may continue engaging in professional learning communities where instructional strategies, teaching resources, and classroom experiences are shared among colleagues. While collaboration has been identified as influential, excessive reliance on group-based planning and shared decision-making may limit teachers' creativity, independence, and responsiveness to their unique classroom contexts. Thus, teachers may instead focus on refining their personal pedagogical approaches and developing individualized teaching strategies that directly address the specific needs of their learners.

HE learners in Cluster 15, Division of Davao City may actively participate in classroom activities and collaborative learning experiences facilitated by their teachers. Since the study indicates that teachers demonstrate a very high level of instructional efficacy in terms of classroom management, pedagogical strategies, and instructional adaptability, learners should maximize these learning opportunities by engaging in hands-on activities, cooperative learning tasks, and reflective learning processes. Similarly, HE learners may not necessarily benefit

from highly structured, collaboration-driven instructional environments. Instead, greater emphasis may be placed on independent learning, self-paced skill development, and personal accountability in mastering Home Economics competencies. This approach could encourage learners to develop stronger self-regulation and problem-solving skills without overdependence on guided or group-based activities.

The Department of Education (DepEd) officials in the Division of Davao City may consider strengthening policies and programs that promote collaborative professional learning among teachers. The findings of the study suggest that teacher collaboration significantly contributes to instructional efficacy; therefore, DepEd may further support initiatives such as structured professional learning communities, collaborative lesson study programs, and capacity-building workshops that encourage knowledge sharing and collaborative teaching practices among educators. From a policy perspective, the Department of Education (DepEd) may reconsider the expansion of structured collaborative programs, as these initiatives can demand significant time, resources, and administrative support. In some cases, such programs may reduce instructional time and increase workload pressures on teachers, potentially leading to inefficiencies rather than improvements in teaching quality.

School administrators in Cluster 15, Division of Davao City are encouraged to provide institutional structures and opportunities that facilitate HE teacher collaboration within their

schools. This may include allocating time for collaborative lesson planning, organizing team-based professional development activities, and establishing supportive professional learning communities among HE teachers. Administrators may also encourage mentoring systems and collaborative instructional planning sessions to help teachers exchange best practices and address instructional challenges collectively. Likewise, school administrators may opt to minimize mandated collaborative activities and instead streamline institutional processes to reduce teacher workload. By limiting required meetings and collaborative sessions, administrators can allow teachers more time for lesson preparation, assessment, and direct classroom engagement, which may yield more immediate and measurable improvements in instructional delivery.

Future researchers are encouraged to conduct further studies that explore additional factors influencing instructional efficacy beyond teacher collaboration, such as leadership support, technological integration, teacher motivation, and school organizational climate. They may also replicate the study in different geographical areas, educational levels, or subject disciplines to validate and expand the findings of this research. Moreover, future studies may employ mixed-methods or qualitative approaches to gain deeper insights into how collaborative practices influence teaching effectiveness and student learning outcomes in diverse educational contexts.

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