



Evaluating School Health and Nutrition Programs and Their Influence on School Performance: A Basis for Supplemental Support Program

Corazon C. Abulencia¹, Edward C. Jimenez^{2*}

La Consolacion University Philippines

Corresponding Author: Edward C. Jimenez

edward.jimenez@email.lcup.edu.ph

ARTICLE INFO

Kata Kunci: School Health and Nutrition Programs, School Performance, School-Based Support Program

Received: 28, May

Revised: 27, June

Accepted: 30, July

©2026 Abulencia, Jimenez: This is an open-access article distributed under the terms of the [Creative Commons Attribution 4.0 International](https://creativecommons.org/licenses/by/4.0/).



ABSTRACT

This study sought to determine the influence of school health and nutrition programs on overall school performance. The findings are summarized as follows: the majority of teacher-respondents were female, married, and between 41 and 50 years old. Most came from small- to medium-sized households, had earned master's degree units, and identified as Catholic. Nearly half of the respondents served both as EPP teachers and canteen managers or coordinators. Regarding the extent of program implementation, teacher-respondents expressed strong agreement with the delivery of the School-Based Feeding (SBF), Water, Sanitation and Hygiene (WASH), Health Education (RHEP), and Medical, Dental, and Nursing (MDN) programs. Similarly, the National Drug Education Program (NDEP) was rated as "very present" in their schools. In terms of institutional outcomes, the participating schools received an "outstanding" rating during the validation of their Office Performance Commitment and Review Form (OPCRF). When examining differences in implementation, no significant variations were found across most School-Based Health and Nutrition Programs. However, notable exceptions included the RHEP, which showed significant differences based on sex, and the NDEP, which varied significantly according to marital status. Furthermore, the study established that School Health and Nutrition Programs significantly influence school performance. Based on these findings, a school-based support program is proposed for adoption to strengthen current practices and sustain positive outcomes.

INTRODUCTION

Proper nutrition is fundamental to every learner's overall well-being, academic achievement, and long-term contributions to economic and societal development. The health of both learners and educators is indispensable for sustaining an effective and continuous teaching-learning process. This perspective aligns with global frameworks such as the Sustainable Development Goal on Good Health and Well-Being (WHO Global Nutrition Action Plan 2016–2021) and SDG 4 on Quality Education (UNESCO, 2017), both of which recognize health and education as interdependent pillars of sustainable development.

Adequate nutrition supports not only physical growth—including muscle, bone, and organ development—but also cognitive maturation, particularly during critical formative years. Well-nourished learners demonstrate improved concentration, information retention, and active classroom participation, all of which contribute to better educational outcomes. Conversely, poor nutrition undermines cognitive function and academic performance, reinforcing the need for intentional nutritional interventions within schools.

Schools serve as vital platforms for nutrition education, equipping learners with knowledge about balanced diets, healthy food choices, and the broader implications of nutrition on health and well-being. Evidence indicates that well-nourished students consistently outperform their undernourished peers (UNICEF, 2019). Moreover, adequate nutrition enhances learners' daily productivity, reduces absenteeism and dropout rates, and promotes consistent engagement in learning. Targeted supplementary feeding programs can also address nutritional deficits, bolster immune systems, support healthy growth, and mitigate malnutrition and obesity—issues particularly pronounced in disadvantaged communities (FAO, 2020).

In the Philippine context, the Department of Education (DepEd) issued DepEd Order No. 17, s. 2017, establishing the school-Based Feeding Program (SBFP) for School Years 2017–2022. The program's primary goal is to improve the nutritional status of at least 70% of beneficiaries after 120 feeding days. Its secondary objectives include raising classroom attendance to 85–100% and fostering positive health and nutrition behaviors among children (DO 37, s. 2017). This context was represented from the recent paper of Abulencia and Jimenez (2026) wherein they explored the school health and nutrition programs of public elementary schools.

Despite these efforts, many Filipino learners continue to face academic challenges linked to poor nutritional status from elementary through tertiary education. Food insecurity and inadequate nutrition have been shown to adversely affect physical health, mental well-being, and academic performance. In response, the SBFP has demonstrated measurable impact: according to the Philippine Information Agency (Luzon_region1, 2025), cases of severe malnutrition dropped by nearly two-thirds, while underweight prevalence was reduced by almost half, benefiting 133,127 identified learners. Nevertheless, malnutrition continues to impair attentiveness and learning capacity among affected students (Zerga et al., 2022), underscoring the need for sustained and enhanced interventions.

This study aims to conduct a comprehensive assessment of current school health and nutrition practices in public elementary schools under the Schools Division of Bulacan. Specifically, it seeks to: (1) identify challenges and gaps in existing nutritional practices; (2) evaluate the extent of implementation of relevant policies; and (3) propose evidence-based recommendations for a school-based support program tailored to learners' specific needs. To achieve these objectives, a sequential explanatory mixed-methods design will be employed, wherein quantitative findings will inform and guide

the qualitative phase, enabling a holistic and nuanced analysis through thematic interpretation.

Ultimately, this research endeavors not only to illuminate persistent challenges but also to chart a pathway toward a transformative, context-responsive supplemental support program. Its implications extend beyond individual schools, offering insights that may influence educational policy and practice across the Philippines, thereby contributing meaningfully to the realization of the Sustainable Development Goals.

LITERATURE REVIEW

School Health and Nutrition Programs

Health education is central to schools' missions (Smith-Grant et al., 2020). Consequently, many programs now integrate nutrition across the curriculum, using interactive methods—such as theater, service learning, and technology—to teach nutrition in health, science, and home economics (Pérez-Rodrigo & Aranceta, 2003). For instance, farm-to-school initiatives, school gardens, and cooking activities also increase learners' knowledge and healthy eating practices (Pérez-Rodrigo & Aranceta, 2003). At the national level, DepEd's school-based feeding guidelines (DO 37, 2017) target a 70% improvement in beneficiaries' nutritional status within 120 feeding days and aim to raise classroom attendance to 85–100%.

Moreover, global monitoring by WHO/UNICEF's JMP highlights persistent WASH gaps that undermine school health (UNESCO, 2016; WHO & UNICEF, 2018). In response, participatory and multicomponent programs—such as Nepal's integrated nutrition initiative and the Shaping Healthy Choices Program—demonstrate that combining nutrition education with physical activity strengthens healthy habits and increases activity intensity among students (Liu et al., 2021). Supporting this, systematic reviews show that interventions that pair nutrition education, physical education, and behavioral counseling most consistently improve nutritional status, dietary behavior, and physical activity.

Given the relevance of food insecurity, evidence from multiple contexts reinforces the value of feeding programs. For example, Hampshire (2021) notes that over half a million U.S. children experience very low food security, a pattern mirrored in the Philippines. Accordingly, Philippine studies show measurable benefits: Corpuz et al. (2018) reported normalized nutritional status for 83% of participants alongside improved attitudes and self-esteem, while Cabaddu (2020) found modest but significant weight and height gains after a four-month supplemental feeding intervention. Nevertheless, academic gains were smaller, suggesting feeding programs work best when combined with complementary educational and psychosocial supports.

Scaling these local gains is important because schools reach vast numbers of children—1.3 billion globally—with many learners facing poverty, disability, and mental health challenges (Kolbe, 2019). Therefore, program models that link experiential learning and local food systems appear promising. For example, the Philippines' "Gulayan sa Paaralan" increased vegetable yields and helped reduce malnutrition (Ibañez, Jr. et al., 2023). Similarly, professional development for school leaders and teachers strengthens implementation and partnerships (Easterly et al., 2023). Research synthesizes these lessons: standardized meal options, stakeholder capacity building, community ownership, accountability, and local supply chains drive effectiveness and sustainability (Shrestha et al., 2020; Bolka et al., 2024). In support, Assefa (2023, 2025) links regular feeding to better concentration and advocates connecting SFPs with local farm networks for sustainability.

Meanwhile, WASH monitoring remains critical. The JMP's long-term tracking shows that, in 2016, 92 countries provided data on basic drinking water coverage; 66%

of schools had basic sanitation, yet 11% lacked soap at handwashing stations (WHO & UNICEF, 2018). Textbook and literacy studies suggest complementary actions: Dikmenli et al. (2024) found that biology texts organized water-health concepts well but recommended a systems-thinking approach, while project-based IoT monitoring improved students' critical thinking about water resources (Irawati & Sulisworo, 2023). At the same time, infrastructure shortfalls—low budgets and weak facilities—limit progress and call for coordinated government and stakeholder action to meet SDG targets (Petilo, 2024).

Drug abuse and school-based responses also intersect with health and protection concerns. Studies identify financial hardship, unstable homes, peer influence, social media, and adult exploitation as drivers of child involvement in drugs (Imran et al., 2021; Kasim et al., 2021). Consequently, authors argue for agile leadership, adult vigilance, and rehabilitative education for drug-involved children to reduce recidivism.

Although many programs show progress, systemic barriers persist: underfunding, poor coordination, and political de-prioritization exclude children in low-resource contexts (UNESCO, 2021; UNICEF, 2022). Thus, international agencies recommend whole-school, integrated strategies combining nutrition, health services, WASH, and policy support to scale effective interventions (UNESCO, 2024; CDC, 2023).

Reproductive health covers physical, emotional, and social dimensions that shape quality of life; therefore, age-appropriate SRHR education is essential (Alegado et al., 2025; Stoyanova et al., 2024; Asio, 2019). While teacher-education students demonstrate moderate SRHR knowledge—on anatomy, disease transmission, environmental effects, and contraception—research emphasizes the need for active teacher engagement to improve both knowledge and attitudes among learners (Stoyanova et al., 2024). Building on this, Ghimire (2025) and others advocate participatory pedagogies, SRHR inclusion in curricula, and leadership opportunities for adolescent girls. Technology also plays a role: Hako and Shipalanga (2022) recommend free data for learners and teachers to ensure timely SRHR access and preparedness for future disruptions.

Psychological and emotional safety affects learning across fields (Robinson et al., 2024; Bautista et al., 2024), and oral health is integral to overall well-being yet under-resourced in low- and middle-income settings (Qutieshat et al., 2024). Volunteer initiatives reveal benefits in awareness and engagement but also highlight challenges—electricity, internet, sterilization—that hinder sustainability (Asio et al., 2021; Paguio et al., 2021). Therefore, resilient, student-oriented curricula and learning environments, paired with preventive health agendas, are necessary (You et al., 2023; Qutieshat et al., 2024).

School Performance

Leadership remains a primary driver of school improvement. Principals who combine transformational and instructional leadership approaches positively shape school climate (affiliation, innovation, justice) and support sustained gains (Al safran et al., n.d.; Wang, 2019; De Castro & Jimenez, 2022). Likewise, teachers' emotional intelligence and capacity to manage personal stressors are linked to greater classroom effectiveness (Go et al., 2020; Jimenez, 2020; Jimenez, 2021; Marco & Jimenez, 2026). Moreover, higher teacher qualifications and ongoing training contribute to better teaching performance (Batuigas et al., 2022). Although school heads' competencies in governance, HR, and community engagement influence school functioning, some analyses find no clear statistical relationship between school-based management practice levels and academic performance (Surio & Jimenez, 2026; Wenjing & Jimenez, 2026; ; Mondejar & Asio, 2022; Bantolo & Arenga, 2021; Mahinay et al., 2025).

School-Based Support Program

Leadership development programs like the Targeted Intensive School Support (TISS) build team strategies (Daugherty et al., 2020). School-based mentoring (SBM) connects at-risk learners with adult mentors (CCNetwork, 2020; Pasubillo & Asio, 2023). Schools are key settings for culturally congruent preventive interventions for Indigenous learners (Head et al., 2022). School-based psychosocial support addresses vulnerable young people's challenges (Nortje & Pillay, 2022). Programs like FlexiTrack High (FTH) offer tertiary participation opportunities (Olds et al., 2022). Irwin et al. (2024) also reported teacher satisfaction with support programs for children with cancer.

Teachers, as frontline implementers, often feel incapable and sacrifice their well-being (Dalamacio & Jimenez, 2026; Francisco & Jimenez, 2026; Estacio, 2024; Asio & Jimenez, 2021). Teacher residency programs (TRPs) integrate institutions and school districts to connect coursework and clinical training (Benge et al., 2024). Special Education (SPED) programs enhance literacy but face resource limitations and training deficits (Olabiyi et al., 2025).

Overall, program success rests on effective leadership and properly supported teachers. Adaptive leadership models and robust teacher residency programs are central to addressing implementation challenges.

The literature consistently affirms that school health and nutrition programs—including feeding, WASH, drug education, reproductive health, and medical/dental services—positively influence learner well-being, attendance, and academic performance. SFPs demonstrate particular effectiveness in improving nutritional status and reducing hunger, though their direct impact on academic achievement varies. Success depends on multi-component, culturally responsive, and well-supported interventions. However, implementation faces persistent challenges: inadequate funding, logistical barriers, infrastructure deficits, insufficient teacher training, and community engagement gaps. Effective school leadership and teacher support are critical to program success. Addressing these challenges requires integrated approaches, adaptive leadership, stakeholder collaboration, and sustained policy commitment to achieve equitable educational outcomes and contribute to sustainable development goals.

Conceptual Framework

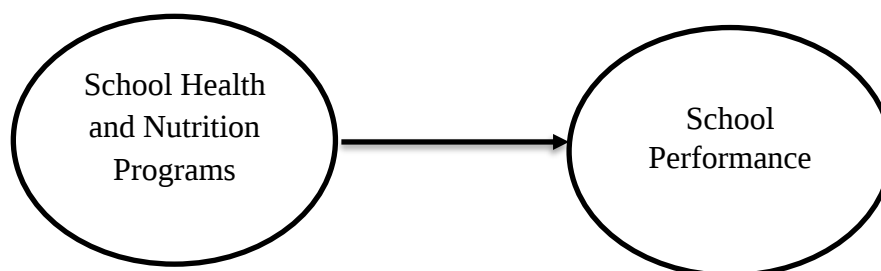


Figure 1. Conceptual Framework

METHODOLOGY

This study employed a descriptive-correlational research design to examine the influence of implementation of school health and nutrition programs on the school performance among public elementary teachers, finally crafting a school-based supplemental support program. This design was selected because, within the context of division-level policing, both how teachers implement the school health and nutrition programs how they respond to challenges met in shaping their school performance. As noted by McCombes (2019), cited in Khidhir (2021) and Asio (2021), "a correlational

research design measures a relationship between two variables without the researcher controlling either of them." This approach is well suited to answering what, where, when, and how questions, though it does not address why a phenomenon occurs. Guided by this framework, the study explored the influence between the independent variables—school health and nutrition programs—and the dependent variable, school performances, using an independent variable-dependent variable (IV-DV) model.

RESULT AND DISCUSION

Teachers' Assessment on the Extent of Implementation of the School-Based Feeding Program in terms of Quality of Food

Table 1 displays the mean and standard deviation values for various aspects related to the quality of food served in the school-Based Feeding Program. The highest mean scores in the table are for items 10 ("use water from a safe source") and 11 ("are well-cooked"), both receiving a mean score of 3.89, indicating a high level of agreement that these aspects are being implemented well in the school-Based Feeding Program. On the other hand, the lowest mean scores are for items 3 ("include fruits and vegetables") and 4 ("include healthy beverages"), both scoring 3.62, suggesting a slightly lower level of agreement regarding the inclusion of fruits, vegetables, and healthy beverages. The composite mean for all items is 3.75, reflecting an overall strong consensus among respondents that the quality of food served in the program is satisfactory. The findings indicate that while there is general satisfaction with the program, there may be room for improvement in terms of incorporating more fruits, vegetables, and healthy beverage options to further enhance the nutritional value of the meals provided. Also, the urgent need to study both the long-term outcomes and permanence of School Feeding Programs, although their short-term advantages are already established (Assefa, 2025).

Table 1. Mean and Standard Deviation Distribution for the School-Based Feeding Program Implementation In terms of Quality of Food

Items	Mean	SD	Interpretation
<i>The meal being served ...</i>			
1. such as snacks and lunch are nutritious.	3.75	0.511	Strongly Agree
2. include variations in the menu.	3.76	0.505	Strongly Agree
3. include fruits and vegetables.	3.63	0.564	Strongly Agree
4. include healthy beverages (ex. Milk, fruit juice)	3.62	0.586	Strongly Agree
5. is being cooked with a minimum use of oil.	3.64	0.561	Strongly Agree
6. are hot and freshly cooked.	3.81	0.490	Strongly Agree
7. have the same portioning that is enough for every beneficiary.	3.77	0.502	Strongly Agree
8. are pleasing to the beneficiaries' sense of sight (Palatability)	3.74	0.514	Strongly Agree
9. are tasteful.	3.76	0.505	Strongly Agree
10. use water from a safe source.	3.89	0.417	Strongly Agree
11. are well-cooked.	3.89	0.411	Strongly Agree
12. includes nutrition facts.	3.73	0.540	Strongly Agree
13. have a pleasant smell	3.82	0.469	Strongly Agree
Composite Mean	3.75	0.423	Strongly Agree

Teachers' Assessment on the Extent of Implementation of the School-Based Feeding Program in terms of Budget

In Table 2, the mean scores for various aspects related to the School-Based Feeding Program's budget implementation are presented. The composite mean for all items is 3.68, indicating a strong consensus among respondents that the budget-related aspects of the program are satisfactory. Among the individual items, the highest mean score is for item 4 ("All beneficiaries are fed") with a mean of 3.78, suggesting a high level of agreement that all intended beneficiaries are receiving meals. On the other hand, the lowest mean scores are for items 2 ("The number of days of the feeding program is sufficient") and 3 ("Ingredients are considered first class and fresh"), both scoring 3.64, indicating a slightly lower level of agreement in these areas. Overall, while respondents are generally satisfied with the budget-related aspects of the program, there may be opportunities to further enhance the sufficiency of feeding program days and the quality of ingredients to improve the overall effectiveness and impact of the program. It is suggested that linking School Feeding Programs to regional farming networks while requiring specific policies that boost their operational efficiency (Assefa, 2025) is encouraged.

Table 2. Frequency and Percentage Distribution of the Respondents in terms of Marital Status

Items	Mean	SD	Interpretation
1. Meals are served everyday	3.71	0.504	Strongly Agree
2. The number of days of the feeding program is sufficient	3.64	0.528	Strongly Agree
3. Ingredients are considered first class and fresh	3.64	0.515	Strongly Agree
4. All beneficiaries are fed.	3.78	0.471	Strongly Agree
5. The school is in coordination with the government to have an on-time feeding program.	3.65	0.547	Strongly Agree
Composite Mean	3.68	0.431	Strongly Agree

Teachers' Assessment on the Extent of Implementation of the School-Based Feeding Program in terms of Staff

For Table 3, the mean scores for aspects related to the school-Based Feeding Program's staff implementation are outlined. The composite mean for all items is 3.69, indicating a strong consensus among respondents that the staff-related aspects of the program are satisfactory. The highest mean score is for item 5 ("Personnel practice proper sanitation in preparing and serving meals") with a mean of 3.84, suggesting a high level of agreement that proper sanitation practices are being followed. Conversely, the lowest mean score is for item 3 ("There is involvement from the parents in the implementation of the program") with a mean of 3.60, indicating a slightly lower level of agreement regarding parental involvement. In general, while respondents generally agree on the effectiveness of staff practices such as sanitation and teacher involvement, there may be opportunities to further enhance parental engagement to improve the overall implementation and impact of the school-Based Feeding Program. Khumalo (2023) revealed that parental involvement in parenting, communicating, volunteering, learning at home, decision-making, and collaborating with the community are necessary for any school management support for parental involvement in school.

Table 3. Mean and Standard Deviation Distribution for the School-Based Feeding Program Implementation in terms of Staff

Items	Mean	SD	Interpretation
1. The meals are prepared by certified and trained personnel	3.62	0.533	Strongly Agree
2. There are enough personnel involved in the implementation of the entire feeding program.	3.61	0.523	Strongly Agree
3. There is involvement from the parents in the implementation of the program.	3.60	0.549	Strongly Agree
4. The teachers help hand-in-hand in feeding the beneficiaries.	3.78	0.467	Strongly Agree
5. Personnel practice proper sanitation in preparing and serving meals.	3.84	0.410	Strongly Agree
Composite Mean	3.69	0.416	Strongly Agree

Summary of Teachers' Assessment on the Extent of Implementation of the School-Based Feeding Program

Table 4 provides a summary of the mean and standard deviation distribution for the school-Based Feeding Program implementation across three latent variables: Quality of Food, Budget, and Staff. The composite mean for all variables is 3.71, indicating a strong consensus among respondents that the overall implementation of the program is satisfactory. Among the three latent variables, Quality of Food received the highest mean score of 3.75, followed closely by Staff at 3.69 and Budget at 3.68. The standard deviations for all variables are relatively low, suggesting a high level of agreement among respondents regarding the program's implementation across these aspects. This summary underscores the positive perception of the school-Based Feeding Program's quality, budget management, and staff practices, indicating a generally effective and well-received program by the respondents.

Table 4. Summary of the Mean and Standard Deviation Distribution for the School-Based Feeding Program Implementation

Latent Variables	Mean	SD	Interpretation
1. Quality of Food	3.75	0.423	Strongly Agree
2. Budget	3.68	0.431	Strongly Agree
3. Staff	3.69	0.416	Strongly Agree
Composite Mean	3.71	0.377	Strongly Agree

Teachers' Assessment on the Extent of Implementation of the Water, Sanitation, and Hygiene (WASH)

Table 5 presents the mean and standard deviation values for the Water, Sanitation, and Hygiene (WASH) programs in schools. The composite mean for all items is 4.77, indicating a strong consensus among respondents that the WASH programs in schools are well-implemented. The highest mean scores are for items 1 ("has water system") with a mean of 4.91 and item 3 ("often cleans the sanitation facilities") with a mean of 4.86, suggesting high levels of agreement on the presence of water systems and regular sanitation facility cleaning. The lowest mean scores are for items 6 ("has an action plan that includes hygiene training requirements") and 8 ("conducts and implements environmental health training in the past three years"), both scoring 4.69, indicating slightly lower agreement in these areas.

To sum up, the results indicate that the schools have strong WASH programs in place, with a focus on water availability, sanitation infrastructure, hygiene awareness, and training, while also highlighting areas for potential improvement in action planning and environmental health training implementation. It is recommended that schools should have a development strategy to improve educational facilities and comply with SDG 4.a.1: evaluates schools' electricity, internet connectivity for education, computers, disabled facilities, clean drinking water, gender-segregated sanitation, and basic handwashing facilities, emphasizing the need for government and stakeholder participation (Petilo, 2024).

Table 5. Mean and Standard Deviation of the WASH Programs in Schools

Items	Mean	SD	Interpretation
<i>The school...</i>			
1. has water system.	4.91	0.344	Strongly Agree
2. has sanitation infrastructure.	4.83	0.420	Strongly Agree
3. often cleans the sanitation facilities.	4.86	0.400	Strongly Agree
4. has a dedicated budget for the purchase of toilet cleaning supplies.	4.70	0.543	Strongly Agree
5. has a dedicated budget for the purchase of soap, paper towels, etc.	4.70	0.529	Strongly Agree
6. has an action plan that includes the hygiene training requirements.	4.69	0.525	Strongly Agree
7. conducts a general hygiene awareness program.	4.78	0.483	Strongly Agree
8. conducts and implements an environmental health training in the past three years.	4.70	0.529	Strongly Agree
9. implements a personal hygiene training in the past three years.	4.73	0.542	Strongly Agree
Composite Mean	4.77	0.392	Strongly Agree

Teachers' Assessment on the Implementation of the National Drug Education Program (NDEP)

Table 6 presents the mean and standard deviation values for the National Drug Education Program (NDEP) implementation within schools, highlighting various indicators related to drug education and prevention efforts. The composite mean of 4.09 indicates a significant presence and implementation of the NDEP within the school context. Notably, indicators such as integrating drug abuse prevention in student organization training, conducting activities for drug abuse prevention, and providing guidance and counseling services received high mean scores (4.28, 2.31, and 4.33), signifying a very present or extremely present status. Additionally, the coordination with governmental and non-governmental organizations demonstrated strong collaboration in drug abuse prevention. However, areas for potential enhancement include organizing Senior and/or Senior Plus Red Cross Youth Councils and strengthening coordination with the Philippine National Police (M= 3.87). Generally, the findings underscore the school's robust efforts in drug education and prevention, focusing on student involvement, counseling services, and inter-agency collaboration while suggesting avenues for further development to fortify drug prevention initiatives. More so, Phuttanu et al. (2024) showed that participatory approaches for the prevention and solution of drug problems of schools under the local administrative organizations

have a suitability assessment at a level higher than the specified criteria and the possibility of implementing the guidelines.

Table 6. Mean and Standard Deviation of the National Drug Education Program Implementation

Indicators	Mean	SD	Interpretation
1. Presence of organized National Drug Education Program (NDEP) School Anti-Drug Abuse Council (SADAC) with respective functions and updated minutes of meeting.	3.96	1.145	Very Present
2. Presence of organized Barkda Kontra Droga (BKD) with designated NDEP/bkd coordinator/s.	3.87	1.188	Very present
3. Presence of Annual Action Plan of SADAC and Barkada Kontra Droga including resource/budgetary allocation.	3.84	1.177	Very Present
4. Presence of NDEP corners and information, Education and communication (IEC) materials located in an appropriate area.	4.08	1.055	Very Present
5. PTA and student organizations are involved in drug prevention activities.	4.20	1.027	Very Present
6. Presence of the Previous School Year Annual Accomplishment Report (AAR) of: 1) SADAC, and 2) Barkada Kontra Droga.	3.90	1.238	Very Present
7. The school integrates drug abuse prevention in the training of Supreme Student Government, Boy Scouts and Girl Scouts and other clubs and organizations.	4.33	0.907	Extremely Present
8. Conduct of activities on drugs abuse prevention thru: a) for a or discussion on drug abuse prevention, and b) poster making contests, slogan and theme writing contests (e.g. on drug abuse prevention and control).	4.28	0.916	Extremely Present
9. Provision of guidance and counseling services, peer counseling, referral services, assistance to student surrenders if any.	4.31	0.980	Extremely Present
10. Presence of organized and accredited Senior and/or Senior Plus Red Cross Youth Councils with designated RCY Focal Person.	3.87	1.208	Very present
11. Coordination with GO's and NGO's: a) Municipal Anti-Drug Abuse Council (MADAC)	4.10	1.088	Very Present

b) Barangay Anti-Drug Abuse Council (BADAC)	4.14	1.043	Very Present
c) Department of Health (DOH)	4.20	1.084	Very Present
d) Local Government unit (LGU)	4.25	0.997	Extremely Present
e) Philippine National Police (PNP)	4.10	1.073	Very Present
f) Others (pls. specify)	3.92	1.237	Very Present
Composite Mean	4.09	0.939	Very Present

Teachers' Assessment on the Implementation of the Reproductive Health Education Program in terms of Teaching Approaches

In Table 7, the evaluation of the Adolescent Reproductive Health Program Implementation in schools, focusing on Teaching Approach, demonstrates a high level of agreement among respondents regarding the pedagogical principles and learner-centered techniques integrated into the program. The composite mean of 4.66 (SD = 0.420) falls within the "Strongly Agree" range, indicating an overall positive perception of the teaching approach. Notably, indicators related to principles such as establishing a respectful environment, fostering critical thinking, and empowering learners for positive change received consistently high mean scores above 4.75. When considering learner-centered techniques, items like participatory teaching, peer education, and self-learning activities also scored well above 4.60. While the indicator on computer-based or online learning had a slightly lower mean score of 4.49, it still fell within the "Strongly Agree" range. These results suggest that the Adolescent Reproductive Health Program incorporates effective and inclusive teaching approaches that prioritize learner empowerment and engagement, fostering a supportive and enriching learning environment conducive to comprehensive sexuality education. The high composite means and consistent high scores across indicators reflect a robust foundation for the successful implementation and delivery of the program's curriculum.

However, Alegado et al. (2025) found that teacher education learners have a moderate level of knowledge on reproductive health, including the basic components of the reproductive system, the transmission of reproductive diseases, the influence of the environment on reproductive health, and birth control methods.

Table 7. Mean and Standard Deviation of the Adolescent Reproductive Health Program Implementation in Schools in terms of Teaching Approach

Indicators	Mean	SD	Interpretation
<i>Does the sexuality education programme include clear and detailed guidance on the following pedagogical principles:</i>			
1. establish a learning environment based on equality, respect, and human rights (including zero tolerance for sexual and gender-based discrimination and violence)?	4.78	0.430	Strongly Agree
2. respect for the uniqueness of each learner (including social, cultural, emotional and sexual background; and different learning aptitudes)	4.79	0.408	Strongly Agree
3. build on learners' power to reflect and think critically about their own lives and about the world around them, and to solve problems?	4.76	0.428	Strongly Agree

4. foster learners' ability to apply what they learn to their lives and communities (helping them to become active citizens and forces for positive change)?	4.77	0.424	Strongly Agree
<i>Does the sexuality education programme include clear and detailed guidance on learner centred learning techniques, including:</i>			
1. participatory classroom teaching (e.g. energizers, discussion triggers, creative play, group discussions, participatory reflection)?	4.64	0.581	Strongly Agree
2. peer education?	4.61	0.627	Strongly Agree
3. self-learning activities?	4.61	0.577	Strongly Agree
4. computer-based or on-line learning (including how to access credible on-line resources, how to support online safety for learners, how to deal with cyber-bullying and other forms of online harassment)?	4.49	0.665	Strongly Agree
5. Does the sexuality education programme include clear and detailed guidance on inviting other professionals, in addition to teachers, to lead certain sessions, as necessary (e.g., health providers)?	4.51	0.665	Strongly Agree
Composite Mean	4.66	0.420	Strongly Agree

Teachers' Assessment on the Implementation of the Reproductive Health Education Program in terms of Teaching Materials

In Table 8, the evaluation of the Adolescent Reproductive Health Program Implementation in schools, specifically focusing on Teaching Materials, demonstrates a high level of agreement among respondents regarding the availability and quality of teaching resources. The composite mean of 4.56 (SD = 0.560) falls within the "Strongly Agree" range, indicating an overall positive perception of the teaching materials. Among the indicators, the highest mean scores were consistently high across various aspects, with items like detailed guidance on learning objectives, expected results, and pedagogical approaches all scoring above 4.60. However, the indicators "Is there a sufficient quantity of teaching manuals for all teachers responsible for sexuality education?" and "Were all teaching materials pre-tested prior to use by teachers?" had slightly lower mean scores, though still within the "Strongly Agree" interpretation. These results suggest that the Adolescent Reproductive Health Program provides comprehensive and well-prepared teaching materials, supporting effective delivery of sexuality education in schools. The high scores across most indicators indicate a strong foundation for the successful implementation and delivery of the program's curriculum.

On the contrary, Stoyanova et al. (2024) revealed that high school learners have a good knowledge of sexuality and sexual and reproductive health, but they receive this information mostly outside of school.

Table 8. Mean and Standard Deviation of the Adolescent Reproductive Health Program Implementation in Schools in terms of Teaching Material

Indicators	Mean	SD	Interpretation
<i>Do teachers have access to teaching materials and tools that include detailed guidance on the following:</i>			
1. learning objectives of each lesson?	4.65	0.569	Strongly Agree
2. expected results of each lesson?	4.61	0.588	Strongly Agree
3. approximate time of each lesson?	4.58	0.593	Strongly Agree
4. appropriate carrier subject(s)?	4.57	0.604	Strongly Agree
5. pedagogical approaches?	4.61	0.567	Strongly Agree
6. evaluation methods?	4.63	0.575	Strongly Agree
7. required materials to deliver the lessons?	4.63	0.585	Strongly Agree
8. step-by-step instructions for each lesson?	4.63	0.615	Strongly Agree
9. Is there a sufficient quantity of teaching manuals for all teachers responsible for sexuality education?	4.37	0.772	Strongly Agree
10. Were all teaching materials pre-tested prior to use by teachers?	4.42	0.738	Strongly Agree
11. Can the teaching materials be adapted to specific local contexts?	4.45	0.724	Strongly Agree
Composite Mean	4.56	0.560	Strongly Agree

Teachers' Assessment on the Implementation of the Reproductive Health Education Program in terms of Learning Materials

Table 9 presents the descriptive statistics for the implementation of the Adolescent Reproductive Health Program in schools, specifically focusing on the availability and quality of learning materials used in sexuality education. The composite mean of 4.00 (SD = 0.822) falls within the "Agree" range, indicating that, overall, respondents perceive the learning materials as adequately available and appropriate for classroom use. The highest mean scores are observed in Items 1 and 2, both with a mean of 4.05, suggesting strong agreement that educational materials are available for all classroom activities and are easily and economically reproducible. Conversely, the lowest mean score appears in Item 3 (M = 3.85, SD = 0.961), indicating relatively less agreement regarding the existence of sexuality education manuals for learners, though still within the "Agree" range. The results suggest that while the materials are generally accessible, reproducible, and culturally inclusive, there may be slight gaps in the consistent availability of structured manuals.

This highlights the need for education stakeholders to ensure that all schools are adequately equipped with standardized and readily accessible instructional resources to support comprehensive sexuality education effectively. Concurrent to the findings, in the study conducted by Mohammadi (2025), found that many community college learners face barriers to contraception, including privacy concerns, lack of awareness, and affordability.

Table 9. Mean and Standard Deviation of the Adolescent Reproductive Health Program Implementation in Schools in terms of Learning Materials

Items	Mean	SD	Interpretation
-------	------	----	----------------

1. Are educational materials available for all classroom activities in the sexuality education programme?	4.05	0.866	Agree
2. Can the sexuality education classroom materials be easily and economically reproduced?	4.05	0.842	Agree
3. Do sexuality education manuals for learners exist?	3.85	0.961	Agree
4. Are the student sexuality education manuals culturally relevant?	4.01	0.898	Agree
5. Are the student sexuality education manuals reflective of the diversity of young people in the country?	4.01	0.892	Agree
Composite Mean	4.00	0.822	Agree

Teachers' Assessment on the Implementation of the Reproductive Health Education Program in terms of Learning Environment

Table 10 presents the mean and standard deviation for the implementation of the Adolescent Reproductive Health Program in schools with respect to the learning environment, highlighting a high level of respondent agreement. The composite mean of 4.68 (SD = 0.455) falls within the "Strongly Agree" range, indicating a very positive perception of how the learning environment is structured to support sexuality education. The highest mean scores are found in Items 1 and 3, both with a mean of 4.72, suggesting strong consensus that the program provides clear guidance on ensuring privacy and confidentiality in the classroom, as well as on how to respond to disclosures of sexual abuse or harassment. The lowest mean is recorded in Item 2 (M = 4.66, SD = 0.511), though still rated as "Strongly Agree," indicating slightly less – but still high – confidence in guidance related to encouraging learner participation without fear of judgment. These findings imply that the program is highly effective in promoting a safe, inclusive, and supportive learning environment, which is essential for the successful delivery of comprehensive sexuality education. The consistently high scores across all items reflect strong implementation practices in creating respectful and protective classroom climates. Moreover, there is a need for teachers to be engaged in effective teaching of sexual health education to high school learners in order to improve the quality of their knowledge and attitudes towards sex (Stoyanova et al., 2024).

Table 10. Mean and Standard Deviation of the Adolescent Reproductive Health Program Implementation in Schools in terms of Learning Materials

Items	Mean	SD	Interpretation
<i>Does the sexuality education programme include clear guidance on the following aspects related to the learning environment:</i>			
1. the importance of creating a learning environment that guarantees privacy and confidentiality for learners, and how to establish such an environment in classrooms.	4.72	0.499	Strongly Agree
2. how to ensure learners can share their questions and participate in sexuality	4.66	0.511	Strongly Agree

education sessions without feeling singled out or vulnerable.			
3. how to address disclosure of sexual abuse or harassment by learners.	4.72	0.477	Strongly Agree
4. how to foster a culture of tolerance and solidarity in the learning environment, especially in relation to gender identity, sexual orientation, health status, ethnicity, disability, social or economic status.	4.67	0.533	Strongly Agree
Composite Mean	4.68	0.455	Strongly Agree

Summary of Teachers' Assessment on the Implementation of the Reproductive Health Education Programs

Table 26 reveals robust implementation of the Adolescent Reproductive Health Program, with a composite mean of 4.47 (SD = 0.458, "Strongly Agree") across 166 respondents. Learning Environment scored highest (4.68, SD = 0.455), affirming exemplary safe, inclusive classroom practices, while Learning Materials ranked lowest (4.00, SD = 0.822, "Agree"), signaling resource gaps despite overall excellence. High means and low variability across subscales demonstrate consistent program strengths in pedagogy and support systems, positioning it as a model despite modest material constraints. These results imply that the Adolescent Reproductive Health Program is highly effective in fostering a supportive learning environment, with room for improvement in the provision of learning materials. The consistency in high scores across most items reflects a robust implementation of the program, highlighting its success in promoting comprehensive reproductive health education among adolescents (Pascual, et.al 2025).

Table 11. Summary of the Mean and Standard Deviation for Adolescent Reproductive Health Program Implementation

Latent Variables	Mean	SD	Interpretation
1. Teaching Approach	4.66	0.420	Strongly Agree
2. Teaching Materials	4.56	0.560	Strongly Agree
3. Learning Materials	4.00	0.822	Agree
4. Learning Environment	4.68	0.455	Strongly Agree
Composite Mean	4.47	0.458	Strongly Agree

Teachers' Assessment on the Implementation of the Medical, Dental and Nursing Program

In Table 12, the analysis of the Medical, Dental, and Nursing Programs in School showcases a high level of agreement among respondents regarding the school's healthcare provisions. The composite mean of 4.68 (SD = 0.455) falls within the "Strongly Agree" range, indicating an overall positive perception of the programs. The items with the highest mean scores were Items 1 and 3, both at 4.72, with standard deviations of 0.499 and 0.477, respectively, pointing to strong endorsement for health care plans for teachers and learners and internal staff support. On the other hand, the lowest mean score was for Item 5 at 4.62 (SD = 0.533), though still rated as "Strongly Agree," suggesting slightly less consensus on providing access to education outside the mainstream school. These results suggest that the school's medical, dental, and nursing programs are highly effective in delivering comprehensive support within and beyond the school environment. The consistently high scores across all items, despite minor

variations, indicate a robust system in place to ensure the well-being and support of both staff and learners within the educational setting.

This is strongly supported by Cabreja-Castillo et al. (2023), who showed that efforts need to be made in continuous professional education to increase the knowledge in the health care environment for medical and nursing learners.

Table 12. Mean and Standard Deviation of the Medical, Dental, and Nursing Programs in School

Items	Mean	SD	Interpretation
<i>The school ...</i>			
1. has health care plans for the teachers and learners.	4.72	0.499	Strongly Agree
2. has reasonable adjustments for teachers' flexibility and learners' prevention from being at a disadvantaged compared with their peers.	4.66	0.511	Strongly Agree
3. provides support to teachers and learners from staff within the school.	4.72	0.477	Strongly Agree
4. provides support from health professionals external to the school.	4.67	0.506	Strongly Agree
5. provides access to education outside of mainstream school.	4.62	0.533	Strongly Agree
Composite Mean	4.68	0.455	Strongly Agree

Teachers' Schools Performance for the SY 2024-2025

Presented in Table 28 is the level of school performance of the teacher-respondents of the study for the school year 2024-2025. As seen, the overall mean was 4.97, which corresponds to a Likert scale interpretation of "outstanding." This result implies that the participating respondents have a very good school evaluation result and performed very well in all aspects of the school's roles and responsibilities towards learners and other stakeholders. Results indicate that school performance is a predictor of a principal's leadership ability that influences the organizational culture of the school and improves performance (Tonich, 2021).

Table 13. Level of Performance of the Teacher-Respondents for the SY 2024-2025

	Overall Mean	Interpretation
Performance	4.97	Outstanding

Significant Influence of School-Based Health and Nutrition Programs to the Schools' Performance

The results presented in Table 14 indicate that all evaluated school-based health and nutrition programs have a statistically significant positive relationship with school performance, as evidenced by Pearson correlation coefficients ranging from $r = .258$ to $r = .643$, all significant at $p < .05$. Among these, the Water, Sanitation, and Hygiene (WASH) Program showed the strongest correlation with school performance ($r = .643$, $p = .000$), followed closely by the Reproductive Health Education Program ($r = .569$, $p = .000$) and the Medical, Dental, and Nursing Program ($r = .567$, $p = .000$). The school-Based Feeding Program also demonstrated a moderate positive correlation ($r = .561$, $p = .000$),

while the National Drug Education Program had the weakest but still significant correlation ($r = .258$, $p = .001$). Bootstrap analysis using 1,000 samples confirmed the robustness of these findings, with bias-corrected and accelerated (BCa) 95% confidence intervals that did not include zero for any of the programs, further supporting the significance of the observed associations. These results suggest that school-based health and nutrition interventions play a meaningful role in enhancing school performance (WASH as performance multiplier; reproduction health and medical programs prevent emergency parent calls and reduces teenage pregnancy; improvement of hot meals; and lowest correlation signals box-checking against behavioral impact).

This conforms with Rizal (2025), who features the critical role of international funding and partnerships in improving program effectiveness and sustainability. It also highlights the need for a robust evaluation system involving key stakeholders to identify areas for improvement and to tailor interventions to meet specific community needs.

Table 14. Influence of School-Based Health and Nutrition Programs on the School's Performance

School Health and Nutrition Programs	Pearson Correlation	Sig. (2-tailed)	Bootstrap			
			Bias	Std Error	BCa 95% Confidence Interval	
					Lower	Upper
School-Based Feeding Program	.561*	.000	-0.174	.310	-0.061	0.767
Water, Sanitation, and Hygiene (WASH) Program	.643*	.000	-0.234	.376	-0.127	0.833
National Drug Education Program	.258*	.001	-0.048	.135	-0.016	0.394
Reproductive Health Education Program	.569*	.000	-0.198	.330	-0.101	0.739
Medical, Dental, and Nursing Program	.567*	.000	-0.229	.368	-0.177	0.751

Note: * $p < .05$; Bootstrap at 5,000 samples

Proposed School-Based Support Program

Based on the comprehensive findings from the study, here is a proposed school-based support program designed to enhance the implementation, sustainability, and impact of School Health and Nutrition Programs (SHNP). The program has been created through the integration of quantitative and qualitative insights to address identified strengths, challenges, and opportunities.

Program Title:

INTEGRATED SCHOOL HEALTH AND NUTRITION ENHANCEMENT PROGRAM (ISHNEP)

Program Vision:

To create a holistic, sustainable, and collaborative school environment that promotes the physical, mental, and academic well-being of all learners through enhanced health and nutrition initiatives.

Program Goals:

1. Strengthen the implementation of all SHNP components (SBFP, WASH, NDEP, RHEP, MDNP).
2. Enhance stakeholder engagement and community partnerships.
3. Improve monitoring, evaluation, and sustainability of health and nutrition programs.
4. Foster a culture of health awareness and academic excellence.

Key Components

Focus Area	Activity	Objectives	Resources	Persons Involved	Timeline	Expected Outcome
Capacity Building and Training	Teacher and Staff Training	Regular workshops on nutrition, food safety, health education, and program management.	Modules, external trainers	Teachers School Head Coordinators	1 st Quarter	• Improved student nutrition, attendance, and academic performance. • Enhanced stakeholder engagement and ownership. • Sustainable and well-monitored health programs. • Increased health awareness and positive health behaviors among learners.
	Parent and Community Workshops	Sessions on nutrition, hygiene, mental health, and how to support school health programs.				
Resource Augmentation and Infrastructure Support	Gulayan sa Paaralan Expansion	Develop and maintain school gardens to supplement feeding programs.	Seeds Tools Gardening space	Learners Teachers Coordinator School Head	Year Round	
	Kitchen and Sanitation Upgrades	Provide basic cooking equipment, water filters, handwashing stations, and	MOOE/ Local Funds/ Donations/ SEF Equipment Hygiene kits	Teachers School Head LGU	2 nd Quarter	

		hygiene kits.				
	Learning Materials	Develop and reproduce culturally relevant, age-appropriate health education materials.	Bond Paper Printer	Teachers Supervisor in-charge in LR	2 nd Quarter	
Strengthened Partnerships	LGU and NGO Collaboration	Formalize partnerships for funding, medical services, training, and resource sharing.	MOA template	Teachers School Head LGU	2 nd & 4 th Quarters	
	Private Sector Engagement	Encourage adopt-a-school initiatives for sustained support.		Teachers School Heads		
	Health Office Linkages	Regular medical, dental, and nursing services through MOAs with local health units.		Teachers School Head Medical Officer LGU		
Enhanced Monitoring and Evaluation	Digital Tracking System	Use simple tools (e.g., Google Forms, Excel) to monitor learner health status, attendance, and program outcomes.	Laptop Internet Monitoring Form	Teachers ICT Coordinator		
	Quarterly Review Meetings	Involve teachers, parents.	Laptop	School Head Parents	Quarterly	

		and partners to assess progress and address challenges.		Community		
	Feedback Mechanisms	Suggestion boxes, parent-teacher conferences, and student surveys.	Box	Teachers School Head Community	Year Round	
Parent and Community Involvement	Volunteer Programs	Parents assist in meal preparation, gardening, and hygiene monitoring.	Handouts Minutes of the Meetings	Teachers Parents	1 st Quarter	
	Incentives	Recognize active parents and partners through certificates or small tokens.	Special Paper Printer Laptop Tokens	Teachers School Head Parents LGU	Annually	
Integration into School Culture	Health Integration in Curriculum	Embed health topics into Science, MAPEH, and Homeroom Guidance.	Curriculum Guide Visual Aids	Teachers Department Heads		
	Health Corners	Establish or revitalize NDEP and health information corners in visible areas.	Posters Leaflets	Classroom Advisers	Quarterly	
Sustainability Mechanisms	Income-Generating Projects	Sell Garden produced or cooked meals to support	Seeds Supplies	Teachers TLE Coordinator	Year Round	

		program funds.				
	Learner-Led Initiatives	Encourage learner clubs to lead health campaigns and activities.	Advocacy Materials	SPG Officers Teachers	Year Round	

Recommendation for Adoption:

This program should be piloted in a few schools, evaluated after one school year, and scaled up based on results. Continuous support from DepEd, LGUs, and NGOs will be critical for long-term success.

CONCLUSIONS AND RECOMMENDATIONS

The study concludes that the school-Based Health and Nutrition Programs (SBHNPs)—specifically School-Based Feeding (SBF), Water, Sanitation and Hygiene (WASH), Reproductive Health and Education Program (RHEP), and Medical, Dental, and Nursing (MDN) services—are perceived by teacher-respondents as being implemented to a very high extent (overall "strongly agree"). Similarly, the National Drug Education Program (NDEP) was rated as highly present in schools. Corroborating these positive perceptions, the participating schools achieved an "Outstanding" rating in their official performance validation reviews.

While no significant differences were found in the overall implementation of the SBHNPs across demographic groups, two specific exceptions emerged: perceptions of RHEP implementation varied significantly by sex, and perceptions of NDEP implementation varied significantly by marital status. Critically, the study establishes that the collective implementation of these SBHNPs exerts a statistically significant positive influence on overall school performance. Based on these findings, a tailored school-based support program for teachers is proposed to sustain and enhance these outcomes.

FUTURE STUDY

This research still has limitations so further research on this topic is still needed "Evaluating School Health and Nutrition Programs and Their Influence on School Performance".

REFERENCES

- Abulencia, C., & Edward C. Jimenez. (2026). Exploring the School Health and Nutrition Programs of Public Elementary Schools. *International Journal of Management and Business Intelligence*, 4(2), 235–252. <https://doi.org/10.59890/ijmbi.v4i2.385>
- Al-safran, E., Brown, D., & Wiseman, A. (n.d.). The effect of principal's leadership style on school environment and outcome. 1–19.
- Alegado, V. M. F., Domingo, A. P. F., Rogayan, D. V., & Albeza, J. R. (2025). College Learners' Knowledge, Attitudes, and Practices Regarding Reproductive Health: Implications to Science Education Curriculum. *Science Education International*, 36(1), 94–105. <https://doi.org/10.33828/sci.v36.i1.10>
- Asio, J. M. R., Gadia, E., Abarintos, E., Paguio, D., & Balce, M. (2021). Internet connection and learning device availability of college students: Basis for institutionalizing flexible learning in the new normal. *Studies in Humanities and Education*, 2(1), 56–69.
- Asio, J. M. R. (2021). Research designs in the new normal: A brief overview. *Academia Letters*, 2, 1–8.

- Asio, J. M. R., & Jimenez, E. (2021). Teachers' sleep, religious tasks, and suicidal thoughts: A preliminary assessment. *International Journal of Multidisciplinary: Applied Business and Education Research*, 2(1), 71-79. <https://doi.org/10.11594/ijmaber.02.01.02>
- Asio, J. M. R. (2019). Reproductive Health Awareness of College Students of Selected Private Colleges in Olongapo City. *BREO Journal of Allied Health Studies*, 1(1), 32-43. <https://eric.ed.gov/?id=ED605920>
- Assefa, E. A. (2023). Do Learners' Academic Performance and Participation Get Better through School Feeding in Ethiopia? *Educational Planning*, 30(1), 7–23. https://www.proquest.com/scholarly-journals/do-learners-academic-performance-participation/docview/2844973229/se-2?accountid=11862%0Ahttps://librarysearch.kcl.ac.uk/discovery/openurl?institution=44KCL_INST&vid=44KCL_INST:44KCL_INST&genre=article&atitle=Do
- Assefa, E. A. (2025). *How Do School Feeding Programs Support the United Nations 2030 Agenda and the African Union 's 2063 Goals ?* 1–17.
- Barnabas, B., Bavorova, M., & Madaki, M. Y. (2024). The Effect of School Feeding Program on Pupils' Enrolment, Attendance and Performance in Northeastern Region of Nigeria. *SAGE Open*, 14(4), 1–19. <https://doi.org/10.1177/21582440241255809>
- Batuigas, F. D., Leyson, F. C., Fernandez, L. T., Napil, J. N., & Sumanga, C. S. (2022). Factors Affecting Teaching Performance of Junior High School Teachers of Madridejos National High School. *Asia Research Network Journal of Education*, 2(1), 40–47.
- Bautista, M., Apostol, J. N., Malibiran, R., Obispo, K. P., & Asio, J. M. (2024). Emotional state of the pre-service teachers prior to field study: Basis for support and monitoring program. *Formosa Journal of Multidisciplinary Research*, 3(3), 288-300. <https://doi.org/10.55927/fjmr.v3i3.7598>
- Benge, C., Gagnon, D., & Education, S. R. I. (2024). Building Strong Teacher Residency Programs In support of sustaining a teacher workforce. *SRI Education*, 1–16.
- Bolka, A., Bosha, T., & Gebremedhin, S. (2024). Effect of school feeding program on dietary folate intake among school adolescent girls in Sidama region, southern Ethiopia. *Frontiers in Nutrition*, 11(November), 1–9. <https://doi.org/10.3389/fnut.2024.1495824>
- Cabaddu, N. T. (2020). Bridging the Gap: Supplementary Feeding Program for IP Children in the Province of Apayao, Philippines. *The International Journal of Humanities & Social Studies*, 8(9), 49–57. <https://doi.org/10.24940/theijhss/2020/v8/i9/hs2009-021>
- Cabreja-Castillo, M., Hernandez, L., Mustafa, A., Hungria, G., & Bertoli, M. T. (2023). COVID-19 Scientific Literacy in Medical and Nursing Learners. *Journal of Microbiology & Biology Education*, 24(1), 1–7. <https://doi.org/10.1128/jmbe.00219-22>
- CCNetwork. (2020). Starting a mentoring program. *Comprehensive Center Network*, 1–4.
- Corpuz, A. M., Quiambao, C. G., & Gamis, J. C. (2018). *EVALUATION OF A SCHOOL-BASED FEEDING PROGRAM IN A PUBLIC SCHOOL IN CENTRAL LUZON , PHILIPPINES*. 1–13.
- Dalmacion, J. R. P., & Jimenez, E. C. (2026). Exploring the Effect of Self-Efficacy on Burnout and Job Commitment of Elementary Teachers: A Basis for Wellness Program. *Formosa Journal of Multidisciplinary Research*, 5(4), 1205-1224. <https://doi.org/10.55927/fjmr.v5i4.56>
- Daugherty, L., Schweig, J., & Gates, S. (2020). A Team-Based Leadership Intervention in New York City Schools: An Evaluation of the Targeted Intensive School Support Program. *A Team-Based Leadership Intervention in New York City Schools: An Evaluation of the Targeted Intensive School Support Program*. <https://doi.org/10.7249/rr4245>
- De Castro, G. B., & Jimenez, E. C. (2022). Influence of School Principal's Attributes and 21st-Century Leadership Skills on Teachers' Performance. *Journal of Humanities and Social Sciences*, 4(2), 52-63.
- Department of Education. (2017). Operational Guidelines on the Implementation of School-Based Feeding Program for School Years 2017-2022 (DepEd Order No. 39, s. 2017). <https://www.deped.gov.ph/2017/08/07/do-39-s-2017-operational-guidelines-on-the-implementation-of-school-based-feeding-program-for-school-years-2017-2022/>
- Dikmenli, M., Ozkan, V. K., Kilic, S., & Cardak, O. (2024). An Analysis of the Concept of Water

- in Secondary School Biology Textbooks. *Journal of Education in Science, Environment and Health*, 1–17. <https://doi.org/10.55549/jeseh.1417888>
- Estacio, L. R. (2024). *GUEST EDITORIAL Recognizing Teachers as Health Workers in the Philippines*. 58(18), 5–6. <https://doi.org/10.47895/amp.vi0.8146>. World
- Francisco, L. A. E., & Jimenez, E. C. (2026). Exploring the Quality of Life and Stress of Teachers' Experiences. *East Asian Journal of Multidisciplinary Research*, 5(4), 1195-1208. <https://doi.org/10.55927/eajmr.v5i4.65>
- Go, M. B., Golbin, R. A., Velos, S. P., & Bate, G. P. (2020). Filipino Teachers' Compartmentalization Ability, Emotional Intelligence, and Teaching Performance. *Asian Journal of University Education*, 16(3), 27–42. <https://doi.org/10.24191/ajue.v16i3.7912>
- Hampshire, N. (2021). *Carsey research*.
- Head, R., Review, S., Programs, P., & Learners, I. (2022). *Running Head: Scoping Review of Prevention Programs for Indigenous Learners*. 1–42.
- Ibañez, Jr., R. Y., Velza, J. F., & Bartolay, R. A. (2023). Gulayan Sa Paaralan (School Garden) Program Coordinators Production Practices: Basis for Capacity-Building Program. *International Journal of Multidisciplinary: Applied Business and Education Research*, 4(5), 1668–1681. <https://doi.org/10.11594/ijmaber.04.05.28>
- Irwin, E. D., Jewell, R., Boles, J. C., & Clay, T. C. (2024). Teacher Perceptions of a School-Based Support Program for Children with Cancer. *Continuity in Education*, 5(1), 142–152. <https://doi.org/10.5334/cie.140>
- Jimenez, E. C. (2021). Adversity and emotional quotients of public elementary school heads amidst the COVID-19. *International Journal of Didactical Studies*, 2(2), 101460. <https://doi.org/10.33902/IJODS.2021269755>
- Jimenez, E. C. (2020). Emotional quotient, work attitude and teaching performance of secondary school teachers. *Journal of Pedagogical Sociology and Psychology*, 2(1), 25–35. <https://doi.org/10.33902/JPSP.2020161079>
- Jordan, R. P., Sañosa, M. E., & Mandin, E. (2021). Management Capabilities of School Administrators vis-à-vis Performance of Elementary Schools in the Philippines International Journal of Research Publication and Reviews Management Capabilities of School Administrators vis-à-vis Performance of Elementary . *International Journal of Research Publication and Reviews*, 2(January), 1554–1562. www.ijrpr.com
- Kasim, A., Karim, M. S., Muchtar, S., Asis, A., Muliani, S., & Tenri, A. (2021). School Drug Education and Leadership Agility: Narcotics Crime Study in Children. *Asian Journal of University Education*, 17(4), 388–398. <https://doi.org/10.24191/ajue.v17i4.16204>
- Kolbe, L. (2019). School health as a strategy to improve both public health and education. *Annual Review of Public Health*, 40, 443-463. DOI: [10.1146/annurev-publhealth-040218-043727](https://doi.org/10.1146/annurev-publhealth-040218-043727)
- Mahinay, R. B., Manla, E., & Baylon, C. (2025). School-Based Management Practices and Academic Performance: Evidence from Philippine Schools. *International Journal For Multidisciplinary Research*, 7(1). <https://doi.org/10.36948/ijfmr.2025.v07i01.36693>
- Marco, N., & Jimenez, E. C. (2026). Emotional Intelligence and Occupational Stress: Its Influence on Teacher's Productivity. *Journal of Educational Analytics*, 5(2), 427-446.
- Mondejar, H. C. U., & Asio, J. M. R. (2022). Human resource management practices and job satisfaction: Basis for development of a teacher retention framework. *International Journal of Multidisciplinary: Applied Business and Education Research*, 3(9), 1630-1641. <https://doi.org/10.11594/ijmaber.03.09.04>
- Nortje, A. L., & Pillay, J. (2022). Vulnerable young adults' retrospective perceptions of school-based psychosocial support. *South African Journal of Education*, 42(1), 1–9. <https://doi.org/10.15700/saje.v42n1a1994>
- Paguio, D., Mendoza, K. J. A., & Asio, J. M. R. (2021). Challenges and Opportunities in a Local College in Time of COVID-19 Pandemic. *Studies in Humanities and Education*, 2(2), 12-18.
- Pascual, J. C., et al. (2025). Adolescent reproductive health implementation in public secondary schools of Northern Samar. *Asian Journal of Education and Social Studies*, 50(7), 2265.
- Paz, R. M. (2021). International Journal of Multidisciplinary Thought. *International Journal of Multidisciplinary Thought*, 2(December), 393–401.

- <https://doi.org/10.11594/ijmaber.02.11.10>
- Pasubillo, M., & Asio, J. M. (2023). Level of satisfaction with the school-based management process: basis for improved management system. *Journal of Elementary and Secondary School*, 1(2), 29-39.
- Pérez-Rodrigo, C., & Aranceta, J. (2003). Nutrition education in schools: experiences and challenges. *European Journal of Clinical Nutrition*, 57(S1), S82-S85. DOI: [10.1038/sj.ejcn.1601824](https://doi.org/10.1038/sj.ejcn.1601824)
- Petilo, J. T. (2024). Educational Facilities Cross Evaluation in Compliance with Sustainable Development Goals (SDG) 4.A.1. *Online Submission*.
- Phuttanu, V., Cain, P. M., Kaewhanam, K., & Kaewhanam, P. (2024). Assessment of the prevention and problem solving of drug problem with participation in schools under the local administrative organization in Sisaket province. *Asian Journal of Education and Training*, 10(1), 76–80. <https://doi.org/10.20448/edu.v10i1.5495>
- Qutieshat, A., Harthy, N. Al, & Ismaili, M. Al. (2024). Community Engagement and Dental Care: Early Insights From an Oman–Zanzibar Initiative. *Journal of Higher Education Outreach and Engagement*, 28(4), 123–134.
- Rizal, E. (2025). *Characteristics and Effectiveness of Child Malnutrition Programs in the Philippines*. 0–20. <https://doi.org/10.5070/B3.50662>
- Republic Act No. 11037. (2018). *An Act Institutionalizing a National Feeding Program for Undernourished Children in Public Day Care, Kindergarten and Elementary Schools to Combat Hunger and Undernutrition Among Filipino Children and Appropriating Funds Therefor* (Masustansyang Pagkain para sa Batang Pilipino Act). <https://issuances-library.senate.gov.ph/legislative-issuance/republic-act-no-11037>
- Robinson, K. J., David, H., Kinslow, B., & Austin, J. (2024). An Exploration of Psychological Safety in Allied Healthcare Clinical Education. *Educational Research: Theory and Practice*, 35(4), 192–200. <https://libproxy.bath.ac.uk/login?url=https://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,shib&db=eric&AN=EJ1450021&lang=es&site=ehost-live&scope=site>
- Rosales, A., Young, S., Mendez, T., Sheldon, K., & Holdaway, M. (2023). 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>
- Smith-Grant, J. C., Brener, N. D., Rico, A., & Underwood, J. M. (2020). Profiles 2020. *Prevention, Centers for Disease Control And*.
- Stoyanova, R., Shopov, D., & Dimova, R. (2024). Knowledge And Attitude Regarding School-Based Sexual Health Education Programs Among High School Learners in Bulgaria: A Cross-Sectional Study. *Proceedings of International Conference on Research in Education and Science*, 10(1), 223–231.
- Tonich. (2021). The role of principals' leadership abilities in improving school performance through the school culture. *Journal of Social Studies Education Research*, 12(1), 47–75.
- Wabe, M. E. L. P., Pontillas, P. V., & Comon, J. D. (2024). Practices and challenges of school-based feeding program of Opol West District. *European Modern Studies Journal*, *8*(4), 278–318. [https://doi.org/10.59573/emsj.8\(4\).2024.13](https://doi.org/10.59573/emsj.8(4).2024.13)
- Jiang , W., & Jimenez , E. (2026). Developing a Self-Management Skills Enhancement Program for Primary School Learners. *International Journal of Education and Humanities*, 6(2), 373–391. <https://i-jeh.com/index.php/ijeh/article/view/462>
- UNESCO. (2016). *Global Education Monitoring Report*
- UNESCO. (2021). *Global Education Monitoring Report*.
- WHO, & UNICEF. (2018). Drinking Water, Sanitation and Hygiene in Schools: Global Baseline Report. *Unicef*, 84. <https://gdc.unicef.org/resource/drinking-water-sanitation-and-hygiene-schools>
- Zerga, A. A., Tadesse, S. E., Ayele, F. Y., & Ayele, S. Z. (2022). Impact of malnutrition on the academic performance of school children in Ethiopia: A systematic review and meta-analysis. *SAGE Open Medicine*, *10*. <https://doi.org/10.1177/20503121221122398>