Asian Journal of Education and Human Development (AJEHD) Volume 2, Issue 1, January - December 2021

School-Based Feeding Program in Ilocos Sur: Impacts on Health and Educational Outcomes

Joy Caren "JC" R. Tablante1*, Edelyn A. Cadorna2

1*Department of Education, Schools Division of Ilocos Sur, Philippines
2University of Northern Philippines, Philippines
1*joycarenjc.rafanan@deped.gov.ph
2edelyn.cadorna@unp.edu.ph

ABSTRACT

The Department of Education created a conditional food transfer program to improve the health and school performance of Filipino children. This descriptive correlational study focused on the impact of the School-Based Feeding Program (SBFP) of public elementary school beneficiaries in the Schools Division of Ilocos Sur for School Year 2019-2020. It involved 625 school heads, teachers, representatives of partner organizations, and parents from the top 11 districts with the most number of severely wasted beneficiaries. The findings revealed that partner organizations highly supported the feeding program in terms of financial and technical resources. SBFP is very highly implemented through the effective utilization of its operational guidelines and well-managed strategies of its eligible and complementary activities. Moreover, it facilitates the rehabilitation of the nutritional status of the beneficiaries, contributes to high classroom attendance, and improves their health and nutritional values and behaviors. In addition, the feeding program is also effective in the attainment of high school performance with decreased dropout rate, increased promotion rate, and reduced repetition rate for the last three years. The respondents raised the following concerns: the incapacity of parents to consistently attend meal preparation and cooking, presence of repeat beneficiaries, delayed budget release, extra effort in buying commodities with receipts, and SBFP Core groups not always following the usual cycle menu. Therefore, the researcher crafted an intervention plan to improve the implementation and impact of the feeding program.

Keywords: School-Based Feeding Program, Food for Education Program, Gulayan sa Paaralan Program, School Health and Nutrition, School Performance

INTRODUCTION

Educational circles widely refer to Maslow's Hierarchy of Needs as a popular motivation theory which prioritizes needs in order of importance (Maslow, 1943). In this theory, Abraham Maslow suggested that before individuals meet their full potential, they need to satisfy a series of needs. The physiological well-being of the pupils is critical, and it ranks first in the hierarchy of needs. These are the most fundamental needs, such as food, water, and shelter, all tied to a person's survival. If the students have not met their physiological requirements, the teacher should understand that they may not focus entirely on learning. For example, a student would not enter a classroom with an empty stomach.

Maslow's hierarchy of needs has tremendous implications for the practice of effective teaching and learning. The order implies that people cannot achieve self-actualization unless their basic requirements, such as physiological and safety demands, are addressed. When the government has not given sufficient food or healthcare to children,

they are not ready or able to learn. The hierarchy explains why initiatives like Head Start, adequate public health care for children, and free school lunches are so important. Children just cannot learn without these programs. Furthermore, if children are to learn, they must feel comfortable in their schools, with each other, and with their teachers (Bruce, 2016).

Since 1997, the Philippines' Department of Education (DepED) has been running FFE programs. The country's initial FFE program focused on alleviating short-term hunger among schoolchildren. However, the department has modified this objective several times to address inadequacies found in earlier programs. For instance, families were recipients of the Malusog na Simula, Yaman ng Bansa, and Food for School (FSP) programs in 2006; it targeted extreme hunger among households in chosen geographical regions. The FSP helped children in public schools who were in preschool or first grade. Every day that a child completed the class, each beneficiary family got a kilogram of rice. To ensure school attendance, the teacher gave the rice to the student after class. Meanwhile, rice delivery in Day Care Centers was facilitated by the Department of Social Welfare and Development (DSWD) (Senate Economic Planning Office, 2008).

The Department of Education (DepEd) likewise restarted its Breakfast Feeding Program in 2010-2011. Its intention was to alleviate the micronutrient deficiencies problem and short-term starvation among the pupils. DepEd considers short-term starvation as a circumstance in which children skip breakfast and take a long distance to go to school. As a result, the department came up with the School-Based Feeding Program (SBFP) to enable schools to choose the optimal time to deliver the feeding according to children's dietary needs, rather than limiting it to only breakfast (Umali, 2014).

The feeding program seeks to recover the nutritional condition of severely wasted and wasted pupils after providing healthy meals and other health interventions for 120 days. It also intends to promote the class attendance of beneficiaries to more than 85 percent annually, secure 100 percent deworming before feeding, and perform group daily handwashing and toothbrushing sessions. To support the feeding program, these activities encourage health-promoting practices, foster Gulayan sa Paaralan, and stimulate communal vegetable backyard planting. Furthermore, through the K to 12 Basic Education Curriculum alternative modalities, these methods counterpart the government's health and poverty reduction programs. Therefore, it is a sound investment in education (DepEd Order No. 51, s. 2016).

For the implementation of SBFP, beneficiary schools managed the SBFP successfully in 2013–2014, with school administrators and other personnel undergoing seminar workshops before the program started. In addition, schools facilitated the program implementation by a suitable feedback mechanism with DepEd division staff tasked to monitor it. The SBFP also seemed to operate best when combined with the DepEd's deworming, GPP, and EHCP programs. School leaders emphasized the need for proper hygiene and GPP and the necessity of deworming (Tabunda et al., 2016).

Furthermore, Rivera (2017) revealed in her study that the strategies implemented by SBFP were very satisfactory. Participants indicated the nutritional assessment, determining SBFP beneficiaries, assembling the SBFP core group, and feeding as excellent. They were also satisfied with program evaluation assessment, report submission,

Asian Journal of Education and Human Development (AJEHD) Volume 2, Issue 1, January - December 2021

procurement, storage, and control system of commodities, EHCP integration, Gulayan sa Paaralan, and delivery system. SBFP highly enhanced the children's diet, wellness values, and conduct. According to the participants, the SBFP significantly improved the children's health, nutrition, and behavior during the program's operation. Nevertheless, the beneficiaries should internalize these enhancements.

On the contrary, some people considered that school food programs were excessive (Kent, 2007). Children are welcome to bring meals from home that they or their families have prepared. They can also use the money to buy food at or near the school. Alternatively, they can eat after school. However, some individuals may be concerned that such programs will supply low-quality food and be vulnerable to contamination and other risks.

On the attainment of school performance indicators, Adelman et al. (2008) and Ahmed (2004), as cited by Mkanyika (2014), argued that school feeding programs enhanced school retention and performance both in short and in the long run. In the short run, school meals could alleviate hunger and make children concentrate and learn better to improve school performance, hence minimize dropout.

All the school principals believed that the initiative had a beneficial impact on reducing short-term hunger in schools. They also stated that the feeding program had significantly reduced school enrollment, dropout, and absenteeism issues among schoolaged youngsters. In addition, according to reports, the food provided to the beneficiaries is satisfactory, and they do not go hungry during school hours (Zenebe et al., 2018).

However, there is insufficient information about the impact of school feeding on dropout rates. Several studies have indicated that school feeding programs, including inschool meals and take-home rations, have a favorable influence on lowering dropout rates. Unfortunately, these studies suffer from statistical problems. Additionally, several studies have found no evidence of an impact of school feeding on dropout rates. However, these studies also have issues in the approach used to identify the causal effects (Adelman et al., 2008).

With the support of partner organizations, Lu and Dacal (2020) recommended that SBFP Coordinators should connect with other agencies/ linkages and tap the support from the Rural Health Units and LGUs and the participation of different stakeholders. For instance, lectures for the beneficiaries' parents are essential to raising awareness about adequate nutrition. Furthermore, implementing schools should involve professional social workers at various levels of stages and organization to obtain technical assistance for the program's service delivery for a significant impact and quality. They could also tap the help of stakeholders, donors, and the community to enhance the program's efficiency and effectiveness.

DepEd has been conducting the School-Based Feeding Program for years and the government has only undertaken a few evaluations on it. However, these reviews frequently miss the diversity in structure, implementation, and assessment of the program. Meanwhile, no outside organization or private individual has assessed the SBFP in its modern version; practically all studies were carried out by the Philippine Institute for Development Studies (PIDS), possibly because the program's limited budget hampered its possible effects before SY 2014-15. However, given the program's considerably larger scope, an impact evaluation

study is required. Moreover, these studies failed to reveal the relationship between SBFP and its complementary activities, neither on the attainment of its objectives and sustainability. Hence, this study endeavored to determine if the school-based feeding program has achieved its goals and made a substantial difference in public elementary schools.

This study aimed to evaluate the impact of the school-based feeding program on the beneficiaries health and educational outcomes. Specifically, it sought to determine the following; 1) level of support of partner agencies in the implementation of the program, 2) extent of implementation of the program, 3) input of the program along improvised health and educational outcomes; and 4) to prepare an intervention plan to improve the implementation of the program.

Given this premise, the internal and external stakeholders may also fully understand and appreciate their roles in the active and consistent implementation of the school-based feeding program, leading to their active participation and contribution to its successful implementation. If pupils are sustained with proper nutrients from their food and are equipped with positive health-promoting values and behavior in their houses and schools, they would have better access to quality education and eventually quality life. The parents and community residents may then be encouraged to actively participate in implementing the School-Based Feeding program and be informed about the significance of having a healthy body and mind in their quest towards the attainment of their goals in life. Lastly, research enthusiasts may use this study as a viable material in a similar study but another locale and a broader scope.

METHODOLOGY

This study utilized the descriptive-correlational methods of research. The researcher carried out this study in the public elementary school beneficiaries of the Schools Division of Ilocos Sur whereby 625 agreed to participate. Moreover, the researcher randomly selected the respondents from the top 11 districts with the most numbered of severely wasted beneficiaries. There were five groups of respondents: the school heads, the SBFP coordinators, clinic teachers, parents, and partner agencies. The study obtained the sample size using the Yamane Formula.

The study made use of a questionnaire developed by the researchers, and validated by experts in the field. The questionnaire has a validity index of 4.868. It was pilot tested and have a Cronbach's Alpha reliability of .867. According to Howard (2018), a frequently cited acceptable range of Cronbach's alpha is a value of 0.70 or above. Data on School performance were taken from the Division Planning Office. The respondents of the study were the school heads, SBFP implementer that include the coordinators, clinic teachers, and representatives of partner agencies.

To analyze the data collected in this study, the researcher used the following statistical tools: frequency, percentage and means.

Asian Journal of Education and Human Development (AJEHD) Volume 2, Issue 1, January - December 2021

RESULTS AND DISCUSSIONS

Level of Support of Partner Agencies

Table 1Summary of the Level of Support of Partner Agencies

Indicators	Mean	Interpretation
A. Financial Support	3.53	High
B. Physical Support	3.30	Fair
C. Technical Support	3.50	High
Overall	3.44	High

Table 1 presents the overall support of partner agencies in the implementation of the school-based feeding program of the public elementary school beneficiaries in the Schools Division of Ilocos Sur. As revealed on the table, on the overall, the respondents rated the level of support provided by partner agencies in conducting the feeding program as "High" (Mean = 3.44). It demonstrates that the implementing schools, parents, public and private sectors acknowledge the value and significance of SBFP in promoting nutritional and educational achievement among the beneficiaries. The partner organizations considered the support they provided to the feeding program adequate.

Partner organizations/associations allocate funds or assist the schools in sourcing funds to successfully implement the school's health and nutrition programs, especially for the SBFP eligible and complementary activities. However, physical assistance was given less priority by the partner organizations/associations and focused more on sourcing and allocating funds for the program's overall implementation. This finding suggests, further, that the school may divide the funds for the expenses of physical and technical resources needed. The result of the study conforms to the finding of Adarayan-Morallos' (2018) that although the majority of the necessary equipment and facilities for the feeding program were available, many were inadequate or congested, rendering it ineffective.

In the study of Adarayan-Morallos (2018), most of the necessary equipment and facilities for the feeding program were available, but many were inadequate or congested, rendering it ineffective. Furthermore, this runs contrary to the basic guidelines on food safety standards outlined in DepEd Order No. 14, s. 2005, and No. 52, s. 2008. These provisions highlighted the availability of drinkable water and handwashing amenities, food covers, and containers for storage in schools. Therefore, the researcher recommended in her study that the school must upgrade its current facilities and adhere to other regulations that would provide children with a healthy school environment.

The level of Implementation of the School-Based Feeding Program

Table 2Summary of the Extent of Implementation of Eligible Activities of the School-Based Feeding Program

Eligible Activities	Mean	Interpretation
A. Procurement Process	4.43	Very High
B. Health and Nutritional Assessment	4.62	High
C. Feeding Proper	4.45	High
D. Partnership-Building and Creation of Local Alliance	3.94	High
E. Liquidation of Funds	4.68	Very High
F. Submission of Reports	4.76	Very High
Overall	4.48	Very High

Eligible Activities

Overall, the extent of implementation of the SBFP along eligible activity is "Very High," (Mean = 4.48). Please refer to Table 2. The feeding initiative was well-managed by the division's implementing schools. However, schools must work harmoniously with the partner agencies and parents to sustain their 100% support to the program. Therefore, discussing the importance of partnership and alliance with them to impact the beneficiaries significantly is necessary.

The school heads were excellent in the preparation, documentation, and submission of reports. However, though assessed as high, school heads should take more effort in reaching out to stakeholders to support and supplement the implementation of the feeding program.

The results support the claim of Cranston (2001) that institutions must be prepared to connect with local partners to address any shortcomings in physical infrastructure and resources. Most of them understand that they cannot operate without the community's assistance. They will be successful in accomplishing their goals if they have a strong community link (Allawan, 2012).

Complementary Activities

Table 3Summary of the Extent of Implementation of Complementary Activities of the School-Based Feeding Program

Complementary Activities	Mean	Interpretation
A. Deworming	4.68	Very High
B. Good Grooming and Personal Hygiene	4.66	Very High
C. Integration of the Essential Health Care Program	4.09	High

Asian Journal of Education and Human Development (AJEHD) Volume 2, Issue 1, January - December 2021

Complementary Activities	Mean	Interpretation
D. Gulayan sa Paaralan Program	4.26	Very High
E. Waste Segregation and Composting	4.29	Very High
F. Productivity, Life and Values Development Training	4.08	High
Overall	4.34	Very High

The School-Based Feeding Program's complementary activities are very highly implemented. Majority of the complementary activities are very implemented. The SBFP Core Group and all teachers conducted and supervised these activities. Besides, these programs are being prioritized by most schools together with SBFP as reflected on their enhanced School Improvement Plan (eSIP) and Annual Implementation Plan (AIP). Thus, these programs have a budget of work and allocated funds for their effective and efficient implementation.

The high level of implementation of the other complementary activities like the Essential Health Care Program and Productivity, Life and Valued Development Training, Integration of the Essential Health Care Program Productivity, Life, and Values Development Training could be due to the high cost of EHCP packages, handwashing and toothbrushing facilities, and the conduct of training programs. Moreover, EHCP should be financially covered by the LGUs depending on the number of children involved in the project and should have strong support from Regional and Division officials in establishing a linkage to LGU sans schools' administrators, teaching, and non-teaching personnel (DepEd Order No. 65, s. 2009).

In relation to this, Adarayan-Morallos (2018) notes that vital health care, routine deworming, careful handwashing, waste segregation, personal cleanliness, good grooming, and food safety were all performed and monitored. For instance, the division nurse administers deworming twice annually. In addition, according to documents kept by teachers who dealt with health-related subjects, Pupil-beneficiaries' daily grooming and cleanliness were also constantly observed. These practices align with one of the program's goals: to help beneficiaries adopt positive health-promoting values and behaviors.

This contradicts the findings of Castor (2016), who found that the Adopt-a-School Program's health and nutrition component of the Schools Division of Vigan is very highly implemented. Most sponsoring/adopting organizations generally extend their support along with health and nutrition.

Impact of School-Based Feeding Program

Improved Nutritional Status of the Beneficiaries

 Table 4

 Nutritional Status Assessment Before Feeding (Baseline) and After Feeding (Endline)

	Before	Feeding	After Feeding	
Nutritional Status	f	%	f	%
Wasted	1874	75.93	159	6.44
Severely Wasted	594	24.07	29	1.18
Normal	-	-	2280	92.38
Total	2468	100	2468	100

Table 4 compares the beneficiaries' nutritional status before and after the feeding. The table reveals a marked decrease in severely wasted from 594 (24.07%) to 29 (1.18%), while the wasted beneficiaries from 1,874 (75.93%) to 159 (6.44%). In addition, SBFP rehabilitated 2,280 (92.38%) beneficiaries to normal. It follows from these findings that the feeding program achieved its first target of elevating the students' nutritional status by at least 70%. The beneficiaries were required to finish their food, especially meals with vegetables. Some pupils were hesitant at first to eat vegetables, especially those who belong to Kindergarten and Grade 1. Hence, the teachers were very patient in feeding them. At the end of the feeding program, gradual change was observed in their nutritional status, and these children became vegetable lovers. They realized the importance of eating vegetables for their health. In addition, program managers, implementers, and beneficiaries collaborated to successfully rehabilitate the SW and W by effectively using the facilities, resources, and strategies (Rivera, 2017).

Furthermore, the result confirms the evaluation done by the Philippines Institute of Developmental Studies (PIDS) in 2015, as cited by Yamaguchi and Takagi (2018), SBFP had restored 73% of the malnourished beneficiaries to normal nutritional status after the feeding. However, the quality of some undernourished children remains unchanged perhaps because DepEd conducted the feeding for a limited duration. Schools only provide food for 120 days in a year, and the improved conditions may not last until the summer vacation following the implementation of this program. Furthermore, feeding has only been delivered to a selected group and does not appear to benefit all children.

Asian Journal of Education and Human Development (AJEHD) Volume 2, Issue 1, January - December 2021

Increased Classroom Attendance to more than 85%

Table 5Percentage of attendance of beneficiaries in the SBFP terminal reports for the past three years

School Year	Average % of Attendance	% Annual Increase/ Decrease
2017-2018	99.94	
2018-2019	99.95	.01
2019-2020	100.0	(.05)
		.03

Table 5 displays the percentage of attendance of the beneficiaries for the past three years based on the submitted SBFP Terminal Reports in the Division Office. The table shows an increase of .03% in the attendance of the SBFP beneficiaries for the last three years based on the program terminal reports of the division. Furthermore, the average attendance of the beneficiaries was 99.94% to 100% from SY 2017-2018 to SY 2019-2020. Therefore, this means that the feeding program was effective in attaining its second goal. It was a great motivation for the beneficiaries to come to school and attend their classes, especially those children who tend to be absent and tardy. Since the feeding started, all the beneficiaries were present and completed the 120 feeding days. It supports the study of Rivera (2017) that the School-Based Feeding Program effectively improves classroom attendance. Her research showed that feeding enhanced the attendance of the beneficiaries to at least 98.86%.

Improved children's health and nutritional values and behaviors

Table 6Degree of Impact of SBFP on The Children's Health and Nutritional Values and Behavior

Items		SBFP Coordinators	Clinic Teachers	Partner Agencies	Parents	As a Whole
	M	M	M	M	M	M
	DR	DR	DR	DR	DR	DR
1 The SBFP beneficiaries wear clean clothes, good haircuts for boys, and combed hair for girls.	4.54	4.53	4.37	4.39	4.37	4.44
	CT	CT	CT	CT	CT	E
2 Through the K to 12 Curriculum and its alternate modes of instruction, the school	4.57	4.53	4.43	4.38	4.37	4.46
	CT	CT	CT	CT	CT	E

Items	School Heads	SBFP Coordinators	Clinic Teachers	Partner Agencies	Parents	As a Whole
	M DR	M DR	M DR	M DR	M DR	M DR
provided health and nutrition information						
and awareness to target recipients.						
3 The beneficiaries conduct a group daily hand	4.60	4.63	4.51	4.39	4.38	4.50
washing and tooth brushing activities that have impacted the development of positive health-promoting values and behaviors	CT	СТ	СТ	СТ	CT	E
4 There is a 100% deworming of all the target	4.71	4.60	4.61	4.55	4.34	4.56
beneficiaries.	CT	CT	CT	CT	CT	E
5 The SBFP encourages the implementation of	4.62	4.67	4.62	4.47	4.39	4.55
the Gulayan sa Paaralan and vegetable backyard gardening in the community.	CT	СТ	СТ	СТ	СТ	E
6 The beneficiaries fall in line while waiting for	4.41	4.51	4.48	4.45	4.34	4.44
his/her turn, not talking when their mouth is complete, and sit appropriately while eating.	CT	СТ	СТ	СТ	СТ	E
7 The beneficiaries say graces/praying before	4.46	4.45	4.47	4.42	4.44	4.45
and after meals	CT	CT	CT	CT	CT	E
8 The beneficiaries say "please and thank you"	4.65	4.59	4.52	4.47	4.46	4.54
when requesting for the food to be passed.	CT	CT	CT	CT	CT	E
9 Parents of the beneficiaries are focusing more	4.61	4.57	4.58	4.39	4.51	4.53
on how to improve the health status of their children.	CT	СТ	СТ	СТ	СТ	E
10 Parents give importance to the positive	4.61	4.52	4.52	4.43	4.31	4.48
effects of nutrition on their children's	CT	CT	CT	CT	CT	E
education by doing their responsibilities better.						
Overall	4.58	4.56	4.51	4.43	4.39	4.49
	Ε	Ε	Ε	Ε	Ε	Ε
Statistical Limit Item Descri	iptive Ra	ting		Overall De	escriptive	Rating
4.21-5.00 Complete	ly True (0	CT)			ellent (E)	
•	True (MT	•			Good (V	G)
2.61-3.40 Generall		-			ood (G)	
<i>5 ,</i>	True (ST)				Fair (F) Poor (P)	
1.00-1.00 NOt at al	1.00-1.80 Not at all True (NT)					

The degree of effect of the School-Based Feeding Program on the learner's health and nutritional values and behavior is presented in Table 6. Overall, as evidenced by the mean rating of 4.49, the SBFP significantly affects children's health, nutritional values, and behavior. Furthermore, the finding suggests that the children's health, nutritional values, and behavior significantly improved after the feeding program.

Asian Journal of Education and Human Development (AJEHD) Volume 2, Issue 1, January - December 2021

Taken individually, item 4, there is a 100% deworming of all the target beneficiaries, has the highest (M = 4.56) impact on the beneficiaries' health and nutritional values and behavior. On the other hand, item 1, the SBFP beneficiaries wear clean clothes, good haircuts for boys, and combed hair for girls, and item 6, the beneficiaries fall in line while waiting for his/her turn, not talking when their mouth is full, and sit while eating have the lowest (M = 4.44) impact, however, interpreted as "Completely True." These imply that clinic teachers and SBFP coordinators deworm the beneficiaries regularly with the consent of their parents. Furthermore, teachers discussed the importance and benefits of good grooming and personal hygiene to the parents and children. Teaching children about a good diet is a constant process that should happen in the classroom and at home. The positive effects of the SBFP on beneficiaries' health practices and values proved that the program was a substantial achievement since it may significantly improve their nutrition and academic achievement (Solania & Cubillas, 2020).

School Performance

Table 7School Performance for the Past Three School Years

	<i>,</i> , -					
School Year	Dropout Rate	Annual % Increase/ Decrease	Promotion Rate	Annual % Increase/ Decrease	Repetition Rate	Annual % Increase/ Decrease
2017- 2018	1.42		97.29		1.29	
2018- 2019	0.60	(88.73)	97.83	.56	1.56	20.93
2019- 2020	0.76	26.67	98.81	1.00	0.56	(64.10)
Mean		(31.03)		0.78		(21.59)

Dropout Rate

Table 7 shows the dropout rate of public elementary school beneficiaries per district in the Schools Division of Ilocos Sur for the past three years. It is evident in the table that the schools have decreased dropout rate. This finding is consistent with the data in table 5 showing that SBFP is successful in improving the classroom attendance of the beneficiaries; thus, it is also effective in reducing the school dropout. Furthermore, the program contributes to learning by avoiding hunger and enhancing the children's cognitive ability. This conforms to the results of the study of Zenebe et al. (2018) that beneficiary schools had a somewhat lower dropout rate (0.9 percent) than non-beneficiaries (1.7 percent). Parents are grateful for the feeding program and hope to see it continue in the future because it has significantly improved the health and nutritional status of their children. Thus, they make

sure to send their children to school, especially those parents who work early and have no time to help their children get ready.

Promotion Rate

Most of the schools considered in the study have increased promotion rate for the last 3 years. On the average, promotion rate increased annually by 0.78%. There is a consistent increase the promotion rate every year but a higher increase is noted for 2019-2020. Children with good nutrition and proper hygiene perform better in class. Increased learning can happen because of children's concentration, enthusiasm, full of energy, and motivation. These findings conform with the results yielded from Chinyoka's (2014) investigation that malnutrition impacts students' physical growth, cognitive development, academic performance, health, and survival. In addition, malnutrition exacerbates poverty by rising healthcare expenses. Hungry and undernourished grade seven students cannot take physical work and sports seriously, are less likely to attend school, and cannot concentrate and learn if they do.

Repetition Rate

Repetition rate in the schools decrease annually by 21.59 percent. There is, however, an increase on 2018-2019 but it abruptly decreased in the last year (2019-2020). The abrupt increase in the repetition rate was attributable to the presence of non-readers. Supervisors completed reading assessments before the completion of the school year. After remedial classes, they did not promote students who did not improve their reading skills to the next grade level. This contradicts the claims of Taylor and Ogbogu (2016) that although the School Feeding Program is a significant educational initiative that may enhance school enrolment, achievement, and retention as well as efficiency and school completion, the participants in their study believe that the pupils' test scores had nothing to do with the food program. The impact of school feeding on pupils cannot be uniform across elementary schools, which explains why students' performance in standardized tests differs.

Most Common Problems Encountered in the Implementation of School-Based Feeding Program

The researcher discovered significant challenges with the SBFP implementation on the randomly selected elementary school beneficiaries through the interviews and focus group discussions. The inability of parents to regularly attend the preparation and cooking of meals. In the first weeks of the feeding program, school leaders and teachers reported high parental involvement and engagement. However, as the program continues, the number of parents and volunteers decreases. A variety of influences contributed to the decline in involvement, including that both parents had to work full-time. Furthermore, there were instances when the school rearranged the orientation meeting to meet the parents' schedule.

The presence of repeat beneficiaries or pupils included in the feeding program for the past school years because some children did not achieve normal nutritional status after the preceding SBFP. The rest of the children achieved normal nutrition status after the

Asian Journal of Education and Human Development (AJEHD) Volume 2, Issue 1, January - December 2021

previous SBFP. However, they relapsed to severely wasted or wasted nutritional status in the current school year. It can be due to the SBFP's limited period of implementation. Schools serve the food for 120 days per year, and the improved conditions may not sustain throughout the summer break following this program.

Third, budget delays for the feeding program happen yearly. To meet the program's timeline, they had to borrow money from the school canteen or use other school funds. There are instances that they use their personal money to finance the program temporarily. However, the implementers returned the borrowed money immediately upon receiving the SBFP funds.

For the SBFP coordinators, going to the market and grocery stores daily or weekly after classes or weekends was also regarded as a challenge by the respondents. Some teachers claimed that they were already overworked, particularly when it comes to the feeding program, maintaining the school canteen, and attending their lessons.

Lastly, schools do not always follow the typical cycle menu. Some of the ingredients, especially the vegetables stated in the standard menu, were not available in the school garden or market.

Proposed Intervention Plan to Improve the Implementation of the School-Based Feeding Program

Based on the study's findings, the school beneficiaries encountered challenges and problems implementing the feeding program. Thus, the researcher proposed an intervention plan to improve the implementation of the School-Based Feeding Program in the Schools Division of Ilocos Sur.

Table 8Retrofitting the School-Based Feeding Program as a Platform for Sustainable and Impact-Driven Education and Nutrition Intervention

Area of Concern	Objectives	Strategies	Person(S) Responsible	Success Indicator
1. Nutritional Assessment and Identification of Beneficiaries	 To train teachers in the appropriate use of BLSS-nutritional SHD's assessment equipment and BMI software. 	 Conduct a training workshop on proper and effective use of nutritional assessment equipment and BMI software provided by BLSS-SHD. 	 Division SBFP Technical Working Group School Heads Health and Nutrition Coordinators 	100% participation of school heads and health and nutrition coordinators
2. Partnership- Building and Creation of Local Alliance	 A Memorandum of Agreement will be used to establish the collaboration (MOA). 	Sign a Memorandum of Agreement (MOA) with partner agencies containing the terms of the partnership and commitment with	 Division SBFP Technical Working Group School Heads SBFP Core Group Partner Agencies 	100% of the school beneficiaries have MOA with partner agencies

Area of Concern	Objectives	Strategies	Person(S) Responsible	Success Indicator
		concrete support modes (human resources, financial and physical donations, etc.)		
3. Capacity- Building for SBFP Implementers	 To conduct capacity- building on improving SBFP implementation. 	 Conduct consultative workshops and learning exchange activities that will serve as an avenue to gather feedback, challenges, best practices, and technical assistance. 	 Division SBFP Technical Working Group School Heads SBFP Core Group Partners Parents 	participation of School Heads, SBFP Core Groups, parents, and representatives of partner agencies
4. Commodities	 To contextualize the DepEd standardized recipes based on the needs of beneficiaries and availability of commodities in the locality. 	 Conduct a consultation meeting to contextualize the cycle menu and plan the GPP annual crop guide. 	 School Heads SBFP Core Groups Gulayan sa Paaralan Program Coordinators 	participation of school heads, SBFP Core Groups, and GPP Coordinators
5. Integration of Essential Health Care Program	To enhance the implementation of the Essential Health Care Program.	 Provide an EHCP package that consists of a toothbrush, toothpaste, soap, and deworming tablets for each beneficiary. 	 Division SBFP Technical Working Group School Heads SBFP Core Group Partner Parents of the Beneficiaries Other Donors 	100% of the beneficiaries received EHCP packages on time
6. Productivity, Life, and Values Development Training	 To sustain family food security, increase school retention, and improve the nutritional status of children in the long term. 	 Conduct training for parents on values formation, climate- smart gardening, and health & nutrition education. 	 Division SBFP Technical Working Group School Heads SBFP Core Group Partner Parents of the Beneficiaries 	

CONCLUSIONS

The study revealed that partner organizations/associations highly supported the implementation of the School-Based Feeding Program. The Program is very highly implemented by effectively utilizing its operational guidelines and well-managed strategies

Asian Journal of Education and Human Development (AJEHD) Volume 2, Issue 1, January - December 2021

of its eligible and complementary activities. It promotes beneficiaries to regain their nutritional status, enhances their health and nutritional values and behaviors, and increases classroom attendance. It is successful in the attainment of its education and nutrition objectives and high school performance. The schools generally have decreased dropout rate, increased promotion rate, and reduced repetition rate for the last three years. The respondents disclosed the following problems and issues in the implementation of SBFP: the inability of parents to regularly attend the preparation and cooking of meals, presence of repeat beneficiaries, delayed release of budget for the feeding program, additional work in buying commodities with receipts, lack of support by partner agencies, and SBFP Core groups did not always follow the standard cycle menu.

RECOMMENDATIONS

The schools should maximize the SBFP advocacy, campaign, and resource mobilization to improve the support of partner agencies and assure the continuity of the feeding program. They must improve the Integration of Essential Health Care Program and Productivity, Life and Values Development of the parents of beneficiaries to achieve their very high implementation. After the 120 days, schools and partner agencies must provide supplemental feeding, technical assistance for functional home and communal vegetable gardens, nutritious menus and family hygienic practices, nutrition education, and training on food safety at home to attain sustainable impacts.

ETHICAL STATEMENT

The researchers submitted the study to the Ethics Review Committee and did not find any ethical inappropriateness. Considerations in undertaking this study were taken into account because of the vulnerability of the respondents and in obtaining informed consent, maintaining anonymity, confidentiality, and equity and equality. The researchers presented the information to enable persons to voluntarily decide whether to participate as respondents to the study. The researchers conducted the study without any conflicts of interest.

ACKNOWLEDGMENT

The researchers gratefully acknowledge all those who have extended their time, effort, most valuable guidance, encouragement, and assistance that contributed to the realization of this study: Dr. Erwin F. Cadorna, President, University of Northern Philippines for the support.

REFERENCES

Adelman, S. W., Gilligan, D. O., & Lehrer, K. (2008). How effective are food for education program. Educationlinks. doi:10.2499/0896295095FPRev9

- Aiken, A. M, Davey, C., Hargreaves, J. R., & Hayes, R. J. (2015). Re-analysis of health and educational impacts of a school-based deworming programme in western Kenya: A pure replication. *International Journal of Epidemiology, 44*(55), 1572-1580. doi: 10.1093/ije/dyv127
- Alipala, J. S., Jerusalem, J., & Aguirre, E. (2016, January 29). Parents wary of deworming. *Inquirer*. https://newsinfo.inquirer.net/759773/parents-wary-of-deworming#ixzz6o6y7J2yE
- Aliyar, R., Gelli, A., & Hamdani, S. H. (2015). A review of nutritional guidelines and menu compositions for school feeding programs in 12 countries. *Frontiers in Public Health,* 3(148), 1-13. doi:10.3389/fpubh.2015.00148
- Cabardo, J. R. (2016). Levels of participation of the school stakeholders to the different school-initiated activities and the implementation of school-based management. Journal of Inquiry & Action in Education, 8(1), 81-94. https://files.eric.ed.gov/fulltext/EJ1133596.pdf
- Department of Education. (2018). Wash in schools: three-star approach. http://www.fitforschool.international/wp-content/ezdocs/TSA_WinS_Booklet_Sanitation_FINAL_WEB_20181105.pdf
- DepEd Order No. 15, S.G.I.S.B.F.P.F.Y.2018. (2018). https://www.deped.gov.ph/2018/03/28/do-15-s-2018-supplemental-guidelines-on-the-implementation-of-school-based-feeding-program-for-fiscal-year-2018/
- DepEd Order No. 39, O.G.I.S.B.F.P.S.Y.2017-2022. (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/
- DepEd Order No. 51, I.S.B.F.P.S.Y.2016-2017. (2016). https://www.deped.gov.ph/2016/06/29/do-51-s-2016-implementation-of-the-school-based-feeding-program-for-school-year-2016-2017/
- DepEd Order No. 13, I.G.D.R.U.M.O.O.E.A.S.I.O.F.M.S. (2016). https://www.deped.gov.ph/2016/03/11/do-13-s-2016-implementing-guidelines-on-the-direct-release-and-use-of-maintenance-and-other-operating-expenses-mooe-allocations-of-schools-including-other-funds-managed-by-schools/
- DepEd Order No. 223, S.I.G.P.P.P.E.S.S.N. (2016). https://www.deped.gov.ph/2016/12/14/december-14-2016-dm-223-s-2016-strengthening-the-implementation-of-the-gulayan-sa-paaralan-program-in-public-elementary-and-secondary-schools-nationwide/
- DepEd Order No. 37, I.D.E.D.S.W.D.F.S.B.F.P.S.Y.2014-2015. (2014). https://www.deped.gov.ph/2014/08/18/do-37-s-2014-implementation-of-the-department-of-education-deped-and-department-of-social-welfare-and-development-dswd-funded-school-based-feeding-program-sbfp-for-school-year-sy-2014-2015/
- DepEd Order No. 05, I.G.I.G.P.S.W.M.T.P.U.N.G.P. (2014). https://www.deped.gov.ph/2014/02/07/do-5-s-2014-implementing-guidelines-on-the-integration-of-gulayan-sa-paaralan-solid-waste-management-and-tree-planting-under-the-national-greening-program-ngp/

Asian Journal of Education and Human Development (AJEHD) Volume 2, Issue 1, January - December 2021

- DepEd Order No. 65, I.E.H.C.P.S.C. (2009). https://www.deped.gov.ph/2009/06/22/do-65-s-2009-implementation-of-essential-health-care-program-ehcp-for-the-school-children/
- Faisal, Z. (2018, April 13). Maslow's hierarchy of needs for learners. The e-learning network. https://www.eln.io/blog/maslows-hierarchy-of-needs-for-learners
- Inocian, R. B, & Nuneza, L. M. (2015). The "gulayan sa paaralan" (school vegetable garden) in response to sustainable development. *European Scientific Journal*, 11(8). https://eujournal.org/index.php/esj/article/view/5263
- Lawson, T. M. (2012). Impact of school feeding programs on educational, nutritional, and agricultural development goals: A systematic review of literature [Master's thesis, Michigan State University]. AgEcon Search. https://ageconsearch.umn.edu/record/142466?In=en
- Leabres, G. (2020). Teachers' s involvement and the level of effectiveness of the school-based feeding program [Master's thesis, Tomas Del Rosario College]. Research Gate. doi:10.13140/RG.2.2.24890.00968
- Mkanyika, A. M. (2014). Influence of school feeding programe on pupil's participation in public primary schools in flood prone areas of Garsen Division, Tana Delta District, Kenya [Master's Thesis, University of Nairobi]. University of Nairobi Research Archive. http://erepository.uonbi.ac.ke/handle/11295/77395
- Tabunda, A. M. (2015). How is gov't managing school feeding program. Rappler. http://www.rappler.com/thought-leaders/81799-education-school-feeding-program