

# School Urban Gardening as Influenced by School Governing Council Support

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**Abstract.** This study examined the extent of School Governing Council (SGC) support and its influence on implementing school urban gardening in selected public schools. Guided by Bronfenbrenner's Ecological Systems Theory, Social Capital Theory, and Rogers' Diffusion of Innovations Theory, the research focused on the contribution of governance support to the sustainability and educational value of gardening programs. Utilizing a quantitative-descriptive and correlational design, the study involved 110 school personnel selected through purposive sampling. Data were gathered through a validated survey and analyzed using descriptive statistics, Pearson correlation, and multiple linear regression. Results showed that SGC support was perceived as very extensive across all domains, particularly in monitoring and evaluation, sustainability, and logistical support. Urban gardening was also implemented to a very extensive degree, yielding strong outcomes in interdisciplinary learning, environmental enhancement, student leadership, and produce yield. Despite this, there was no significant overall relationship between SGC support and gardening implementation had no significant overall relationship. However, monitoring and evaluation emerged as a significant positive predictor, while logistical support showed a significant negative influence. The study concludes that effective governance requires alignment with school-level needs and participatory approaches. It recommends improving monitoring systems, aligning logistical assistance with actual requirements, and promoting greater teacher and student involvement.

## KEY WORDS

1. School Governing Council 2. urban gardening 3. educational sustainability

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

## 1. Introduction

Urban gardening has become a popular and educational approach to teach students about the environment, sustainable practices, and nutrition. Integrating gardening into the school curriculum provides students with hands-on learning experiences and helps them develop a deeper connection to nature while also learning where their food comes from. The active participation of parents is essential to the suc-

cess of urban gardening in schools. Around the world, parents play a pivotal role in supporting and enhancing the urban gardening initiatives in schools. Their involvement can take various forms, such as volunteering during gardening sessions, contributing expertise in horticulture or agriculture, and assisting in maintaining garden spaces. This collaborative effort between schools and parents creates a sense of commu-

nity and shared responsibility for the well-being of the students. Moreover, in South Africa, according to Tsharane and Bussin (2022), when parents take part in urban gardening projects, they get an opportunity to exchange knowledge and skills. Parents can share their gardening experiences, provide insights into sustainable gardening practices, and even contribute resources and materials to enhance gardening activities. This collaborative approach not only benefits the school garden but also extends the learning environment beyond the classroom, providing a comprehensive educational experience for the students. Urban gardening involving parents not only provides educational benefits but also fosters a sense of pride and accomplishment within the school community. It encourages a sense of ownership and responsibility and instills lifelong values of environmental stewardship in both students and parents. This partnership between schools and parents promotes sustainable living and community engagement, contributing to the physical transformation of school grounds and cultivating a nurturing environment. Witnessing the growth and development of plants nurtured by their own hands can be a fulfilling experience for both students and parents (Zygouris-Coe, et al., 2021). The literature on school education in Nepal suggests that teaching and learning science in basic-level community schools is mostly theoretical, which leads to poor academic achievements and a weak understanding of scientific concepts among students. Acharya et al. (2022) propose a shift from dogmatic lecturing to activity-based pedagogy, using school gardening as a contextual scaffold for learning science in community schools. The study reports that activity-based pedagogy through school gardening has yielded positive experiences for students, science teachers, and parents, leading to active and meaningful engagement. They conclude that school gardening activities have a significant positive effect on students' understanding

of scientific concepts, connecting school gardens to a contextual scaffold. In the Philippines, Calub et al. (2019), school gardening has become increasingly popular in developed and developing countries in the past decade. However, most school gardening projects have focused solely on educational goals, such as increasing students' knowledge of food systems and their willingness to eat vegetables. To address this issue, the School-Plus-Home Gardens Project (S+HGP) was created in collaboration with the Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA), the University of the Philippines Los Baños (UPLB), and the Department of Education (DepEd) of the Philippines. This involves using the harvests from school gardens to provide fresh vegetables for the school-based feeding program and extends the gardening-feeding linkage by establishing food gardens in the students' homes. Moreover, Calub et al. (2020) encourage more parental involvement in establishing home gardens and school gardening, which can help sustain nutritional gains. The Department of Education in the Philippines is implementing the School Garden Program and School-Based Feeding Program (SBFP), which have helped 62% of severely wasted and 70% of wasted children beneficiaries attain normal nutritional status in a 3-month feeding period. However, some schools reported repeat beneficiary pupils from the previous year's SBFP, with 36-38% being repeat beneficiaries in nine out of fourteen schools. In addition to the lack of food in their homes during the rest of the year, severe illnesses and parents' attitudes and values were cited as contributing factors. In addition, Oro et al. (2018) offer valuable insights on how to scale up a model for school nutrition by integrating school gardens at a local level with support from national agencies, the Department of Education, and donor organizations. The purpose of establishing school gardens is to provide learners with an opportunity to learn the

fundamentals of nutrition and to provide input for supplementary feeding. However, schools need help with garden spaces, which hinders the achievement of program goals. In Davao Region, particularly in Mati City, urban gardening in schools offers numerous benefits, but it also comes with its set of challenges that educators, students, and parents may encounter. Urban schools often face constraints in terms of space. Limited outdoor areas or lack of suitable land can hinder the establishment of substantial garden plots. Despite these challenges, many schools successfully overcome them through careful planning, community involvement, and ongoing support. Addressing these obstacles can lead to a more sustainable and enriching urban gardening experience for students and the entire school community.

*1.1. Theoretical/Conceptual Framework of the Study*—This study is based on Urie Bronfenbrenner's theory of ecological systems, which deals with how people interact with their environment. The analysis of how the support of the Governing Council influences the various environmental levels of the school setting, including the microsystem of individuals, the mesosystem of relationships, and the macrosystem of broad cultural and societal influences, could help to understand how the support of the Governing Council influences the various ecological levels of the school setting, including the microsystem of individuals, the mesosystem of relationships, and the macrosystem of broad cultural and societal influences. Utilizing Urie Bronfenbrenner's Ecological Systems Theory to analyze the "Analysis of School Urban Gardening with Emphasis on Support from School Governing Council" provides a robust framework for comprehending the complex dynamics inherent within the school environment. The theory posits that individuals exist within interconnected systems, with each system influencing the others. Within this study, the microsystem encapsulates the immediate context of the

school garden and its stakeholders, including students, teachers, and parents. The mesosystem delves into the interactions among these microsystem components, investigating how the support from the School Governing Council impacts relationships and collaborations about urban gardening (Keller et al., 2023). The exosystem extends the analysis to external influences, including community partnerships and local organizations that may be engaged in supporting the school's gardening initiatives. The macrosystem considers broader cultural and societal influences on school urban gardening, encompassing educational policies, environmental awareness trends, and broader sustainability movements. Finally, the chronosystem accounts for the temporal dimension, examining how historical events or changes over time impact the urban gardening program. By employing the Ecological Systems Theory, the study can holistically analyze the multifaceted relationships within and around the school's urban gardening initiative, offering insights into the interconnected layers that contribute to its success or challenges (Carroll, et.al., 2022). Moreover, Social capital theory explores how social relationships and networks contribute to positive outcomes. In the context of school urban gardening, it could help understand how support from the School Governing Council builds social connections and networks within the school community, fostering collaboration and shared responsibility. The application of Social Capital Theory to the study on the "Analysis of School Urban Gardening with Emphasis on Support from School Governing Council" provides a lens through which to examine the role of social relationships and networks in the success of the urban gardening program. Social Capital Theory emphasizes the value embedded in social connections and collaborative networks. In this context, the support from the School Governing Council is viewed as a mechanism for building and enhancing social capital within the school

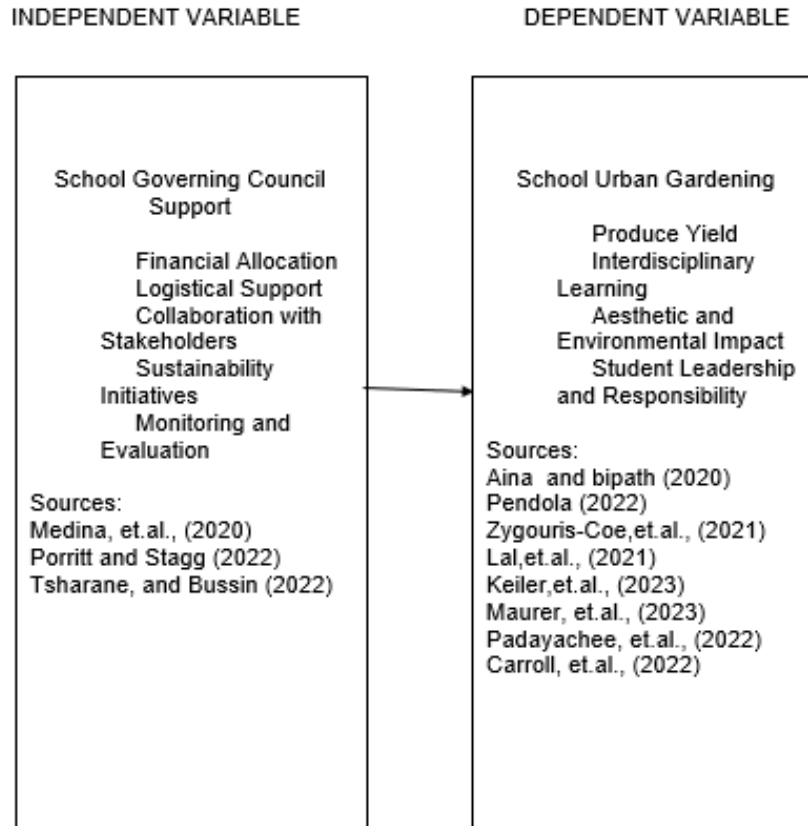


Fig. 1. Theoretical/Conceptual Framework

community. The theory allows researchers to explore how the Council's support fosters trust, shared norms, and reciprocity among stakeholders such as teachers, students, and parents. It enables an examination of how these social connections contribute to effective communication, cooperation, and the exchange of resources related to urban gardening (Keiler, et.al., 2023). Moreover, Social Capital Theory helps illuminate the potential long-term benefits of these social relationships, such as sustained community engagement, collective problem-solving, and a sense of shared responsibility for the success and sustainability of the school's urban gardening initiatives. By applying Social Capital Theory, the study gains insights into the social

dynamics that underpin the School Governing Council's support and its impact on fostering a collaborative and supportive environment for school-based urban gardening. Everett Rogers' Diffusion of Innovations theory could be relevant to understanding how support from the School Governing Council facilitates the adoption and diffusion of innovative practices, such as urban gardening, within the school community. According to the theory, innovations pass through a series of stages: innovation knowledge, persuasion, decision, implementation, and confirmation within a social system. It explores factors influencing the rate of adoption and dissemination of new ideas (Maurer et al., 2023).

## 2. Methodology

This chapter contains the processes and steps for conducting the study. These include selecting the study's design, the respondents and sampling method, the research instruments to be used in data gathering, the procedure, the ethical considerations, and lastly, the data analysis. These steps are considered essential to ensure appropriateness and correctness and to produce sound data process collection, analysis, and interpretation.

**2.1. Research Design**—The research utilized a descriptive-correlational research design, a non-experimental approach outlined by Creswell (2019). This design explores the relationships between two or more variables without intervening or manipulating them. Instead, it focuses on observing and analyzing the existing associations between these variables. Additionally, the descriptive-correlational research design is employed to elucidate and clarify the relationships between variables. Its main goal is to uncover connections between variables and provide insights that can be used to predict future events. Typically applied in exploratory studies or when researchers seek to establish relationships between variables, this design proves valuable for its capacity to illuminate associations among variables without resorting to experimental manipulation. In the study titled "School Urban Gardening As Influenced By School Governing Council Support In Mati City Division," a descriptive-correlational research design, a non-experimental approach, is applied to examine the relationships between various factors without intervening or manipulating them. This research design, as outlined by Creswell (2019), allows for an exploration of the extent to which different variables, such as financial support, logistical assistance, and collaboration with stakeholders, are related to the success and sustainability of school urban gardening initiatives. By not manipulating the variables, the study aims to measure and analyze the existing relationships between the level of support from the School Governing Council and key outcomes in the urban gardening program.

The descriptive-correlational design proves particularly relevant in this context as it serves the purpose of describing and explaining the connections between variables, shedding light on the nuanced dynamics between the level of support provided by the Council and the overall effectiveness of the urban gardening initiatives. This approach is valuable for identifying patterns, trends, and potential predictors that can inform future decisions and strategies for enhancing school urban gardening programs.

**2.2. Ethical Consideration**—The section pertaining to ethical considerations within this study will focus on the essential principles that safeguard the protection and welfare of the teacher-respondents involved. This encompasses strict adherence to confidentiality, acquisition of informed consent, and the voluntary nature of participation, thereby ensuring that the research is conducted with integrity and respect for the rights of all individuals respondents.

### Social Value

I aim to contribute to the improvement of practical education, equipping learners with essential life and vocational skills that prepare them for future opportunities. This study also seeks to support teachers by identifying gaps in instructional methods and recommending professional development initiatives that can enhance their teaching effectiveness. Beyond the classroom, I believe this research holds broader societal benefits by strengthening technical-vocational education at the elementary level, fostering self-sufficiency, and promoting skill-based learning that can lead to economic empowerment. Ensuring that EPP instruction is

relevant, engaging, and effective, the study supports the long-term goal of developing a better prepared workforce for entrepreneurial and livelihood opportunities. This benefits students and contributes to the growth of the local economy and community development. Through this study, I am committed to producing findings that can inform educational policies and curriculum improvements, ensuring that EPP instruction remains responsive to the evolving needs of learners and society.

**Informed Consent and Assent** As a researcher, I uphold the ethical principle of informed consent by ensuring that all respondents fully understand the study's purpose, procedures, potential benefits, and any associated risks before participating. I provided clear explanations through both online and face-to-face briefings, allowing teachers to make voluntary and informed decisions about their involvement. I also emphasized their right to withdraw at any stage without consequences, reinforcing respect for their autonomy and professional discretion. I recognize the importance of assent, particularly for participants who may need further clarification regarding data confidentiality and their role in the research process. I ensured that all respondents were given the opportunity to ask questions and receive comprehensive answers before giving their consent. This transparency fosters trust and encourages open participation, ensuring that teachers feel comfortable sharing their insights.

#### Vulnerability of Research Respondents

I acknowledge the potential vulnerabilities of the teacher-respondents, particularly in relation to their teaching experiences, familiarity with EPP instruction, and professional challenges. Some teachers may feel hesitant to share their honest perspectives due to concerns about how school administrators or colleagues might perceive their responses. To address this, I assured respondents of anonymity and confidentiality, ensuring that their identities remain

protected and that their insights will be used solely for research purposes. I also recognize that some teachers may have limited training or resources in teaching Edukasyong Pantahanan at Pangkabuhayan (EPP), which could make them feel inadequate or uncertain about their instructional effectiveness. To mitigate this, I approached all respondents with sensitivity and emphasized that the study seeks to identify areas for support and improvement, rather than evaluate individual performance. This reassurance encouraged teachers to participate without fear of judgment, allowing for a more open and honest exchange of experiences.

#### Privacy and Confidentiality

I am committed to protecting the privacy and confidentiality of all respondents throughout the study. I ensured that personal information and responses remain anonymous and securely stored, preventing any identifiable details from being linked to individual participants. Data collected through surveys and interviews are handled with strict confidentiality, accessible only to authorized research personnel and used exclusively for academic purposes. To further safeguard respondents' privacy, I designed data collection methods that minimize risks of exposure, whether through online platforms or face-to-face interactions. Any published findings will be presented in an aggregated format, ensuring that no single response can be traced back to a specific teacher. Prioritizing privacy and confidentiality, I uphold ethical research standards that respect all respondents' rights, dignity, and trust. Ensuring a secure and confidential research environment not only protects participants but also strengthens the reliability and credibility of the study's findings on EPP instruction and its effectiveness.. Risk, Benefits and Safety

I ensured that personal information and responses remain anonymous and securely stored, preventing any identifiable details from being linked to individual participants. Data collected

through surveys and interviews are handled with strict confidentiality, accessible only to authorized research personnel and used exclusively for academic purposes. To further safeguard respondents' privacy, I designed data collection methods that minimize risks of exposure, whether through online platforms or face-to-face interactions. Any published findings will be presented in an aggregated format, ensuring that no single response can be traced back to a specific teacher. This approach allows participants to express their views freely without concerns about potential consequences in their professional setting.

#### Justice

I recognize the potential risks of participation in this study, including concerns about data privacy, time commitment, and professional perceptions. To minimize these risks, I ensured that participation was voluntary, with respondents having the freedom to withdraw at any stage without any negative consequences. Additionally, I implemented strict confidentiality measures to protect their identities and responses, ensuring that no information would be used beyond the intended academic purpose. Despite these minimal risks, the study offers valuable benefits to both teachers and the broader educational community. Assessing the effectiveness of EPP instruction, this research can help identify best practices, areas for improvement, and professional development opportunities for educators. The findings can also contribute to curriculum enhancement and policy recommendations, ultimately benefiting both teachers and students in the long run. To ensure the safety and well-being of all respondents, I maintained ethical research standards throughout the data collection process. I provided clear guidelines on participation, ensured that no sensitive information was disclosed, and created a supportive environment where teachers could freely share their experiences.

#### Transparency

I uphold the ethical principle of transparency by ensuring that all aspects of the study are conducted openly and honestly. Before participation, I provided clear and detailed explanations regarding the study's objectives, data collection process, and how the findings will be used. Respondents were fully informed about their rights, including voluntary participation, confidentiality, and the option to withdraw without repercussions. This open communication fosters trust and credibility throughout the research process. I maintained transparency in data handling and reporting to ensure the integrity of the study. Respondents were encouraged to ask questions, and I provided clarifications to ensure they fully understood their role in the research. Findings will be presented accurately and objectively, with no manipulation or misrepresentation of data, ensuring that the study contributes genuine and reliable insights into EPP instruction effectiveness.

#### Qualification of the Researcher

I recognize the importance of possessing the necessary qualifications and expertise to conduct this study with academic rigor and ethical responsibility. My background in educational research, curriculum development, and teacher training equips me with the skills to critically assess the effectiveness of *Edukasyong Pantahanan at Pangkabuhayan* (EPP) instruction. I have experience in both qualitative and quantitative research methodologies, ensuring that data collection, analysis, and interpretation are conducted accurately and systematically. To uphold ethical standards, I have undergone training in research ethics and best practices, ensuring that this study adheres to established guidelines for human subject research. I am also knowledgeable in confidentiality protocols, informed consent procedures, and equitable participant selection, allowing me to protect the rights and welfare of respondents throughout the study. These qualifications enable me to conduct unbiased research while maintaining professional integrity.

in data handling and reporting

#### Conflict of Interest

I am committed to conducting this study with objectivity and integrity, ensuring that no personal, financial, or professional interests influence the research process. I have no affiliations, funding sources, or external pressures that could bias the selection of respondents, data collection, analysis, or interpretation of results. My primary goal is to generate accurate and unbiased findings that improve *Edukasyong Pantahanan at Pangkabuhayan (EPP)* instruction and professional development for teachers. To maintain transparency and credibility, I have proactively disclosed any potential conflicts of interest and ensured that all aspects of the study remain free from undue influence. The research process follows ethical guidelines, with decisions based solely on academic rigor, ethical research principles, and the best interests of educators and students. Avoiding conflicts of interest, I ensure that the study upholds its integrity and provides findings that are reliable and beneficial to the field of education.

#### Adequacy of Facilities

I ensured that the study was conducted with adequate facilities and resources to support a smooth and efficient research process. I secured reliable digital tools, research materials, and data storage systems to facilitate accurate data collection and analysis. Additionally, I utilized appropriate venues and online platforms for conducting surveys, interviews, and discussions, ensuring accessibility for all respondents. These measures helped create a structured and well-supported research environment that upholds credibility and efficiency. To ensure participant convenience and engagement, I considered the availability of Wi-Fi connections, communication channels, and necessary teaching materials that respondents use in their professional settings. By integrating both face-to-face and online communication, I accommodated the varying circumstances of participants, minimizing

disruptions while maintaining a high standard of data accuracy and reliability. The availability of secure data storage and ethical handling procedures further guaranteed the protection of respondent information.

#### Community Involvement

I recognize the importance of community involvement in ensuring that this study is relevant, impactful, and responsive to the needs of educators and learners. I actively engaged with teachers, school administrators, and local education stakeholders to gather insights and foster collaboration throughout the research process. Involving the community, I ensured that the study reflects real-life experiences, challenges, and opportunities in *Edukasyong Pantahanan at Pangkabuhayan (EPP)* instruction, making the findings more practical and beneficial. I tried to create an inclusive research environment where participants felt valued and heard. I encouraged open dialogue through consultations, discussions, and transparent communication, allowing teachers and stakeholders to share their perspectives on curriculum effectiveness, teaching strategies, and professional development needs. This active participation strengthened the study's credibility and applicability, ensuring its outcomes aligned with local educational goals and policies.

*2.3. Research Respondents*—The study's respondents were elementary school teachers teaching *Edukasyong Pantahanan at Pangkabuhayan (EPP)* in Mati Northeast District, Mati City. Using Slovin's formula with a 5% margin of error, a sample of 110 teachers was randomly selected from the total population to ensure a representative and statistically valid sample. This approach ensures that the study accurately reflects the perspectives and experiences of EPP teachers in the district, allowing for meaningful analysis of their professional development needs and instructional practices. The researcher proportionately distributed the 110 respondents across the respective schools

within the Mati Northeast District, ensuring fair representation from different educational settings. Random sampling was employed to minimize selection bias, ensuring that all eligible teachers had an equal opportunity to participate. This method enhances the reliability of the study's findings by capturing diverse perspectives from teachers working in different school environments. To facilitate participation, the selected respondents were informed through online platforms and face-to-face communication, considering the availability of Wi-Fi connections in their respective schools. Additionally, they were provided with a thorough orientation on the study's purpose, significance, and potential contributions to their professional growth. The study upholds ethical research standards by ensuring transparency and informed participation while promoting engagement and awareness among EPP teachers in Mati Northeast District. The selection criteria for this study were carefully established to ensure that the respondents could provide relevant and meaningful insights into the effectiveness of Edukasyong Pantahanan at Pangkabuhayan (EPP) instruction in Mati Northeast District, Mati City. First, the study included elementary school teachers actively teaching EPP subjects in the district. This criterion ensures that the respondents have direct classroom experience in delivering EPP instruction, allowing for a reliable assessment of their teaching strategies, challenges, and professional development needs related to the subject. Second, the study required that the participating teachers have to ensure that they have had adequate exposure to the subject's curriculum, instructional methods, and student engagement strategies. By selecting teachers with at least a year of experience, the study ensures that respondents can provide informed perspectives on the effectiveness of EPP instruction and insights into areas for improvement in both teaching practices and student learning outcomes. Lastly, the selection criteria considered the willingness

of teachers to participate in the study and share their experiences openly. Respondents were selected based on their readiness to engage in surveys, interviews, or focus group discussions to contribute valuable data. Since EPP instruction is influenced by various factors such as available resources, training opportunities, and institutional support, it was essential to include enthusiastic teachers about providing feedback and recommendations. Adhering to these selection criteria, the study aims to comprehensively understand the effectiveness of EPP instruction and identify areas for curriculum enhancement and teacher development.

*2.4. Research Instrument*—In this research study, the researcher employed an adapted instrument derived from a comprehensive review of literature and related studies. A dedicated effort was made to collect and scrutinize literature to extract concepts that informed the content and offered support for the instrument and its associated strands. This meticulous process articulated a set of question items, addressing potential threats to the study's validity. As the authors argued, items were adapted from the reviewed literature. The survey questionnaire had two parts, one of which determined the extent of school governing council support in terms of financial allocation, logistical support, collaboration with stakeholders, sustainability initiatives, and monitoring and evaluation. Likewise, the second part of the survey measured the extent of school urban gardening in terms of produce yield, interdisciplinary learning, aesthetic and environmental impact, and student leadership and responsibility. Further, the survey statements were subjected to a test-retest or validity and reliability testing using Cronbach Alpha at a .05 level of confidence and generated an alpha Cronbach of 0.678, which means that 67.8 percent level of confidence in the validity and reliability of the survey statement constructs (Pallant 2010). The questionnaire used a 5-point Likert scale to de-

termine the extent of school governing council support regarding financial allocation, logistical support, collaboration with stakeholders, sustainability initiatives, and monitoring and evaluation. Scale, descriptive rating, and interpretation are provided below:

### Scale Descriptive Rating and Interpretation for School Governing Council Support

| Scale       | Descriptive Rating   | Interpretation                                                |
|-------------|----------------------|---------------------------------------------------------------|
| 4.20 – 5.00 | Very Extensive       | The school governing council support is always manifested     |
| 3.40 – 4.19 | Extensive            | The school governing council support is oftentimes manifested |
| 2.60 – 3.39 | Moderately Extensive | The school governing council support is sometimes manifested  |
| 1.80 – 2.59 | Less Extensive       | The school governing council support is rarely manifested     |
| 1.00 – 1.79 | Not Extensive        | The school governing council support is not manifested        |

### Scale Descriptive Rating and Interpretation for School Urban Gardening

| Scale       | Descriptive Rating   | Interpretation                                      |
|-------------|----------------------|-----------------------------------------------------|
| 4.20 – 5.00 | Very Extensive       | The school urban gardening is always manifested     |
| 3.40 – 4.19 | Extensive            | The school urban gardening is oftentimes manifested |
| 2.60 – 3.39 | Moderately Extensive | The school urban gardening is sometimes manifested  |
| 1.80 – 2.59 | Less Extensive       | The school urban gardening is rarely manifested     |
| 1.00 – 1.79 | Not Extensive        | The school urban gardening is not manifested        |

2.5. *Data Gathering Procedure*—In the research project’s data-gathering procedure, several crucial steps are involved, with one of them being the ethical acquisition of permission to conduct the study. This step is essential for upholding fundamental principles such as respect, transparency, and responsible research conduct. The guidelines for this process adhere to the policies of The Rizal Memorial Colleges, Inc. As part of the formal request, researchers delineate their intentions regarding data collection, analysis, and dissemination, aligning these with the overarching research goals. Anticipated concerns or questions from recipients are proactively addressed in this communication, providing assurances on ethical safeguards, confidentiality measures, and the potential benefits of the study. The formal permission request

explicitly seeks authorization to proceed, emphasizing the pivotal role of their support in ensuring the research's success.

#### Permission to Conduct the Study

In April 2024, before data collection, the researcher initiated the process of obtaining necessary permissions from the relevant authorities, including the research adviser, the Dean of The Rizal Memorial Colleges, Inc., and the top management of DepEd Mati City Division through the appropriate channels. This involved submitting a comprehensive research proposal outlining study design, procedures, and potential risks and benefits. The researcher provided detailed information about the study's purpose, goals, and methods for data collection, analysis, and reporting. Furthermore, in May 2024, immediately after the conducted colloquium, the researcher took steps to ensure that all participants were fully informed about the study, their

rights, and the nature of their involvement. Informed consent was obtained from each participant before they participated in the study. The researcher maintained a commitment to data accuracy and completeness during the last week of June 2024. The distribution and retrieval of questionnaires were conducted using a standardized and systematic approach, ensuring reliability in the collection of responses from participants.

#### Collation and Statistical Treatment of Data

The researcher took time in data management. He ensured that accurate data gathered were sorted accordingly through Microsoft Excel and later transferred to JASP. All necessary information was collected. Consistency was also considered to make it relevant to the problem statement. Reliability and validity were reviewed to lessen the degree of error in the analysis.

2.6. *Data Analysis*—Mean Scores and Standard Deviation were used to address statement problems number one, the extent of school governing council support, and number two, the extent of school urban gardening in Mati North East District, Mati City Schools Division.

Pearson Product-Moment Correlation Coefficient or Pearson-r was used to determine its strength/direction significant relationship be-

tween school governing council support and school urban gardening. Simple Linear Regression was used to address statement problem number 4 on the indicators of school governing council support that significantly influence school urban gardening. All data processing and analysis were performed using Jeffrey's Statistics Amazing Program (JASP) version 0.12.20. When results were yielded, discussions and interpretations followed.

### 3. Results and Discussion

This chapter presents findings on the influence of School Governing Council (SGC) support for school-based urban gardening initiatives. It interprets the quantitative and qualitative data collected, offering insights into SGC involvement and its correlation with urban gardening aspects like planning, resource provision, technical support, and community engagement. The discussion integrates results with existing literature, drawing implications relevant to school governance and environmental education.

3.1. *School Governing Council Support*—The School Governing Council supports urban gardening as a unified effort to promote sus-

tainable, educational, and community-oriented initiatives. This support includes financial, logistical, and academic aid. The Council invests

in seeds, tools, and infrastructure, assists with site planning and maintenance, and integrates gardening into the curriculum to enhance interdisciplinary learning. Educators must address diverse academic and social-emotional needs especially in urban districts serving high-risk populations. Ongoing support for educators is crucial to meet these responsibilities. Summary on the Extent of School Governing Council Support

Table 1 summarizes the extent of support given by the School Governing Council. The data presented in Table 6 provides a comprehensive overview of the extent of School Governing Council (SGC) support in implementing school urban gardening initiatives, with all five indicators receiving a Very Extensive descriptive equivalent. The highest mean was recorded in Monitoring and Evaluation (mean = 4.57), indicating that SGCs prioritize data-driven strategies and accountability mechanisms to sustain the program's effectiveness. This is closely

followed by Sustainability Initiatives (mean = 4.56), reflecting a strong commitment to long-term environmental goals such as biodiversity, resource conservation, and ecological education. Logistical Support (mean = 4.55) also ranked highly, underscoring the Council's capacity to mobilize materials, equipment, and infrastructure necessary for gardening operations. Meanwhile, Collaboration with Stakeholders (mean = 4.51) affirms the Council's active role in building partnerships with parents, local businesses, and external agencies. Financial Allocation, though slightly lower (mean = 4.49), still falls within the Very Extensive category, highlighting that sufficient budgetary resources are being strategically allocated to support gardening activities. The overall mean of 4.53 reinforces that the School Governing Council demonstrates strong and holistic support across all key dimensions of urban gardening, thereby contributing significantly to the program's institutionalization and impact.

Table 1. Summary on the Extent of School Governing Council Support

| No.                 | School Governing Council Support | Mean        | Descriptive Equivalent |
|---------------------|----------------------------------|-------------|------------------------|
| 1                   | Financial Allocation             | 4.49        | Very Extensive         |
| 2                   | Logistical Support               | 4.55        | Very Extensive         |
| 3                   | Collaboration With Stakeholders  | 4.51        | Very Extensive         |
| 4                   | Sustainability Initiatives       | 4.56        | Very Extensive         |
| 5                   | Monitoring And Evaluation        | 4.57        | Very Extensive         |
| <b>Overall Mean</b> |                                  | <b>4.53</b> | <b>Very Extensive</b>  |

These findings are substantiated by recent studies that emphasize the multifaceted role of school governance in promoting sustainable educational initiatives. A 2023 study by Al-Khateeb and Jimenez emphasized that urban gardening success in public schools is maximized when governing councils integrate financial, logistical, and instructional consider-

ations through a participatory leadership approach. Similarly, Gonzalez et al. (2021) found that strong governance support, especially in evaluation, community partnerships, and ecological responsibility, was instrumental in ensuring program scalability and student engagement in environmental projects. These studies reinforce the present findings by affirming that

comprehensive, strategic, and collaborative support from school governing bodies is essential for the holistic development and sustainability of school urban gardening programs.

**3.2. School Urban Gardening—Summary** on the Extent of School Urban Gardening Table 2 summarizes the extent of school urban gardening. The data presented in Table 2 highlight the pervasive implementation of school urban gardening across four critical domains, with an overall mean of 4.56. Both Interdisciplinary Learning and Aesthetic and Environmental Impact received the highest mean scores (4.57), indicating that urban gardening is deeply embedded in schools' instructional and ecological framework. These areas reflect how gardening programs are not merely extracurricular activities but are effectively integrated into science, math, literacy, and environmental education while enhancing school ambiance and promoting biodiversity. Produce Yield and Student Leadership and Responsibility also registered pervasive support (means = 4.56), revealing that schools are achieving tangible outputs in

terms of harvests and using gardening as a platform for cultivating leadership, ownership, and community engagement among students. This holistic approach suggests that urban gardening in schools is a strategic educational practice that connects curriculum, environmental sustainability, health, and youth development. These findings are corroborated by recent research affirming the multifaceted value of school gardening. According to Lim (2022), urban gardening programs in Philippine schools significantly enhanced interdisciplinary learning outcomes and developed environmental awareness, particularly when aligned with science and values education. They found that gardening initiatives that emphasized student leadership and hands-on participation improved self-efficacy, civic responsibility, and academic engagement. These studies reinforce the current results, validating that school urban gardening contributes meaningfully to educational, environmental, and personal development goals when properly supported and integrated.

**Table 2. Summary on the Extent of School Urban Gardening**

| No                  | School Urban Gardening                | Mean        | Descriptive Equivalent |
|---------------------|---------------------------------------|-------------|------------------------|
| 1                   | Produce Yield                         | 4.56        | Very Extensive         |
| 2                   | Interdisciplinary Learning            | 4.57        | Very Extensive         |
| 3                   | Aesthetic and Environmental Impact    | 4.57        | Very Extensive         |
| 4                   | Student Leadership and Responsibility | 4.56        | Very Extensive         |
| <b>Overall Mean</b> |                                       | <b>4.56</b> | <b>Very Extensive</b>  |

**3.3. Significant Relationship Between School Governing Council Support and School Urban Gardening**—Table 3 presents the statistical analysis of the relationship between School Governing Council (SGC) support and the implementation of school urban gardening initiatives. Using Pearson's correlation, the table examines whether the extent of SGC involve-

ment, across areas such as financial allocation, logistical support, and stakeholder collaboration, significantly impacts the effectiveness of school-based urban gardening programs. The analysis aims to determine the strength and direction of the association between governance support and program outcomes. The results presented in Table 12 indicate that there is no statis-

tically significant relationship between School Governing Council (SGC) support and the implementation of school urban gardening, as reflected by an  $r$ -value of 0.156 and a  $p$ -value of 0.103, which exceeds the threshold of significance set at  $p \leq 0.05$ . This finding suggests that while the SGC may provide extensive support across financial, logistical, and stakeholder engagement domains, such support does not significantly correlate with the overall effectiveness of school urban gardening initiatives. A plausible interpretation is that other intervening variables—such as teacher initiative, student participation, and partnerships with external organizations, may exert a more direct influence on gardening outcomes. Consequently, it is necessary to critically examine how SGC support is translated into operational practices and how it interacts with on-the-ground implementation factors. These results align with existing literature that underscores the multifaceted nature of educational gardening programs. Lee and Garcia (2022) emphasized that institutional support must be paired with instructional leadership and teacher empowerment to ensure the success of such initiatives. Similarly, Tan and Alvarez (2021) reported that the commitment of classroom-level implementers often has a greater impact on program outcomes than governance structures alone. Additionally, Sharma and Torres (2023) argued that contextual factors—including school culture, stakeholder motivation, and local resource availability—are central to the sustainability and efficacy of school garden programs. These studies collectively suggest that while SGC support is essential, it must be aligned with broader institutional and pedagogical strategies to achieve significant results. This finding can be interpreted through the lens of Bronfenbrenner's Ecological Systems Theory, which posits that child development and learning are influenced by multiple, interacting systems, including microsystems (e.g., the classroom), mesosystems (e.g.,

the school), and exosystems (e.g., governance bodies such as SGCs). While the SGC operates at an exosystemic level, its influence is mediated by the actions of more immediate agents, such as teachers and students. If the microsystemic interactions lack cohesion or ownership, even strong exosystemic support may fail to translate into visible program outcomes. From the perspective of Social Capital Theory, the presence of networks, shared norms, and trust among school stakeholders is essential for collective action. The absence of a statistically significant relationship may imply that SGC support, though structurally present, has not yet matured into robust forms of relational and cognitive social capital necessary for effective implementation. As Lin (2021) argued, governance structures must cultivate vertical and horizontal trust to mobilize resources effectively across school stakeholders. Moreover, Rogers' Diffusion of Innovations Theory helps explain the disconnection between support and outcome. While the SGC may serve as an early adopter or advocate for innovation (i.e., urban gardening), the success of the innovation depends on its perceived attributes, relative advantage, compatibility, complexity, trialability, and observability, among the individuals implementing it. If teachers and students, as the primary users, do not perceive the program as feasible or valuable within their immediate context, widespread adoption and sustained implementation may be limited, regardless of governance support. Recent studies support these theoretical interpretations. Lee and Garcia (2022) found that instructional leadership and teacher motivation correlated more strongly with program success than administrative backing alone. Tan and Alvarez (2021) also emphasized that classroom-level engagement, rather than top-down support, was the key determinant of continuity in school garden programs. Similarly, Sharma and Torres (2023) argued that contextual alignment between governance support and internal school dynamics is critical for

effective program diffusion.

Table 3. Significant Relationship between the School Governing Council Support and School Urban Gardening

| Variables              | School Governing Council Support | r-value | p-value | Decision     |
|------------------------|----------------------------------|---------|---------|--------------|
| School Urban Gardening |                                  | 0.156   | 0.103   | Accept $H_0$ |

\*significant at  $p < 0.05$

**Interpretation Guide:** Perfect Positive Correlation ( $r = 1.0$ ); Strong ( $0.7 \leq r < 1.0$ ); Moderate ( $0.3 \leq r < 0.7$ ); Weak ( $0 < r < 0.3$ ); No Correlation ( $r = 0$ )

*3.4. Domains Of the School Governing Council Support significantly Influences School Urban Gardening* —According to Field (2018), the F-test evaluates whether the explained variance in a regression model is significantly greater than the unexplained variance. In this model, the regression sum of squares (SS) is 0.376, while the residual sum of squares is 2.353, suggesting that the model explains a modest proportion of the total variance (Total SS = 2.729). The mean square value for regression (0.075), when compared to the mean square residual (0.023), confirms the existence of a statistically meaningful difference between groups defined by the predictors. Although the coefficient of determination ( $R^2 = 0.138$ ) reported earlier implies a modest explanatory power, the statistically significant F-ratio confirms that the combined predictors contribute more to the variance in school urban gardening implementation than would be expected by chance alone. Hair et al. (2020) stress the importance of considering statistical significance and practical relevance. While the effect size may be limited, the significant ANOVA result underscores the potential value of integrated governance strategies. Furthermore, Cohen et al. (2013) suggest that statistically significant models, even with small effect sizes, can still offer actionable insights when dealing with complex social

variables where multiple external factors may influence the outcome. Thus, although individual predictors may not show strong correlations with the outcome variable, the model as a whole demonstrates statistical validity, supporting the hypothesis that SGC support, when holistically applied, has a meaningful influence on school urban gardening. This provides a valuable foundation for educational leaders and policymakers to strengthen and synergize the five governance dimensions for greater programmatic impact. The results of the regression coefficient analysis in Table 13 show a more granular understanding of how each domain of School Governing Council (SGC) support influences the implementation of school urban gardening programs. While the full model (M) was statistically significant, individual coefficients reveal that only two domains, Logistical Support (LS) and Monitoring and Evaluation (ME), significantly influence the dependent variable. Specifically, Monitoring and Evaluation (ME) has a positive standardized beta coefficient of 0.231 ( $t = 2.417$ ,  $p = 0.017$ ), indicating that it is a significant and positive predictor of successful school gardening implementation. This suggests that schools with strong systems for data tracking, stakeholder feedback, and outcome measurement are more likely to see effective results in their gardening programs. This is aligned with recent

findings by Santos and Lee (2022), who emphasized that school programs supported by structured monitoring systems are more sustainable and outcome-oriented. Conversely, Logistical Support (LS) displays a negative standardized coefficient of -0.213 ( $t = -2.141$ ,  $p = 0.035$ ), which, although statistically significant, indicates an inverse relationship with the dependent variable. This unexpected result may suggest that logistical interventions, such as infrastruc-

ture support or material procurement, may not translate into effective gardening outcomes if not properly aligned with internal school readiness or teacher-led implementation. This finding resonates with the study of Narvaez and Chong (2023), who argued that resource provision, when detached from participatory planning and instructional alignment, may result in inefficiencies or underutilization of school programs.

Table 4. Regression Coefficient Analysis of School Governing Council Support Domains That Significantly Influence School Urban Gardening

| Model          | Variable                             | Unstandardized | Standard Error | Standardized | t       | p      | Decision    |
|----------------|--------------------------------------|----------------|----------------|--------------|---------|--------|-------------|
| M <sub>0</sub> | (Intercept)                          | 4.565          | 0.015          |              | 302.612 | < .001 |             |
| M <sub>1</sub> | (Intercept)                          | 4.031          | 0.335          |              | 12.037  | < .001 |             |
|                | FA (Financial Allocation)            | 0.046          | 0.035          | 0.118        | 1.289   | 0.200  | Accept Null |
|                | LS (Logistical Support)              | -0.092         | 0.043          | -0.213       | -2.141  | 0.035  | Reject Null |
|                | CS (Collaboration with Stakeholders) | 0.040          | 0.045          | 0.097        | 0.879   | 0.382  | Accept Null |
|                | SI (Sustainability Initiatives)      | 0.027          | 0.047          | 0.062        | 0.570   | 0.570  | Accept Null |
|                | ME (Monitoring and Evaluation)       | 0.098          | 0.040          | 0.231        | 2.417   | 0.017  | Reject Null |

#### 4. Conclusions and Recommendations

This chapter presents the conclusions and recommendations based on the study's findings on the influence of School Governing Council (SGC) support on school urban gardening. Anchored on relevant theories, the section outlines key insights and proposes actionable strategies to enhance governance, collaboration, and sustainability in school-based gardening programs.

**4.1. Findings**—The presentation results, analysis, and discussions showed the study's findings. School Governing Council (SGC) support for school urban gardening was perceived as very extensive across all assessed domains. Urban gardening initiatives in schools were also rated as very extensive in all measured dimen-

sions. Findings revealed no statistically significant relationship between the overall support provided by the School Governing Council and the implementation of school urban gardening. Among the five domains of SGC support examined, two were found to have a statistically significant influence on school urban garden-

ing. Monitoring and evaluation emerged as a positive predictor, highlighting the importance of data-informed decision-making in sustaining effective gardening programs. Logistical support, however, showed a negative relationship, possibly indicating that logistical interventions may not yield the intended outcomes without proper alignment to school needs and capacities. Other domains such as financial allocation, stakeholder collaboration, and sustainability initiatives did not demonstrate a significant predictive effect.

**4.2. Conclusions**—The study concludes that School Governing Councils provide very extensive support in the implementation of school urban gardening programs. This is evident in their active involvement in financial planning, logistical facilitation, stakeholder engagement, sustainability initiatives, and monitoring and evaluation. Among these, monitoring and evaluation and sustainability initiatives emerged as the most emphasized domains, reflecting a governance structure that values long-term viability and accountability. School urban gardening programs are also implemented to a very extensive degree. These initiatives are not only productive in terms of yield but are also integrated into interdisciplinary learning, contribute to aesthetic and environmental improvements, and promote student leadership and responsibility. The gardening programs serve both educational and ecological purposes, reinforcing their relevance within the school system. Despite the extensive support provided, the study found no statistically significant relationship between overall SGC support and the success of school urban gardening. This suggests that other contextual or internal school factors—such as teacher engagement, student participation, and curriculum integration—may more directly influence the outcomes of gardening initiatives. Among the five domains assessed, monitoring and evaluation was found to significantly and positively influence the imple-

mentation of school urban gardening. This highlights the importance of data-driven decision-making and feedback mechanisms in sustaining program success. Conversely, logistical support demonstrated a significant but negative relationship, suggesting that resource provision, if not well-coordinated with actual needs, may hinder rather than help program implementation. Other domains such as financial allocation, stakeholder collaboration, and sustainability initiatives did not show significant direct influence. The Ecological Systems Theory and Social Capital Theory are fit to my study since both theories emphasize that strong, interconnected environments and relationships are essential for sustainable, effective educational programs like school urban gardening.

**4.3. Recommendations**—With the presented conclusions of the study, the following were recommendations to wit; Strengthening SGC support. It is recommended that SGCs maintain and improve their extensive support, especially in areas with high impact, such as monitoring and evaluation. Structured data collection, performance tracking, and community feedback mechanisms should be institutionalized to inform continuous improvement. For improving the school urban gardening implementation. Schools should continue to integrate urban gardening across disciplines and use it as a platform for environmental education, student leadership, and community engagement. Regular program reviews and reflection sessions should be conducted to maintain the relevance and effectiveness of the initiative. For aligning support with school-level needs. Logistical support must be carefully planned in consultation with school personnel to ensure that resources provided are practical, timely, and aligned with actual implementation capacities. This prevents wastage and promotes efficiency. For enhancing stakeholder engagement and financial strategies. Although these areas did not emerge as statistically significant predictors, their strategic

value remains. SGCs should expand partnerships with local communities and stakeholders, and optimize resource mobilization to support complementary components of the gardening program. For future research and policy development, further studies may explore mediating variables such as instructional leadership, teacher attitudes, and student agency to better understand how governance structures can influence school programs. Policies should also emphasize participatory planning and localized implementation frameworks to ensure support mechanisms translate into tangible outcomes.

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