

ENHANCING BASIC EDUCATION LEARNERS' COGNITIVE AND SOCIAL ACADEMIC ENGAGEMENTS IN DELTA STATE THROUGH EFFECTIVE ADMINISTRATION OF SCHOOL FEEDING PROGRAMME

Ndibueze, Scholar Ego (Mrs.)

Deputy Director of Nursing Services, Nursing Department
Federal Medical Centre Asaba, Delta State
Email: ndiego51@yahoo.com; 08034031119

&

Ezugoh, Theodorah Chinelo PhD

Department of Educational Foundations, School of Education
Federal College of Education (Technical) Asaba, Delta State
Email: theodorahezugoh@gmail.com; 08067529008

Abstract

This study investigated the importance of enhancing basic education learners' cognitive and social academic engagements in Delta State through effective administration of school feeding programme. Two research questions guided the study. The study adopted a descriptive survey research design. Only the 1,130 head teachers within 1,130 public primary schools operating in all the 25 LGAs within Delta State formed the study population. The sample for this study constituted a total of 565 public primary school head teachers from their schools in Delta State selected using the purposive sampling technique. The instrument for data collection was a self-structured questionnaire designed by the researcher, containing 18 items and titled: Enhancing Basic Education Learners' Cognitive and Social Academic Engagements through Effective Administration of School Feeding Programme Questionnaire (EBELCSAEEASFPQ) which was structured on a 4-point scale of Very High Extent (VHE), High Extent (HE), Low Extent (LE) and Very Low Extent (VLE), for answering the research questions. The questionnaire was face validated by two Educational Administration and Planning experts from Educational Foundations Department and one Measurement and Evaluation expert, from Educational Psychology Department in Federal College of Education (Technical) Asaba, Delta State. Reliability of the instrument was established through a pilot-test. Thereafter, scores were collated and calculated using the Cronbach Alpha formula to arrive at an overall reliability value of 0.79. Data were analyzed using mean statistics rated at 2.50 and standard deviation statistics. Findings of the study generally indicated that effective administration of the School Feeding Programme (SFP) enhanced learners' cognitive and social academic engagements in basic education in Delta State to a high extent. Based on these findings, recommendations were proffered. Among them include that there is need for the head teachers and teachers through adequate financial support and encouragements from the Delta State Universal Basic Education Board (DSUBEB) and external bodies like non-governmental organizations to improve on resource mobilization and infrastructure which has positive impact on effective administration of SFP for enhanced learners' cognitive task engagement in basic education to a high extent in areas of applying higher-order thinking in learning tasks, willingness to tackle challenging tasks without easily giving up, ability to strive to create personal academic targets, among others.

Keywords: *Academic, Administration, Basic, Cognitive, Education, Engagements, Learners, SFP, Social*

Introduction

Education is a great instrument 'par excellence' for nation-building, social transformation and economic reconstruction. It is an aggregate tool for empowerment and developing full capacities likewise potentials of human resources or workforce of a country. Education is the furculum in which the development of any society hangs. Quality education, therefore, plays a pivotal role in the socio-economic development of any society. For education to thrive and truly be recognized as the greatest

‘instrument for excellence’ and ‘societal transformation’, it is imperative that its products, that is, learners, are intellectually, emotionally and socially sound, a feat achievable only through sustained and meaningful academic engagements. Hence, the quality of learners’ academic engagements significantly enhances educational outcomes. Academic engagement, encompassing behavioural, emotional, cognitive and social dimensions, is essential in fostering learners’ motivation, participation and achievement in school activities (Appleton, Christenson & Furlong, 2008). In Nigeria, and particularly in Delta State, ensuring learners’ active engagement in basic education remains a major educational priority, as it directly affects the overall quality and equity of education delivered (Olagboyega & Aluko, 2021). One effective way to ensure that learners, particularly at the basic education level, remain academically engaged and committed to their studies is through the implementation of essential educational support services, such as, the introduction of school programme.

School feeding programmes (SFP) have emerged globally as a strategic intervention to improve learners’ academic engagements by addressing hunger and malnutrition, which are critical barriers to effective learning (Bundy, de Silva, Horton, Jamison & Patton, 2018). The programme provides nutritious meals to learners during school hours, which is expected to enhance their physical health, concentration, attendance, and participation in school activities (Adelman, Gilligan & Lehrer, 2008). The concept of school feeding programme in scholarly articles, can be referred to as such interventions that regularly provide school-going children and adolescents with nutritious food at school (FAO, 2019). A further definition is given by Cupertino, Ginani, Cupertino and Botelho (2022) who described the school feeding programme as an essential initiative addressing food insecurity, improving nutritional education, and ultimately enhancing health outcomes. In this sense, the World Bank (2015) also cited in Jean de Dieu, Theogene, Emmanuel, Faustin, Abdou, Emmanuel and Ke (2023) have provided a simple definition of school feeding programme, as any programme that provides school children with food. The component of engaging farmers into the SFP explains the concept now referred to the SFP as Home-Grown School Feeding (HGSF). The overall global aim of school feeding programmes (SFP), according to WFP (2020), is to ensure that all school aged children have access to school meals and are healthy and ready to learn. A fact indicating world concern for school-age children’s health and quality education. At the time an important aim corroborates the current Sustainable Development Goals (SDGs) particularly SDGs 2, 4, and 5 (United Nations - UN, 2015). The overall goal of school feeding programmes in Nigeria as observed by Jean de Dieu et al (2023) is to deliver a well-organized, decentralized intervention providing school-going children with nutritionally adequate, locally produced food, thereby, reducing poverty through improved household incomes and effective local economic development (Jean de Dieu et al, 2023). Most importantly, the school feeding programme implemented in Nigerian basic education schools plays a vital role in promoting learners’ academic engagement through their active participation and retention in the programme. The term basic

education schools alongside this present study, have also been used to refer to a continuum of compulsory public or government aided pre-primary schools, primary schools, and junior secondary schools in Nigeria (Jean de Dieu et al, 2023). The basic education programme which was launched on the 30th of September, 1999 in Sokoto State by President Olusegun Obasanjo, has a broad scope which covers educational programmes such as the Early Childhood Care and Development Education (ECCDE) offered for children between the ages of (0-4 years) and 10 years of formal schooling (Federal Republic of Nigeria – FRN, 2014). Basic education is often defined as compulsory education that guarantees universal access to learning opportunities, fostering equality and social inclusion (World Bank, 2022). Basic education learners are therefore, individuals enrolled in foundational education levels, typically aged 5-15, who are acquiring fundamental literacy, numeracy and social skills (UNICEF, 2020). These learners represent the population served by primary and junior secondary schools, undergoing structured learning to develop cognitive and socio-emotional competencies (Federal Ministry of Education Nigeria, 2019).

In Delta State, administration of the school feeding programme has gained attention as a policy tool to combat food insecurity and improve educational outcomes in basic education (Okeke, 2023). However, the extent to which effective administration of these programmes contributes to basic education learners' cognitive and social academic engagements remains under-researched. Besides, administration can be termed as the process of organizing and managing resources, policies, and activities to achieve educational goals efficiently and with desired outcomes (Bush, 2018). It involves planning, coordinating, supervising, and evaluating programmes to maximize impact, such as ensuring consistent delivery of school feeding services on time and with quality (Owens & Valesky, 2015). Academic engagement in this study has been conceptualized through two key dimensions of cognitive engagement (investment in learning and willingness to exert effort), and social engagement (interaction and collaboration with peers and teachers) (Fredricks, Blumenfeld & Paris, 2004). It is hypothesized that effective school feeding programme can positively influence and enhance each of these dimensions by improving learners' performance, reducing hunger-related distractions and fostering a supportive learning environment as observed in past empirical studies of Adekunle and Christiana (2016), Adelman, Gilligan and Lehrer (2008), and Eze, Nwankwo and Anyaegbunam (2020).

Cognitive academic engagement entails the mental effort, strategies, and thought processes students use to understand, learn, and master academic content. This also involves learners' investment in learning, self-regulation, and willingness to exert mental effort. It goes beyond surface learning and involves deep thinking, problem-solving, and self-regulation. Cognitive academic engagement thus, reflects the mental investment learners make in understanding complex ideas, applying strategies, and persisting in challenging tasks (Fredricks et al., 2004). In the same vein, Adolphus, Lawton and Dye (2020) described cognitive academic engagement as the extent to which learners invest mental effort in

understanding complex ideas, solving problems, and mastering academic content. It involves critical thinking, deep learning strategies, self-regulation, and persistence in challenging tasks. Adequate nutrition directly affects brain development, attention span, and memory (Adelman et al., 2008). By ensuring adequate nutrition through school feeding, learners can better concentrate, process information, and engage in complex cognitive tasks, enhancing their academic performance and intellectual development. Well-nourished learners tend to demonstrate higher cognitive engagement because adequate nutrition supports brain development, memory, and concentration. Empirical research shows that children who receive regular school meals are more attentive, better able to process information, and more capable of sustained learning (Adolphus et al., 2020). Research further highlights that well-nourished children in feeding programmes exhibit improved concentration, problem-solving abilities, and better academic achievement (Bundy et al., 2018). Cognitive engagement reflects a learner's mental investment and willingness to understand deeply and take responsibility for their own learning. Effective administration, through consistent delivery and nutritious meals, supports learners' cognitive readiness in Delta State schools (Fentahun, 2019). Cognitive academic engagement refers to the mental investment and strategies learners use in their academic work such as their motivation to learn, self-regulation and goals setting, critical thinking and problem-solving application, willingness to tackle challenging tasks and not give up easily, applying prior knowledge, among others. Thus, the benefits of SFP in enhancing basic education learners' cognitive academic engagement include improving learners' concentration and memory, assisting learners to become more attentive in the classroom and better able to process information, among others.

Social academic engagement on the other hand, refers to the quality of learners' interactions with teachers, peers, and the school community. It includes collaboration, participation in group work, respect for others, and a sense of belonging within the school environment. Learners who feel socially connected are more likely to participate actively in classroom activities and remain committed to schooling. Supportive programmes such as school feeding can strengthen peer relationships and teacher–student rapport, which in turn enhances engagement (Reschly & Christenson, 2012). School feeding programmes offer opportunities for socialization during meal times, fostering collaboration and peer bonding (Durlak et al., 2010; World Food Programme, Nigeria, 2021). Effective administration ensures structured meal breaks that promote positive social experiences, teamwork and communal values. In Delta State, learners sharing meals develop friendships and improve social skills critical for holistic development (Eze & Okoro, 2022). The benefits of SFP in enhancing basic education learners' social academic engagement include promoting collaborations and teamwork among learners, fostering a sense of belonging, promoting positive peer influence, contributing to a healthy learning environment, building positive relationships among learners, and supporting classmates who may feel left out, among others. Social engagement interaction with peers and teachers is therefore, crucial for holistic academic

engagement (Fredricks et al., 2004; Reschly & Christenson, 2012). The study investigates how school feeding programmes facilitate social interactions during meal times and in classrooms, contributing to collaborative learning and peer support. Despite the potential benefits, the effective administration of school feeding programmes in Delta State faces several challenges including poor funding, poor logistical arrangements, inadequate community involvement, inefficiencies in food quality and distribution, among many others (Eze & Okoro, 2022); which hinder their effectiveness in promoting learners' cognitive and social academic engagements. Consequently, these challenges undermine the programme's capacity to fully actualize and achieve the basic education goals and objectives fully. Given these gaps, this study sought to determine the extent to which effective administration of school feeding programmes enhances learners' cognitive, and social academic engagements in basic education in Delta State. This comprehensive approach is intended to provide evidence-based insights to policymakers, school administrators, and stakeholders, facilitating the design and implementation of more effective school feeding interventions to support learners' academic success in Delta State.

Statement of the Problem

Despite the growing recognition of school feeding programme as vital interventions for improving learners' academic engagement, retention, active participation and educational outcomes, there still remains limited empirical evidence on the extent to which effective administration of the programme enhances the different dimensions of basic education learners' academic engagements, in terms of their cognitive and social engagements, especially, in basic education within Delta State. While the provision of nutritious meals is expected to improve learners' participation, motivation, mental focus, and peer interactions, the degree to which these benefits manifest remains unclear and underexplored in the local context. Moreover, challenges such as inadequate funding, logistical inefficiencies, poor community involvement and inconsistent food quality have been reported to undermine the effectiveness of school feeding programmes. These obstacles not only compromise the smooth and effective administration of the programme but also potentially diminish its positive impact on learners' academic engagement in school activities. However, there is insufficient understanding on the extent of how the SFP enhance learners' academic engagements. Therefore, there is a critical need to systematically investigate the extent to which effective administration of the school feeding programme influences each dimension of learners' engagement, that is, cognitive and social engagements, and to also identify the key challenges limiting this effectiveness in Delta State basic education schools. Existing studies on the school feeding programme in Nigeria seems to focus broadly on nutritional outcomes and general attendance rates, with limited disaggregated analysis of how the programme enhances the multifaceted nature of academic engagements among basic education learners. Furthermore, the specific administrative challenges that affect the successful delivery of this programme and their impact on academic engagements remain under-investigated in Delta State. This study sought to fill this gap and also resolve

the existing problem of this study by providing empirical evidence on the extent of enhancing basic education learners' cognitive and social academic engagements in Delta State, through effective administration of the school feeding programme, tailored to the local educational context.

Purpose of the Study

The purpose of this study was to examine the importance of enhancing basic education learners' cognitive and social academic engagements in Delta State through effective administration of school feeding programme. Specifically, the study sought to:

1. Assess the extent to which effective administration of school feeding programme enhances learners' cognitive engagement in basic education in Delta State.
2. Identify the extent to which effective administration of school feeding programme enhances learners' social engagement in basic education in Delta State.

Research Questions

The following research questions guided the study;

1. To what extent does the effective administration of school feeding programme enhance learners' cognitive engagement in basic education in Delta State?
2. To what extent does the effective administration of school feeding programme enhance learners' social engagement in basic education in Delta State?

Methods

The study adopted a descriptive survey research design. Descriptive survey design, according to Nworgu (2015) is the research design in which data are collected from sample of a large population to enable the researcher to describe in a very systematic manner, and interpret characteristic features and facts about things that exist. This study employed the descriptive survey design in order to enable the researchers gather information from the sample of the population of the study (that is: head teachers only) and thereafter analyze data gathered as they exist in determining the extent of enhancing basic education learners' cognitive and social academic engagements in Delta State through effective administration of school feeding programme. The study population comprised all the head teachers in the State-Government owned primary schools in Delta State. There are a total population of 1,130 head teachers within the 1,130 public primary schools in Delta State (Source: Planning, Research and Statistics Department, Delta State Universal Basic Education Board – DSUBEB, 2024). Justification for choosing only the head teacher is because, as the chief executive head and leader in charge of school administration and policy implementation, they are in a better position to disclose the extent of enhancing basic education learners' cognitive and social academic engagement in Delta State through effective administration of school feeding programme. The sample for this study constituted a total of 565 public primary school head teachers from their schools in Delta State selected using the purposive sampling technique which was based on researcher's convenience and discretion. Fifty percent of the

entire head teachers' population were selected as sample for the study. The instrument for data collection was a self-structured questionnaire by the researchers, containing 18 items and titled: Extent of Enhancing Basic Education Learners' Cognitive and Social Academic Engagements through Effective Administration of School Feeding Programme Questionnaire (EEBELCSAEEASFPQ). The questionnaire was organized in two clusters. The response for each of the items in the research instrument were structured on a 4-point scale and weighted as follows: (a) Very High Extent (VHE) – 4, (b) High Extent (HE) – 3, (c) Low Extent (LE) – 2, and Very Low Extent (VLE) – 1, for answering the two research questions. The questionnaire was face validated by two Educational Administration and Planning experts from Educational Foundations Department and one Measurement and Evaluation expert, from Educational Psychology Department in Federal College of Education (Technical) Asaba, Delta State. These experts were requested to examine the items in terms of the appropriateness of language, adequacy of questions in relation to the purpose of the study and research questions. The experts reviewed and affirmed both the face and content validation. Regarding the content items, these experts from various departments in the College made some observations and corrections on vague and double-barreled items. Some items were removed and new ones added based on the comments of the experts. The researchers corrected the questionnaire before its final administration to the respondents. Reliability of the instrument was established through a pilot-test. This method involved distributing 40 copies of the questionnaire amongst 40 primary school head teachers from 40 public primary schools in Delta State, which were not part of the study. This was to avoid the respondents being biased when the final instrument was distributed. The researchers who personally administered the questionnaire also waited for them to complete the questionnaire before retrieving them. Thereafter, the questionnaires were collated and their scores calculated using the Cronbach Alpha formula. Results of the distributed copies of the questionnaire yielded a reliability coefficient of 0.83 and 0.74 respectively for each cluster, amounting to a total reliability value of 0.79. The method of using Cronbach Alpha formula to calculate scores was adopted in order to ensure the internal consistency for reliability of research instrument which was arranged in two clusters. The result indicated the internal consistency of the instrument, which is considered satisfactory and suitable for the study. Therefore, the reliability of the questionnaire showed that the instrument was reliable, dependable and likewise trust-worthy. Nworgu (2015) identified that the Cronbach Alpha statistical method refers to the degree of consistency with which the item of an instrument measures a given trait and provides a measure of how homogeneous or otherwise the items are. Copies of the questionnaire were administered to the respondents (head teachers) on face-to-face and direct contact using the help of three (3) research assistants who contacted and liaised with some of the teachers from the various public primary schools sampled in the study, in order to administer the questionnaire to their head teachers. The research assistants were residents of Delta State. These research assistants were given briefings concerning the purpose of the study in order

to administer and retrieve the filled copies of questionnaire from the head teachers. The respondents filled all the questionnaire presented to them immediately on the spot. Distributing all printed copies of the questionnaires took the researcher a period of three weeks after which they were collated for data analysis. A total of 600 copies of the questionnaire were distributed to the respondents in order to retrieve all the 565 copies that was meant for the study. However, all the 565 copies of the questionnaire were retrieved at a 100% rate of return. Data were analyzed using mean statistics and standard deviation statistics. All the copies of the questionnaire were collated using mean scores, grand mean and standard deviation for answering the research questions. The decision rule for the research questions was based on the mean score, which was benchmarked on 2.50. Only mean scores which rated 2.50 and above was regarded as an indication of ‘High Extent’ in agreement with the statement. While mean scores that rated 2.49 and below was regarded as an indication of ‘Low Extent’ in disagreement with the statement. Data was also coded into the SPSS (Statistical Software Package for Social Sciences) for computer analysis.

Results

Research Question 1: To what extent does the effective administration of school feeding programme enhance learners’ cognitive engagement in basic education in Delta State?

Table 3: Mean Rating and SD of Head Teachers on the Extent to which Effective Administration of School Feeding Programme Enhances Learners’ Cognitive Engagement in Basic Education in Delta State (N = 565 Head Teachers)

S/N	Show your agreement concerning the extent to which effective administration of school feeding programme enhance learners’ cognitive engagement in your school.	\bar{X}	SD	Decision
	Effective administration of SFP promote learners:			
1.	intrinsic or extrinsic drive not to achieve academic success	2.07	1.00	Low Extent
2.	application of higher-order thinking in learning tasks	2.93	1.03	High Extent
3.	application of critical problem-solving skills or logical reasoning to find solutions during tasks, assignments or experiments	3.06	1.00	High Extent
4.	persistence or willingness to tackle challenging tasks without easily giving up	2.82	1.10	High Extent
5.	ability to strive to create personal academic targets for goal achievement	3.04	0.97	High Extent
6.	reflection on what has been previously learnt in the classroom likewise identify areas that need further clarification	2.70	1.01	High Extent
7.	to seek out self-directed learning, thereby, it promotes the ability to learn independently beyond class requirements	3.06	0.97	High Extent
8.	ability of note-taking, highlighting key points, or creating mind maps while studying	3.17	0.90	High Extent
Grand Mean and Standard Deviation		2.86	1.05	High Extent

Results from the responses of respondents (that is, head teachers) as presented in Table 1 revealed that all the items from 2-8 were rated above the acceptable mean score of 2.50 in agreement with the statements by the head teachers that effective administration of SFP improved learners’ cognitive engagement in basic education in Delta State to a high extent. Except for only item 1 which was rated below 2.50 in disagreement with the statements by the head teachers showcasing negative

reactions that effective administration of SFP negatively enhanced the intrinsic or extrinsic drive not to achieve academic success, to a low extent. Rather, it positively improved learners' cognitive engagement by improving their intrinsic or extrinsic drive to achieve academic success. The grand mean and standard deviation of 2.86 and 1.05, showed respondents positive reactions concerning the extent to which effective administration of school feeding programmes enhanced learners' cognitive engagement in basic education in Delta State, which was to a high extent.

Research Question 2: To what extent does the effective administration of school feeding programme enhance learners' social engagement in basic education in Delta State?

Table 2: Mean Rating and SD of Head Teachers on the Extent to which Effective Administration of School Feeding Programme Enhances Learners' Social Engagement in Basic Education in Delta State (N = 565 Head Teachers)

S/N	Show your agreement concerning the extent to which effective administration of school feeding programme enhance learners' social engagement in your school.	\bar{X}	SD	Decision
	Effective administration of SFP encourage learners to:			
9.	socialize or bond with fellow peers in school during and after meals	2.81	1.13	High Extent
10.	interact with teachers likewise the entire school community	2.88	1.02	High Extent
11.	participate in civic activities that extend beyond the classroom	2.65	1.04	High Extent
12.	actively get involved in social activities, discussions, or peer-to-peer learning sessions in school	2.92	1.05	High Extent
13.	avoid associating with other peers in classwork or sharing learning materials	1.97	0.96	Low Extent
14.	listen attentively in order to respect other peers' opinions by valuing different perspectives during interactions	3.05	0.94	High Extent
15.	volunteer or participate in community service	2.84	1.08	High Extent
16.	join children's social groups, such as science clubs, drama groups, or sports teams	3.05	0.98	High Extent
17.	support classmates who might feel left out in class activities or work	3.06	0.98	High Extent
18.	effectively express their own opinions or ideas in group discussions	2.76	1.13	High Extent
Grand Mean and Standard Deviation		2.80	1.08	High Extent

Results from the responses of respondents (that is, head teachers) as presented in Table 4 revealed that all the items from 9 – 12 and 14 - 18 were rated above the acceptable mean score of 2.50 in agreement with the statements by the head teachers that effective administration of SFP improved learners' social engagement in basic education in Delta State to a high extent. Except for only item 13 which was rated below 2.50 in disagreement with the statements by the head teachers showcasing negative reactions that effective administration of SFP negatively enhanced learners to avoid associating with other peers in classwork or sharing learning materials, to a low extent. Rather, it positively improved learners' social engagement which aided them ability to associate with their fellow peers in classwork. The grand mean and standard deviation of 2.80 and 1.08, showed respondents positive reactions concerning the extent to which effective administration of school feeding programmes enhanced learners' social engagement in basic education in Delta State, which was to a high extent.

Discussion of Findings

It was found out that effective administration of School Feeding Programme (SFP) enhanced learners' cognitive engagement in basic education in Delta State to a high extent. It was also indicated that that effective administration of SFP negatively enhanced the learners' intrinsic or extrinsic drive not to achieve academic success, to a low extent. The finding further indicated that effective administration of SFP improved learners' cognitive engagement in basic education in Delta State to a high extent by enhancing learners' application of higher-order thinking in learning tasks; persistence or willingness to tackle challenging tasks without easily giving up; ability to strive to create personal academic targets for goal achievement; reflection on what has been previously learnt in the classroom likewise identify areas that need further clarification; to seek out self-directed learning, thereby, it promotes the ability to learn independently beyond class requirements; and ability of note-taking, highlighting key points, or creating mind maps while studying.

This present finding flows in line with the findings of Adekunle and Christiana (2016) study which revealed that 44% of the respondents strongly agreed that there was improvement in the performance of pupils' both in curricular and extra-curricular activities; this ranked 1st with a mean score of 4.41. In the same vein 44% of the respondents also affirmed that there was an improvement in the performance of pupils in the examinations held at the end of each term and session; this ranked 2nd with a mean score of 4.37. The result showed that 48.3% of the respondents indicated that the performance of pupils in class tests had improved as a result of the school feeding programme. The study findings concluded that the School Feeding Programme in Osun State had improved the performance of elementary school pupils in the State. The present study finding also collaborates with the findings of Adelman, Gilligan and Lehrer (2008) study on how effective are school feeding programmes which indicated that School feeding improved attendance and cognitive function significantly. Effects were stronger where programme administration was consistent. The findings of Eze, Nwankwo and Anyaegbunam (2020) study on the impact of school feeding programmes on academic performance of primary school pupils in Enugu State, Nigeria confirmed that school feeding improved cognitive engagement and academic achievement; administration quality was a significant moderator.

Another finding indicated that effective administration of School Feeding Programme (SFP) enhanced learners' social engagement in basic education in Delta State to a high extent. It was further indicated that effective administration of SFP negatively enhanced learners to avoid associating with other peers in classwork or sharing learning materials, to a low extent. The finding further indicated that effective administration of SFP improved learners' social engagement in basic education in Delta State to a high extent by enhancing learners' ability to socialize or bond with fellow peers in school during and after meals; interact with teachers likewise the entire school community; participate in civic activities that extend beyond the classroom; actively get involved in social activities, discussions, or peer-to-peer learning sessions in school; listen attentively in order to respect other peers opinions by valuing different

perspectives during interactions; volunteer or participate in community service; join children's social groups, such as science clubs, drama groups, or sports teams; support classmates who might feel left out in class activities or work; and effectively express their own opinions or ideas in group discussions. The present study finding corroborates and falls in line with the findings of Adekunle and Christiana (2016) study which indicated that there was improvement in the performance of pupils' extra-curricular activities; which ranked 1st with a mean score of 4.41 because of the implementation of school feeding programme. The findings of World Food Programme, Nigeria (2021) study on school feeding programme annual report confirmed that effective programme administration improved attendance, social engagement, and cognitive readiness; challenges included logistics and monitoring gaps.

Conclusion

This study assessed the extent to which effective administration of the School Feeding Programme (SFP) enhances basic education learners' cognitive and social academic engagements in basic education in Delta State. Investigating the cognitive and social dimensions, the study findings clearly revealed and submits that when SFP is effectively administered, this serves as a powerful educational support intervention that promotes punctuality, active class participation, emotional commitment, higher-order thinking, peer interaction, and overall engagement in learning activities. Ultimately, the research affirms that the SFP, when implemented effectively, not only addresses learners' nutritional needs but also enhances their holistic academic engagements in education, thereby, contributing to improved learning outcomes and the achievement of the Sustainable Development Goals (SDGs) in basic education schools in Delta State.

Recommendations

Based on the finding of this study, the following recommendations were proffered:

1. There is need for the head teachers and teachers through adequate financial support and encouragements from the Delta State Universal Basic Education Board (DSUBEB) and external bodies like non-governmental organizations to improve on resource mobilization and infrastructure which has positive impact on effective administration of SFP for enhanced learners' cognitive task engagement in basic education to a high extent in areas of applying higher-order thinking in learning tasks, willingness to tackle challenging tasks without easily giving up, ability to strive to create personal academic targets, among others.
2. The State government in collaboration with DSUBEB, head teachers and teachers should improve on monitoring, supervision and evaluation systems through the implementation of regular inspections, transparent reporting, and digital tracking systems to ensure accountability, detect irregularities, and address challenges promptly, necessary for effective administration of SFP and enhanced learners' social engagement in basic education to a high extent in relation to enhancing learners' ability to socialize or bond with fellow peers in school during and after meals, interact with

teachers likewise the entire school community, participate in civic activities that extend beyond the classroom, actively get involved in social activities, discussions, or peer-to-peer learning sessions in school, among others.

References

- Adekunle, D. T. & Christiana, O. O. (2016). The effects of school feeding programme on enrolment and performance of public elementary school pupils in Osun State, Nigeria. *World Journal of Education*, 6 (3), 39-47.
- Adelman, S., Gilligan, D. O. & Lehrer, K. (2008). *How effective are school feeding programs?* Washington, DC: International Food Policy Research Institute.
- Adolphus, K., Lawton, C. L. & Dye, L. (2020). The effects of breakfast on behavior and academic performance in children and adolescents. *Frontiers in Human Neuroscience*, 14, 1–13. <https://doi.org/10.3389/fnhum.2020.00273>.
- Appleton, J. J., Christenson, S. L. & Furlong, M. J. (2008). Student engagement with school: Critical conceptual and methodological issues of the construct. *Psychology in the Schools*, 45 (5), 369–386. <https://doi.org/10.1002/pits.20303>.
- Bundy, D. A. P., de Silva, N., Horton, S., Jamison, D. T. & Patton, G. C. (2018). *School health and nutrition: An investment in education*. Washington, DC: World Bank.
- Bush, T. (2018). *Theories of educational leadership and management* (5th ed.). London, UK: Sage.
- Cupertino, A., Ginani, V., Cupertino, A. P. & Botelho, R. B. A. (2022). School feeding programs: What happens globally? *International Journal of Environmental Research and Public Health*, 19, 2265. <https://doi.org/10.3390/ijerph19042265>.
- Durlak, J. A., Weissberg, R. P. & Pachan, M. (2010). A meta-analysis of after-school programs that seek to promote personal and social skills in children and adolescents. *American Journal of Community Psychology*, 45 (3-4), 294 - 309. <https://doi.org/10.1007/s10464-010-9300-6>.
- Eze, S. O. & Okoro, C. E. (2022). Challenges of school feeding programmes in Nigerian basic education: A focus on Delta State. *Journal of Educational Management and Policy*, 8 (1), 45–59.
- Eze, U. C., Nwankwo, C. A. & Anyaegbunam, N. J. (2020). The impact of school feeding programmes on academic performance of primary school pupils in Enugu State, Nigeria. *International Journal of Educational Research*, 7 (2), 100 -110.
- FAO (2019). *Nutrition guidelines and standards for school meals: a report from 33 low and middle-income countries*. Rome: FAO; 2019. <https://www.fao.org/publications/card/en/c/CA2773EN/>.
- Federal Ministry of Education Nigeria (2019). *National policy on education* (7th ed.). Abuja, Nigeria: NERDC Press.
- Federal Republic of Nigeria (FRN, 2014). *National policy on education*, sixth edition. Abuja: NERDC.
- Fentahun, N. (2019). Challenges of school feeding program implementation in Ethiopia: The case of primary schools in Addis Ababa. *Journal of Nutrition and Food Sciences*, 9 (2), 1–7.
- Fredricks, J. A., Blumenfeld, P. C. & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research*, 74 (1), 59–109. <https://doi.org/10.3102/0034654>.
- Jean de Dieu, H., Theogene, H., Emmanuel, N., Faustin, M., Abdou, M., Emmanuel, N. & Ke, Z. (2023). School feeding programme implementation and its challenges in basic education schools in Rwanda. *African Educational Research Journal*, 11 (3), 338-350.
- Nworgu, B. G. (2015). *Educational research. Basic issues and methodology*. Enugu: University Trust Publishers.
- Okeke, I. C. (2023). Assessment of school feeding programme implementation in Delta State basic education. *Delta State Journal of Educational Studies*, 15 (1), 87–101.
- Olagboyega, O. S. & Aluko, A. D. (2021). Enhancing learner engagement in Nigerian basic education: The role of policy and practice. *African Journal of Educational Research*, 9 (2), 12–25.

- Onah, R. C. & Onah, F. E. (2021). Implementation of the national home-grown school feeding programme (NHGSFP) in Nigeria: Examining the issues, impediments, and the way forward. *Journal of Public Administration and Governance*, 11 (3), 100-117. <http://jpag.macrothink.org>.
- Owens, R. G. & Valesky, T. C. (2015). *Organizational behavior in education* (11th ed.). Boston, MA: Pearson.
- Reschly, A. L. & Christenson, S. L. (2012). Jingle, jangle, and conceptual haziness: Evolution and future directions of the engagement construct. *Handbook of Research on Student Engagement*. Springer.
- UNICEF (2020). *The state of the world's children 2020*: World Wide Web.
- United Nations (UN, 2015). *The 17 goals*. Washington DC: UN. <https://sdgs.un.org/goals>.
- World Bank (2015). *Benin: School feeding*. Washington DC.: The World Bank. http://wbfiles.worldbank.org/documents/hdn/ed/saber/supporting_doc/CountryReports/SHN/SABER_School_Feeding_Benin_CR_Final_2_015.pdf.
- World Bank (2022). *Strengthening social protection through school feeding programmes*. World Bank Policy Brief.
- World Food Programme (WFP, 2020). *State of school feeding worldwide*. WFP Publications.
- World Food Programme, Nigeria (2021). *School feeding programme annual report*. Abuja, Nigeria: WFP.