

Implementation of the *Tuloy-Tuloy na Busog, Lusog, Talino* Program Towards a Framework on Sustainable Extension Program

Mona Liza Glodoviza Immaculata
University of Perpetual Help System Dalta
monettebong.051003@gmail.com

Date Submitted:

March 16, 2026

Date Accepted:

June 11, 2026

Date Published:

August 18, 2026

DOI:

10.5281/zenodo.21993865

ABSTRACT

This study evaluated the implementation of the “Tuloy-Tuloy na Busog, Lusog, Talino” (BLT) Program and developed a sustainable extension program framework for continuous nutritional support, health improvement, and academic development among learners. An explanatory sequential mixed-methods design was employed at Elvira Razon Aranilla Elementary School in Lucena City, Quezon Province. The quantitative phase involved 50 MSEUF teacher volunteers and 50 parents of beneficiaries, while program coordinators also provided implementation information; the qualitative phase included four parents and four program coordinators selected purposively for key informant interviews. Researcher-made questionnaires, validated by three experts and pilot-tested with 20 non-respondents, measured implementation status, holistic

learner development, and implementation challenges. Weighted mean, standard deviation, relationship analysis, and reflexive thematic analysis were used. Both teacher volunteers and parents perceived the program as highly implemented in terms of target beneficiaries, feeding commodities, mode of delivery, and feeding days. The program was viewed as strongly supporting learners’ physical fitness, emotional regulation, social interaction, and intellectual capability; teacher volunteers, however, rated behavioral regulation only at a moderate extent. The relationship tables showed significant associations between the four implementation dimensions and physical, emotional, social, and intellectual development, while behavioral regulation was significantly associated only with mode of delivery. Challenges involving beneficiary identification, absenteeism, food preferences, logistics, resources, and scheduling were generally manageable. Qualitative findings emphasized positive program experiences, coordinated implementation, stakeholder support, improved learner health and participation, and the need for sustained collaboration. These findings informed a DepEd-aligned sustainable extension framework with a specific behavioral-regulation focus.

Keywords: *school-based feeding program, sustainable extension program, holistic development, nutrition support, program implementation, mixed methods*

INTRODUCTION

School feeding programs are widely used to address child hunger and undernutrition while supporting school participation and learning. Their development reflects the recognition that children who regularly receive nutritious food are more prepared to attend school, engage in classroom activities, and benefit from education (Cupertino et al., 2022; Kristjansson et al., 2022). Contemporary feeding initiatives therefore extend beyond food provision and increasingly consider health, attendance, educational participation, and broader child development as interconnected outcomes.

In the Philippines, school-based feeding has become an important strategy for addressing undernutrition among public-school learners. Program effectiveness, however, depends on more than the availability of meals. Beneficiary identification, food quality, delivery arrangements, feeding duration, monitoring, coordination, and stakeholder participation influence whether feeding support reaches learners consistently and safely (Azevedo et al., 2023; Oflaria, 2023; Siy Van et al., 2022). Implementation is especially important in sustained community-extension initiatives, where institutional and school partners must coordinate resources and responsibilities over multiple years.

The “Tuloy-Tuloy na Busog, Lusog, Talino” Program represents such a continuing partnership. At Elvira Razon Aranilla Elementary School, the program had operated for approximately ten years and was serving 50 beneficiaries at the time of the study. This duration created an opportunity to examine not only whether operational components were being implemented, but also whether stakeholders perceived corresponding changes in learners’ physical, emotional, social, intellectual, and behavioral development.

Although school-feeding research has documented benefits for nutrition, attendance, and learning, sustainability remains dependent on locally responsive implementation and the active participation of schools, families, volunteers, and community partners (Flores, 2023; Mostert, 2021; Rosales et al., 2022). The dissertation identified a need to evaluate the BLT Program through both measurable implementation indicators and stakeholder experiences, particularly because nutrition alone may not fully address behavioral and psychosocial needs. This gap supports the use of a mixed-methods evaluation that can connect quantitative patterns with the realities of implementation.

Accordingly, the study assessed the status of the BLT Program in terms of target beneficiaries, feeding commodity, mode of delivery, and feeding days; determined its extent as a support mechanism for holistic development; examined relationships between implementation and learner-development indicators; identified implementation challenges; explored stakeholder experiences; and developed a sustainable extension program framework. The study was intended to provide evidence for strengthening program continuity, stakeholder coordination, learner support, and alignment with school-based feeding objectives.

Literature Review

School-Based Feeding Program Implementation and Operational Delivery

School feeding programs combine nutritional objectives with education and social-protection goals. Evidence from different settings indicates that access to regular school meals can improve attendance, retention, and learning opportunities, particularly for children facing socioeconomic disadvantage (Afridi et al., 2021; Kaur, 2021; Kristjansson et al., 2022). In the Philippine context, the school-Based Feeding Program similarly links nutrition support with school participation and learner readiness, making implementation quality a central concern rather than a purely logistical issue.

Operational delivery affects the consistency and safety of feeding services. Food quality, procurement, storage, delivery timing, documentation, and adherence to prescribed meal standards can determine whether beneficiaries receive adequate support without interruption (Azevedo et al., 2023). Community-led and central-kitchen experiences in the Philippines also show that multisectoral coordination can improve scale and consistency while creating new demands for quality assurance, communication, and supply-chain management (Siy Van et al., 2022).

The duration and continuity of feeding are likewise relevant. Programs that provide regular exposure to meals are better positioned to achieve nutritional and education-related outcomes, whereas interruptions may reduce program effects. Program monitoring, updated beneficiary records, and attention to implementation gaps are therefore necessary for maintaining effectiveness over time (Castillo & Reyes, 2021; Oflaria, 2023). These considerations directly support the study’s four implementation indicators: beneficiary coverage, feeding commodity, delivery mode, and number of feeding days.

Feeding Programs and Holistic Learner Development

The potential effects of feeding programs extend beyond anthropometric outcomes. Nutritional health is associated with learners' energy, concentration, attendance, and capacity to participate meaningfully in school activities (Hamdan & Aljarrah, 2024; Pulimeno et al., 2020). Experimental and large-scale evaluations have also linked school feeding with educational outcomes, although the magnitude of effects varies by context, program design, and implementation conditions (Aurino et al., 2020; Mostert, 2021).

Holistic development includes physical, emotional, social, intellectual, and behavioral dimensions. The source dissertation used McIlroy's (2024) holistic-development perspective to frame these domains. Regular nutrition can support physical functioning and readiness to learn, but improvements in emotional regulation, peer relations, problem-solving, and behavior may also depend on family, school, and psychosocial environments. This distinction is important because feeding may create enabling conditions for development without acting as the sole mechanism for every developmental outcome.

The literature also suggests that feeding programs can increase school motivation and participation when they reduce hunger and create supportive routines. However, positive outcomes may be reinforced when programs are embedded in broader school-health, counseling, and family-engagement structures (Kristjansson et al., 2022; Rosales et al., 2022). The present study therefore examined multiple developmental dimensions rather than treating nutrition or academic performance as the only indicators of program effectiveness.

Stakeholder Participation, Challenges, and Program Sustainability

School feeding is implemented through networks of school personnel, parents, volunteers, suppliers, local partners, and other institutions. Parental involvement can support attendance, communication, monitoring, and the responsiveness of feeding activities to children's needs (Flores, 2023). Collaborative strategies can also strengthen nutrition security and educational support by distributing responsibilities across schools, families, and community organizations (Rosales et al., 2022).

Implementation challenges commonly involve procurement, logistics, limited resources, beneficiary attendance, food preferences, and coordination. Such barriers do not necessarily indicate program failure, but they can interrupt services or weaken continuity when planning and monitoring systems are insufficient (Mafugu, 2021). Sustainability consequently requires mechanisms for resource mobilization, stakeholder ownership, contingency planning, training, and continuous evaluation rather than dependence on short-term implementation effort alone (Dang et al., 2022).

For extension programs, sustainability also depends on institutionalizing successful practices and building partnerships that can withstand changes in resources or personnel. The source study therefore considered stakeholder experiences alongside quantitative implementation indicators. This is consistent with the view that long-term feeding initiatives benefit from multisectoral participation, locally appropriate delivery arrangements, and continuing monitoring of both intended outcomes and operational constraints (Global Child Nutrition Foundation, 2022; Siy Van et al., 2022).

Theoretical and Conceptual Foundations

The study was anchored in several complementary perspectives. Maslow's Hierarchy of Needs positions food as a fundamental physiological requirement that supports learners' ability to pursue higher-order psychological, social, and developmental needs (McLeod, 2025). From this perspective, providing nutritious meals may reduce an immediate barrier to school participation and learning. Bronfenbrenner's Ecological Systems Theory adds that child development is shaped by interacting environments, including family, school, community, and wider social systems; a school feeding program therefore functions within a network of influences rather than in isolation (Guy-Evans, 2025).

The dissertation also applied Results-Based Management to connect program inputs, activities, outputs, and outcomes, and used Sustainability Theory to emphasize continuity, stakeholder engagement, community ownership, and the management of resource and logistical barriers (Berkshire, 2024). Together, these perspectives

support an evaluation that asks whether implementation processes lead to meaningful learner outcomes and whether the program can continue producing benefits over time.

The conceptual framework operationalized these ideas through an explanatory sequential mixed-methods process. Quantitative data assessed implementation status, holistic learner development, relationships among the variables, and implementation challenges. Qualitative data then explored stakeholder experiences to explain and deepen the quantitative results. Both strands were integrated to inform the Sustainable Extension Program Framework. The research paradigm retained these source variables and relationships and is presented immediately before the Methods section.

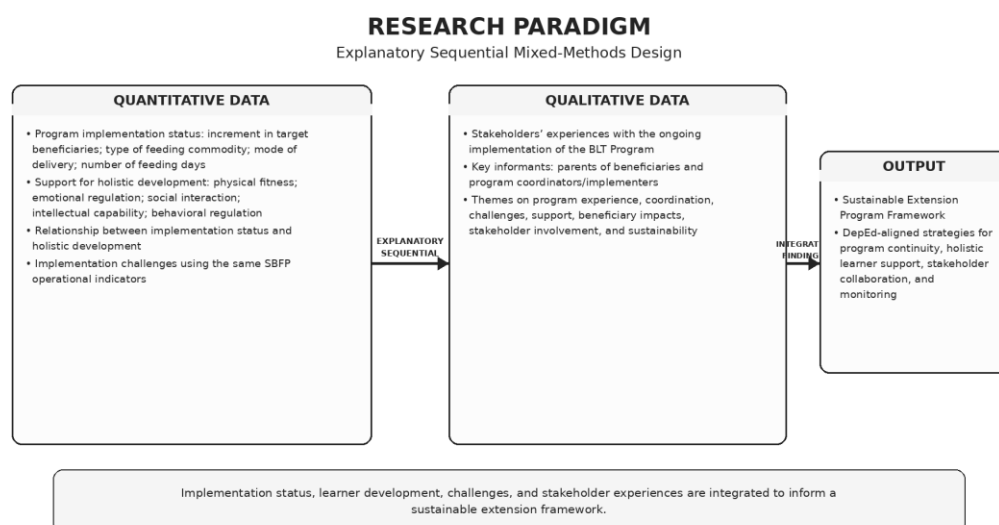


Figure 1. *Research Paradigm*

METHODS

Research Design

The study employed an explanatory sequential mixed-methods design. Quantitative data were collected and analyzed first to describe program implementation, holistic-development support, implementation challenges, and relationships among the study variables. The qualitative phase followed to explain the quantitative findings through participants' experiences and perspectives. Within the quantitative strand, a descriptive-correlational design was used; within the qualitative strand, Key Informant Interviews were analyzed thematically. Integration of the two strands served as the empirical basis for the proposed sustainable extension framework.

Research Locale

The study was conducted at Elvira Razon Aranilla Elementary School in Lucena City, Quezon Province. The school was selected because it had been a beneficiary of the "Tuloy-Tuloy na Busog, Lusog, Talino" Program for approximately ten years and was serving 50 beneficiaries during the study. The implementation involved collaboration with the Community Extension Service of Manuel S. Enverga University Foundation (MSEUF).

Participants and Sampling Technique

Purposive sampling was used to select respondents who had direct involvement in the program during Academic Year 2025–2026, participated in planning, monitoring, feeding, supervision, or related activities, and voluntarily agreed to participate. The quantitative respondent groups included 50 MSEUF teacher volunteers and

50 parents of beneficiaries. The study also identified three MSEUF Program Coordinators and one ERAES Program Coordinator as key implementation stakeholders. For the qualitative phase, four parents from the quantitative group and four program coordinators were purposively selected for Key Informant Interviews because they could provide detailed accounts of program implementation and outcomes.

Research Instrument

The study used researcher-made instruments developed for MSEUF teacher volunteers, parents of beneficiaries, and program coordinators. The teacher-volunteer questionnaire contained sections on program implementation, holistic learner development, and implementation challenges. Implementation was assessed through increment in target beneficiaries, type of feeding commodity, mode of delivery, and number of feeding days. Holistic development covered physical fitness, emotional regulation, social interaction, intellectual capability, and behavioral regulation. The parent questionnaire captured corresponding observations from the family perspective, while the qualitative interview guide explored stakeholders' experiences with ongoing implementation.

The questionnaires were validated by three experts in educational management and pilot-tested with 20 non-respondents from Dalahican Elementary School. Reported Cronbach's alpha coefficients ranged from adequate to excellent, including .925 for target-beneficiary implementation, .905 for feeding days, .909 for physical fitness, .803 for mode of delivery, .864 for intellectual capability, .809 for behavioral regulation, .794 for feeding commodity, .769 for emotional regulation, and .792 for challenges related to mode of delivery. The source manuscript interpreted these values as evidence of acceptable internal consistency.

Data Gathering Procedure

After instrument validation, the researcher obtained permission from the City Schools Division Superintendent and the school heads of MSEUF and Elvira Razon Aranilla Elementary School. Participants were oriented on the purpose of the study, confidentiality, voluntary participation, and their right to withdraw. Questionnaires were personally distributed and collected to support completeness of responses. For the qualitative phase, Key Informant Interviews were scheduled with selected participants, audio-recorded with consent, transcribed, and prepared for thematic analysis.

Data Analysis

Weighted mean and standard deviation were used to summarize the status of program implementation, the extent of support for holistic learner development, and perceived implementation challenges. Relationship coefficients were used to examine associations between implementation dimensions and learner-development indicators. The Results chapter consistently labels the reported coefficients as Spearman rho; the Statistical Treatment section, however, names the Pearson product-moment correlation. To preserve the dissertation without recalculation, the present article reproduces the coefficients and significance levels as reported in the Results chapter and identifies them as Spearman rho. Qualitative interview data were analyzed through the six-phase reflexive thematic-analysis procedure described in the source manuscript, and the quantitative and qualitative findings were integrated during interpretation.

Ethical Consideration

The study followed documented procedures for institutional permission, informed consent, voluntary participation, confidentiality, and anonymity. Codes were used instead of participant names, and the collected information was used only for academic purposes and stored securely. The dissertation further stated adherence to the Data Privacy Act of 2012 (Republic Act No. 10173), the Department of Education Research Management Guidelines under DepEd Order No. 16, s. 2017, and the principles of beneficence, respect for persons, and justice in the National Ethical Guidelines for Health and Health-Related Research.

RESULTS AND DISCUSSION

Status of BLT Program Implementation

Both respondent groups assessed the “Tuloy-Tuloy na Busog, Lusog, Talino” Program as Highly Implemented across the four operational indicators. Teacher-volunteer overall means ranged from 3.93 to 3.95, while parent means ranged from 3.69 to 3.76. Among teacher volunteers, the highest overall mean was recorded for the number of feeding days ($M = 3.95$, $SD = .167$). Among parents, the highest overall mean was for feeding commodity ($M = 3.76$, $SD = .340$). These results indicate consistent implementation in beneficiary management, food provision, delivery, and feeding schedules, while the dissertation also identified continuing opportunities for wider beneficiary coverage, improved communication, greater meal variety, stronger delivery coordination, and completion of required feeding days.

Table 1. *Summary of Program Implementation Status*

Implementation Dimension	Teacher M	Teacher SD	Interpretation	Parent M	Parent SD	Interpretation
Target beneficiaries	3.93	.173	Highly Implemented	3.71	.460	Highly Implemented
Feeding commodity	3.94	.184	Highly Implemented	3.76	.340	Highly Implemented
Mode of delivery	3.94	.209	Highly Implemented	3.69	.506	Highly Implemented
Number of feeding days	3.95	.167	Highly Implemented	3.74	.376	Highly Implemented

The high implementation ratings support the literature emphasizing the importance of orderly delivery systems, food quality, and consistent feeding exposure (Azevedo et al., 2023; Siy Van et al., 2022). The relatively lower parent ratings, although still within the Highly Implemented range, suggest that families may experience program operations from a different vantage point than implementers. This reinforces the value of including both groups in implementation assessment rather than relying on administrative reports alone.

BLT Program as a Support Mechanism for Holistic Development

Teacher volunteers rated the program at a Very Great Extent in physical fitness ($M = 3.79$), emotional regulation ($M = 3.73$), social interaction ($M = 3.78$), and intellectual capability ($M = 3.75$). Their assessment of behavioral regulation was substantially lower ($M = 2.49$, $SD = 1.196$), interpreted as Moderate Extent. Parents, by contrast, rated all five domains at a Very Great Extent, with means ranging from 3.62 to 3.72. The combined pattern indicates broad perceived benefits but also identifies behavioral regulation as a specific area where implementer observations were less favorable.

Table 2. *Perceived Extent of Support for Holistic Learner Development*

Development Domain	Teacher M	Teacher SD	Interpretation	Parent M	Parent SD	Interpretation
Physical fitness	3.79	.375	Very Great Extent	3.63	.523	Very Great Extent
Emotional regulation	3.73	.407	Very Great Extent	3.64	.424	Very Great Extent
Social interaction	3.78	.381	Very Great Extent	3.72	.367	Very Great Extent
Intellectual capability	3.75	.398	Very Great Extent	3.62	.460	Very Great Extent
Behavioral regulation	2.49	1.196	Moderate Extent	3.71	.401	Very Great Extent

The results are consistent with research linking school meals to physical and psychological health, attendance, and learning readiness (Hamdan & Aljarrah, 2024; Kristjansson et al., 2022; Mostert, 2021). The difference in behavioral-regulation ratings is especially informative. It suggests that nutritional support may create conditions conducive to positive behavior but may not be sufficient by itself to produce consistent self-control, discipline, or social-emotional adjustment. This interpretation became central to the study's proposed framework.

Relationships Between Implementation and Holistic Development

The relationship analysis showed that all four implementation dimensions were significantly associated with physical fitness, emotional regulation, social interaction, and intellectual capability. Coefficients for these domains ranged from .367 to .649, with reported p-values of < .001. Behavioral regulation followed a different pattern: it was not significantly associated with target-beneficiary increment ($r = .090$, $p = .372$), feeding commodity ($r = .070$, $p = .490$), or number of feeding days ($r = .152$, $p = .131$), but it was significantly associated with mode of delivery ($r = .225$, $p = .025$).

Table 3. Reported Relationships Between Implementation Dimensions and Holistic Development

Implementation Dimension	Physical	Emotional	Social	Intellectual / Behavioral
Target beneficiaries	$r=.601$, $p<.001$	$r=.408$, $p<.001$	$r=.446$, $p<.001$	Intellectual $r=.405$, $p<.001$; Behavioral $r=.090$, $p=.372$
Feeding commodity	$r=.528$, $p<.001$	$r=.498$, $p<.001$	$r=.526$, $p<.001$	Intellectual $r=.367$, $p<.001$; Behavioral $r=.070$, $p=.490$
Mode of delivery	$r=.574$, $p<.001$	$r=.548$, $p<.001$	$r=.649$, $p<.001$	Intellectual $r=.568$, $p<.001$; Behavioral $r=.225$, $p=.025$
Feeding days	$r=.553$, $p<.001$	$r=.490$, $p<.001$	$r=.597$, $p<.001$	Intellectual $r=.568$, $p<.001$; Behavioral $r=.152$, $p=.131$

The findings support the conclusion that stronger implementation is associated with several dimensions of learner development, but they also caution against interpreting feeding as a complete behavioral intervention. This pattern aligns with ecological and holistic perspectives: nutrition can strengthen health and readiness to learn, while behavior is also shaped by family, classroom, peer, guidance, and community systems (Guy-Evans, 2025; McIlroy, 2024). The significant relationship between delivery mode and behavioral regulation may reflect the importance of structure, routine, coordination, and predictable interaction during feeding activities.

Challenges Affecting Program Implementation

Teacher volunteers and parents generally described implementation challenges as Slightly Challenging. Difficulties included timely identification of eligible beneficiaries, absenteeism, food preferences and menu variety, procurement and freshness of commodities, logistics, coordination between delivery personnel and school staff, resource limitations, scheduling, program continuity, and compliance with implementation timelines. These concerns were generally viewed as manageable through communication, planning, monitoring, coordination, and teamwork.

Table 4. Summary of Reported Implementation Challenges

Challenge Dimension	Teacher Volunteers	Parents	Overall Interpretation
Target beneficiaries	M=2.43, SD=1.250	M=2.27, SD=1.114	Slightly Challenging
Feeding commodity	M=2.40, SD=1.254	M=2.36, SD=1.197	Slightly Challenging
Mode of delivery	Source overall mean inconsistent*	M=2.17, SD=1.136	Slightly Challenging

Challenge Dimension	Teacher Volunteers	Parents	Overall Interpretation
Number of feeding days	M=2.09, SD=.881	M=2.23, SD=1.182	Slightly Challenging

The identified issues mirror challenges reported in school-nutrition literature, particularly logistics, procurement, supply continuity, and operational capacity (Mafugu, 2021). The generally low challenge ratings nevertheless suggest that established routines and stakeholder cooperation helped the BLT Program absorb ordinary implementation difficulties. Sustainability therefore depends on maintaining these coordination mechanisms while strengthening contingency planning and resource partnerships.

Stakeholder Experiences and Integrated Mixed-Methods Findings

The qualitative analysis produced seven recurring themes: positive experience in program implementation; program coordination and implementation responsibilities; challenges encountered during implementation; support, training, and resources received; positive impact on beneficiaries; stakeholder and community involvement; and recommendations for improvement and sustainability. Participants described the program as meaningful and organized, while coordinators emphasized scheduling, food preparation, distribution, documentation, sanitation, health activities, and continuous monitoring as core responsibilities.

Table 5. Qualitative Themes on Ongoing BLT Program Implementation

Theme	Key Ideas Reported by Participants
Positive experience in program implementation	Meaningful experience, satisfaction, organized implementation, program helpfulness
Program coordination and responsibilities	Scheduling, food preparation and distribution, monitoring, documentation, sanitation and health activities
Challenges encountered	Absenteeism, food preferences, time management, logistics, limited resources, parent availability
Support, training, and resources	Orientations, meetings, funding, technical assistance, school/DepEd support, parent coordination
Positive impact on beneficiaries	Improved appetite, weight, energy, attendance, classroom participation, and healthier food preferences
Stakeholder and community involvement	Cooperation, parent participation, volunteering, school-community partnerships
Improvement and sustainability	Regular monitoring, expanded coverage, implementer training, LGU/community partnerships, increased faculty involvement

The qualitative accounts converged with the quantitative results. Parents and coordinators described improved appetite, healthier weight, greater energy, stronger attendance, classroom participation, and increased willingness to eat nutritious foods. These experiences help explain how a highly implemented feeding program can translate into physical, social, and educational benefits. At the same time, participants described absenteeism, food preferences, logistics, and resource constraints, which correspond to the quantitative challenge indicators.

The integrated findings also clarified the weaker behavioral evidence. Stakeholders observed that some emotional, behavioral, and family-related concerns persisted despite nutritional support. This suggests that behavior and emotional regulation require complementary services such as guidance, counseling, social-emotional learning, mentoring, and parent engagement. The mixed-methods integration therefore supported a framework that retained feeding as the program foundation while adding structured behavioral and psychosocial components.

Immaculata's Sustainable Extension Program Framework

The proposed framework translated the study findings into a DepEd-aligned extension model with a behavioral-regulation focus. It retained nutrition support while adding structured routines, values formation, emotional and social regulation activities, collaborative governance, and monitoring and evaluation. The

framework directly addresses the principal gap identified in the results: behavioral regulation was not consistently associated with most feeding implementation dimensions and was rated only at a moderate extent by teacher volunteers.

Figure 2. *Immaculata's Sustainable Extension Program Framework*



Table 6. *Core Components of the Sustainable Extension Program Framework*

Component	Program / Activity	Primary Purpose	Monitoring / Governance
Structured Feeding Routines	Orderly Mealtime Initiative	Patience, order, self-control, consistent participation	Attendance logs, compliance reports, observation checklists
Behavioral Discipline Integration	Gratitude Circle	Respect and gratitude through guided post-meal reflection	Behavioral rubrics, reflection journals, peer evaluation
Emotional & Social Regulation	Empathy Hour	Empathy, impulse control, and emotional stability	Activity evaluation, regulation scales, feedback surveys
Collaborative Governance	Behavioral Governance Forum	Shared commitment among school, parents, and LGU partners	Quarterly meetings, policy reports, stakeholder feedback
Monitoring & Evaluation	Behavioral Impact Review	Track discipline and emotional growth and guide program improvement	Bi-annual reports, focus groups, data-analysis sheets

The framework operationalizes sustainability by distributing responsibility among program coordinators, teachers, parent volunteers, guidance personnel, school leaders, student leaders, and local partners. It also introduces regular behavioral and psychosocial monitoring rather than assuming that nutritional support alone will improve every developmental domain. This approach is consistent with sustainability and ecological perspectives that emphasize institutionalization, shared ownership, and the interaction of multiple support systems (Berkshire, 2024; Guy-Evans, 2025).

CONCLUSION

The “Tuloy-Tuloy na Busog, Lusog, Talino” Program was perceived by teacher volunteers and parents as highly implemented in beneficiary coverage, feeding commodities, delivery mode, and feeding days. The program was also viewed as an important support for learners’ physical fitness, emotional regulation, social interaction, and intellectual capability. Behavioral regulation showed a more complex pattern: parents rated the program highly in this area, whereas teacher volunteers rated its contribution at a moderate extent. Relationship results likewise showed that behavioral regulation was significantly associated only with mode of delivery, unlike the other developmental domains that were significantly related to all four implementation dimensions.

The mixed-methods findings indicate that the program’s benefits were reinforced by stakeholder coordination, regular feeding routines, monitoring, and community participation. Operational challenges involving absenteeism, food preferences, logistics, resources, and scheduling were present but generally manageable. The study therefore concludes that a sustainable feeding extension program should preserve strong nutritional and operational practices while expanding support for behavioral and psychosocial development. Immaculata’s Sustainable Extension Program Framework contributes a practical model for integrating structured routines, behavioral discipline, empathy, collaborative governance, and continuous evaluation into the continuing BLT Program.

Recommendation

MSEUF, Elvira Razon Aranilla Elementary School, and program partners should sustain the implementation practices that received high ratings while strengthening beneficiary identification, communication with families, meal variety, delivery coordination, catch-up feeding, and contingency arrangements for interruptions. These measures should be incorporated into routine monitoring rather than addressed only when problems arise.

The behavioral-regulation components of the proposed Sustainable Extension Program Framework should be institutionalized alongside feeding activities. Structured mealtime routines, Gratitude Circle activities, Empathy Hour sessions, guidance support, behavioral mentoring, and systematic follow-up may address developmental needs that cannot be resolved through nutrition alone.

School leaders, parent volunteers, MSEUF implementers, DepEd personnel, LGU representatives, and community or private-sector partners should maintain a formal coordination mechanism for training, technical assistance, resource mobilization, monitoring, and shared accountability. Regular evaluation should include both implementation indicators and learner outcomes so that the program can be adjusted based on evidence.

Future researchers should examine the framework in other schools and feeding-program settings and use longitudinal or comparative designs to determine whether the proposed behavioral and psychosocial components produce sustained improvements. Further studies may also assess objective nutritional, attendance, academic, behavioral, and cost-effectiveness outcomes to complement stakeholder perceptions.

References

- Afridi, F., Barooah, B., & Somanathan, R. (2021). School meals and student learning achievement: Evidence from India's midday meal program. *Journal of Development Economics*, 152, 102681. <https://doi.org/10.1016/j.jdeveco.2021.102681>
- Aurino, E., Gelli, A., Adamba, C., Osei-Akoto, I., & Alderman, H. (2020). Food for thought? Experimental evidence on the learning impacts of a large-scale school feeding program. *Journal of Human Resources*, 58(1), 1019–1051. <https://doi.org/10.3368/jhr.58.3.1019-1051SR1>
- Azevedo, J. P., Martinic, S., & Saavedra, J. (2023). Improving food quality and safety in low- and middle-income school feeding programs. *Global Food Security*, 36, 100667. <https://doi.org/10.1016/j.gfs.2023.100667>
- Berkshire. (2024). *Sustainability theory*. Berkshire Publishing Blog. <https://www.berkshirepublishing.com/blog/sustainability-theory/>

- Castillo, M. R., & Reyes, R. C. (2021). Monitoring and evaluation gaps in school-based feeding programs: A Philippine case study. *Asian Journal of Education and Social Studies*, 15(3), 20–29. <https://doi.org/10.9734/ajess/2021/v15i330384>
- Cupertino, A., Ginani, V., Cupertino, A. P., & Botelho, R. B. A. (2022). School feeding programs: What happens globally? *International Journal of Environmental Research and Public Health*, 19(4), 2265. <https://doi.org/10.3390/ijerph19042265>
- Dang, H. A. H., Glewwe, P., & Nguyen, T. (2022). The sustainability of home-grown school feeding programs: Evidence from rural Vietnam. *World Development*, 150, 105710. <https://doi.org/10.1016/j.worlddev.2021.105710>
- Flores, K. C. (2023). Parental involvement in school-based feeding program. *International Journal of Research Studies in Education*, 12(7), 123–141. <https://doi.org/10.5861/ijrse.2023.54>
- Global Child Nutrition Foundation. (2022). *State of school feeding worldwide 2022*. <https://gcnf.org>
- Guy-Evans, O. (2025). *Bronfenbrenner's ecological systems theory*. Simply Psychology. <https://www.simplypsychology.org/bronfenbrenner.html>
- Hamdan, F. R., & Aljarrah, F. (2024). Nutritional health and its impact on students' academic achievement. *Journal of Educational and Social Research*, 14(6), 449. <https://doi.org/10.36941/jesr-2024-0185>
- Kaur, R. (2021). Estimating the impact of school feeding programs: Evidence from mid day meal scheme of India. *Economics of Education Review*, 84, 102171. <https://doi.org/10.1016/j.econedurev.2021.102171>
- Kristjansson, E., Osman, M., Dignam, M., Labelle, P. R., Magwood, O., Huerta Galicia, A., Cooke-Hughes, P., Wells, G. A., Krasevec, J., Enns, A., Nepton, A., Janzen, L., Shea, B., Liberato, S. C., Garner, J. A., & Welch, V. (2022). School feeding programs for improving the physical and psychological health of school children experiencing socioeconomic disadvantage. *Cochrane Database of Systematic Reviews*, 2022(8), Article CD014794. <https://doi.org/10.1002/14651858.CD014794>
- Mafugu, T. (2021). Challenges encountered in a South African school nutrition programme. *Journal of Public Health Research*, 10(1), 1982. <https://doi.org/10.4081/jphr.2021.1982>
- McIlroy, T. (2024). *What are the 5 aspects of holistic development in childhood?* Empowered Parents. <https://empoweredparents.co/what-are-the-5-aspects-of-holistic-development>
- McLeod, S. (2025). *Maslow's hierarchy of needs*. Simply Psychology. <https://www.simplypsychology.org/maslow.html>
- Mostert, C. M. (2021). The impact of the school feeding programme on the education and health outcomes of South African children. *Children and Youth Services Review*, 126, 106029. <https://doi.org/10.1016/j.childyouth.2021.106029>
- Oflaria, C. D. (2023). Implementation of school-based feeding program among selected elementary central schools in the Schools Division of Quezon: Basis for an intervention program. *Psychology and Education: A Multidisciplinary Journal*, 7, 532–539. <https://doi.org/10.5281/zenodo.7732191>
- Pulimeno, M., Piscitelli, P., Colazzo, S., Colao, A., & Miani, A. (2020). School as ideal setting to promote health and wellbeing among young people. *Health Promotion Perspectives*, 10(4), 316–324. <https://doi.org/10.34172/hpp.2020.50>
- Rosales, A., Young, S., Mendez, T., Shelden, K., & Holdaway, M. (2022). Collaborative strategies to improve nutrition security and education: Lessons learned during a pandemic. *Journal of School Health*, 93(2), 148–152. <https://doi.org/10.1111/josh.13247>
- Siy Van, V. T., Siguin, C. P., Lacsina, A. C., Yao, L. F., Sales, Z. G., Gordoncillo, N. P., Advincula-Lopez, L., Sescon, J. T., & Miro, E. D. P. (2022). A community-led central kitchen model for school feeding programs in the Philippines: Learnings for multisectoral action for health. *Global Health: Science and Practice*, 10(6), e2100391. <https://doi.org/10.9745/GHSP-D-21-00391>