

Assessing the Impact of Bakery Income Generating Project on Student Competence and School Sustainability at General Mariano Alvarez Technical High School

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ABSTRACT

The Bakery Income Generating Project (IGP) at General Mariano Alvarez Technical High School has emerged as a significant contributor to both educational enrichment and financial sustainability. This study aims to assess the school-based income generating projects (IGPs) of baking at General Mariano Alvarez Technical High School, focusing on their impact on the performance tasks of students specializing in Food Technology. Utilizing purposive sampling, the research engaged 2 administrators and 30 Food Technology students. Results reveal a mutual relationship between the school and IGPs, with shared benefits from generated income. Motivation, teamwork, collaboration, and budget allocation for laboratory tasks and revolving funds were notably high. Learners demonstrated exceptional competence in Food Technology encompassing knowledge, attitude, technical skills, and entrepreneurial mindset. Significant correlations were observed between IGPs and learners' competence in Food Technology across various dimensions. Thus, the study concludes that school based IGPs positively impact learners' competence in food technology. Based on these findings, recommendations are proposed. General Mariano Alvarez Technical High School should establish and sustain school based IGPs to enhance learners' competence in food technology. Policy improvements are suggested to optimize existing IGPs in schools, ensuring ongoing financial assistance and competence enhancement. Teachers are encouraged to initiate income-generating activities to supplement school budgets and enrich learning experiences. Learners are urged to actively participate in IGPs to benefit from the positive effects on their learning competence in food technology. Furthermore, future research should expand on this study to explore further enhancements in conducting IGPs to support and enhance learners' competence in food technology. This research underscores the significant impact of the Bakery IGP on students' learning outcomes, practical experience, and financial sustainability. By comprehensively evaluating the project, this study contributes to our understanding of the pivotal role IGPs play in enhancing educational practices, promoting entrepreneurship, and ensuring the long-term success of educational institutions.

Key words: Income Generating Projects (IGP); Learners' Competence; Food Technology

INTRODUCTION

Education stands as a fundamental catalyst for personal development and societal progress, fostering the growth of individuals equipped with the skills and knowledge necessary to thrive in an interconnected world (Admin, 2023). In today's educational landscape, the role of educators extends beyond imparting information; they are tasked with nurturing adaptable learners capable of navigating the complexities of an ever-evolving global society (The World Bank, 2003; Kuit & Fell, 2010). However, amidst increasing financial constraints faced by educational institutions, innovative solutions are imperative to enrich educational experiences while ensuring sustainability.

The Philippine government has dedicated significant efforts to enhance the quality of education in the country with the aim of producing globally competitive citizens and fostering a progressive society. The passage of Republic Act 10533, or the Enhanced Fundamental Education Act of 2013, marked a milestone in this endeavor, introducing the K to 12 program which extends basic education by two years, known as Senior High School. Senior High School offers four tracks for students to choose from, one of which is the Technical-

Vocational-Livelihood track. Within this track, the Home Economics strand provides instruction in various skills such as cooking, food and beverage services, and baking. However, one of the challenges faced by students in this program is the high cost associated with it, which can impact their proficiency in the subject.

To address these challenges, educators are encouraged to explore alternative methods of improving the financial resources of schools while offering students hands-on training and practical applications of their lessons. One promising approach is implementing income-generating projects, which can help alleviate financial constraints and enhance the quality of education by funding materials needed for teaching and learning.

Income-generating projects serve dual purposes: firstly, they expose students to entrepreneurial environments where they can apply technical knowledge alongside business principles, setting them up for success after graduation. Secondly, these projects contribute to the financial sustainability of schools, reducing reliance on external funding sources. Income Generating Projects (IGPs) have emerged as a viable avenue to address these challenges, offering opportunities for practical skill acquisition while generating revenue for schools (Callaghan, 2021). Defined as initiatives aimed at supplementing institutional income to support operations and fill budgetary gaps (Miranda et al., 2016), IGPs hold promise for promoting self-sustainability while providing valuable learning experiences.

Embracing this ethos, General Mariano Alvarez Technical High School (GMATHS) has embarked on a transformative journey by implementing a Bakery IGP tailored for Food Technology students. This initiative signifies the school's commitment to integrating hands-on learning experiences with entrepreneurship education, with the overarching goal of equipping students with practical skills and fostering an entrepreneurial mindset.

Initiated on August 29, 2022, the Bakery IGP represents a departure from traditional instructional methods, emphasizing dynamic and experiential learning. By immersing students in real-world bakery operations, the project enriches their academic understanding while cultivating essential life skills such as teamwork, problem-solving, and financial literacy. Aligned with Article 5 of the Manual Operation for Tech-Voc Section 3: Income Generating Projects 3.1, schools are encouraged to establish IGPs that serve as practicum for students, allowing them to apply theories and concepts learned in the classroom. These projects should have relevance to curricular activities and embody the concept of earning while learning, with project proposals submitted and approved by the school principal prior to implementation.

The community surrounding GMATHS grapples with various challenges impacting educational development. Financial constraints within educational institutions hinder their ability to provide quality education and necessary resources for skill development programs, particularly in subjects like cookery and baking, which entail significant expenses for consumables and instructional materials.

Moreover, according to Boldureanu et al. (2020) traditional classroom-based learning often falls short in equipping students with applied knowledge and an entrepreneurial mindset essential for success in the job market. Without real-world projects aligned with their academic pursuits, students may graduate without the practical skills needed for their chosen fields.

In response, the Bakery IGP offers a tailored solution, addressing GMATHS's financial constraints while enriching the educational experience of Food Technology students. By establishing a bakery within the school premises, students gain practical experience in bread and pastry production, fulfilling curriculum requirements and cultivating essential life skills. This initiative also serves as a sustainable revenue-generating project, addressing financial gaps highlighted in literature. The income generated can be reinvested to enhance instructional quality, facilities, and overall learning environment, ensuring the long-term viability of Gmaths.

LITERATURE REVIEW

Income-generating projects (IGPs) in educational settings have garnered considerable attention due to their potential to enrich learning experiences and cultivate practical skills among students (Mahmud et al., 2022). In

the Philippines, the Department of Education (DepEd) has underscored the importance of IGPs through official orders, such as those outlined in Article 5 of the Manual Operation for Technical-Vocational (Tech-Voc) Section 3. This directive emphasizes the encouragement for schools to establish IGPs, which serve as practicums for students to apply theoretical knowledge in practical settings.

IGPs are considered crucial resources for educational institutions, offering various benefits (Miranda, 2016). These initiatives not only enhance the school's credibility but also provide students and trainees with opportunities to gain practical knowledge, skills, and exposure to technology. They serve as models for development, offering tangible examples of viable income-generating projects, and serve as venues for hands-on training, fostering future entrepreneurial capabilities through experiential learning.

Moreover, IGPs facilitate the integration of instruction, research, and extension activities, facilitating knowledge dissemination and improvement in production and instruction. They contribute to employment creation by necessitating human resources and providing incentives for commitment and creativity among project staff. Additionally, IGPs play a pivotal role in human resource development, offering scholarship slots and financial support for faculty and staff training. They also supplement the school's budget, enabling the employment of additional personnel, procurement of supplies, and enhancement of facilities necessary for various activities within the institution.

According to a study conducted by Njau et al. (2022), the establishment and operationalization of Income Generating Project (IGP) in secondary school cycles have been found to significantly impact students, serving as a vital mechanism for imparting entrepreneurial skills. Engaging students in real-world projects, such as baking and selling products through Bakery Income Generating Projects (IGPs), provides them with invaluable opportunities to apply theoretical knowledge in practical settings. This hands-on experience deepens their understanding and retention of course content (Johnson, 2019).

Furthermore, the Bakery IGP facilitates the development of essential skills crucial for both academic and professional success. Meeks (2017) emphasizes that participation in collaborative efforts involved in planning, production, and marketing refines not only technical skills but also cultivates soft skills such as teamwork, communication, and problem-solving. These skills are transferable to various contexts, underscoring the holistic benefits of engaging students in real-world projects within educational settings.

Bakery Income Generating Projects (IGPs) exhibit promising outcomes, yet sustainability and scalability challenges pose significant considerations for educational institutions. Brown (2017) emphasizes the critical need to address these challenges for sustained IGP success. Sustainability concerns include securing ongoing operational funding, maintaining market competitiveness, and efficient resource management. Scalability issues arise when expanding IGPs to accommodate larger student cohorts or replicate them across different educational settings. Without meticulous planning and strategic management, IGPs risk ineffectiveness or unsustainability in achieving desired outcomes.

A comprehensive assessment of effectiveness and long-term viability becomes imperative in light of these challenges. This assessment should involve stakeholder feedback, financial and operational data analysis, and evaluation of the project's impact on student learning and development. Informed decisions regarding resource allocation, programmatic adjustments, and strategic partnerships can be made based on these findings to enhance the sustainability and scalability of IGPs. Future research should explore innovative approaches to address sustainability challenges and maximize educational benefits for students. Continuous evaluation and refinement of these initiatives will ensure their continued success and positive impact on student learning.

A study by Amos and Koda (2018) found that school-based income-generating activities (IGAs) have proven to be effective in addressing financial challenges faced by secondary schools under the management of the Catholic Dioceses of Moshi (CDM). In public schools, funding for laboratory materials typically comes from the Maintenance and Other Operating Expenses (MOOE), which often falls short due to high operational expenses caused by increased enrollment. To tackle these issues, the Department of Education (DepEd) encourages schools to engage in income-generating activities that support students' academic progress.

Motivation in learning is defined as an internal state that stimulates, directs, and sustains individuals' learning

behaviors (Woolfolk, 2019). According to the self-determination theory proposed by Ryan and Deci (2017), motivation can be classified into intrinsic and extrinsic forms. Intrinsically motivated learners are self-driven, finding satisfaction and drive from within to accomplish challenging tasks without external incentives or pressure. On the other hand, extrinsically motivated behaviors are driven by external factors rather than inherent satisfaction (Ryan and Deci, 2020).

Teamwork is crucial for organizational success and profitability, allowing for workload distribution among team members and benefiting individuals, teams, and organizations (Dugang, 2020). Competency-based learning focuses on identifying specific skills or competencies, enabling learners to master them at their own pace, often with mentorship. Learners can choose which competencies to develop, earning recognition such as badges or qualifications upon mastery (BC Campus, 2015). Technical skills are practical abilities used to perform tasks in various fields such as science, technology, engineering, and mathematics, often requiring specific tools and technologies (Rhinehart, 2022). Entrepreneurial skill involves creating new products or services that add value to society and generate profits for entrepreneurs. Attributes such as risk-taking, innovation, decision-making, and competitiveness are crucial for entrepreneurship and can be developed by students (Costin et al., 2018). School-based income-generating projects aim to enhance learners' entrepreneurial skills, allowing them to generate revenue through product and service sales in subjects like home economics. These studies have informed and enriched the researcher's current study by providing a deeper understanding, valuable insights, and critical analysis to form hypotheses and research questions. They also serve as a basis for comparison, enabling meaningful conclusions to be drawn from the data.

Research Questions

This study aims to evaluate school-based income generating project as a sustainability program for learners' competence in Food Technology. Specifically, the researcher sought to answer the following questions:

1. What are the educational facilities available for learning, the sales generated from income-generating projects (IGP), and the extent to which learners benefit from the support provided by IGP?
2. What is the level of school-based income generating project in terms of:
 - 2.1 motivation in doing laboratory tasks.
 - 2.2 teamwork and collaboration.
 - 2.3 budget allocation for laboratory; and
 - 2.4 revolving fund?
3. To what extent does the school's income-generating project contribute to students' competency in Food Technology in terms of:
 - 3.1 knowledge acquisition;
 - 3.2 attitude;
 - 3.3 technical skills; and
 - 3.4 entrepreneurial skills?
4. Is there a significant relationship between income generating project and learners' competencies in Food Technology?

RESEARCH METHODOLOGY

This part discusses various aspects of the research methodology, including the research approach, the participants involved, the instruments employed, the data collection methods, and the data analysis techniques

applied.

Research Design

This study employs a quantitative, descriptive research design utilizing correlational analysis to examine the impact of school-based income-generating projects on students' proficiency in food technology. Descriptive research involves gathering quantitative survey data, which is then objectively analyzed using established statistical methods to ensure reliable interpretation and findings.

Descriptive research is utilized to systematically depict various aspects such as situations, problems, phenomena, services, or programs, as noted by Kumar (2014) cited by Pagandian and Eduardo (2019). Additionally, according to Adan & Keiyoro (2017) referenced by Borg and Gall (2000), this method aims to describe current conditions, establish benchmarks for comparison, and explore potential relationships between events. The survey design allows for data collection without manipulating variables.

Moreover, employing this method enables the study to assess the support provided by school-based income-generating projects for students' learning resources. Ultimately, it aids in evaluating the impact of income-generating projects on students' competence in Food Technology.

Sampling

A purposive sampling technique was utilized to select participants for the study, including Food Technology students, administrators, and students involved in the Bakery Income Generating Project (IGP). This method facilitated the deliberate selection of individuals who had direct experience with the project, ensuring that insights gathered would be relevant and reflective of the project's impact from various perspectives.

Data Collection

The data collection for this study employed a multi-method approach to ensure a thorough understanding of the Bakery Income Generating Project (IGP) at General Mariano Alvarez Technical High School (GMATHS). Surveys, interviews, and observations were conducted to gather insights from participants actively involved in the Bakery IGP. Additionally, financial records and school reports were examined to assess the project's economic feasibility and performance.

Surveys were utilized using instruments adopted from Marasigan-Bartolome, Z. (2023), titled "*Assessment of Learners' Competence and Engagement in Food Technology Education*" (Annex A) and "*Evaluation of Revolving Fund Utilization in Income-Generating Projects*," (Annex B) to gather quantitative data regarding perceptions and experiences related to the Bakery IGP. Interviews provided an opportunity for in-depth exploration of participants' perspectives, motivations, and challenges. Observations of participants' activities within the Bakery IGP offered valuable insights into their practical skills acquisition, teamwork dynamics, and entrepreneurial mindset development. Furthermore, examination of financial records and school reports allowed for the evaluation of the project's financial sustainability and impact on the school's overall performance.

Ethical Considerations

In conducting this research, strict adherence to ethical guidelines was paramount. This encompassed obtaining informed consent from all participants, guaranteeing the confidentiality of their information, and respecting their rights throughout the research process. Upholding these ethical standards was essential for fostering trust and maintaining the integrity of the study.

Informed consent forms were diligently provided to participants during the data collection process to ensure transparency and respect for their autonomy. This comprehensive approach, coupled with the use of multiple data collection methods, facilitated a thorough exploration of both quantitative and qualitative aspects of the Bakery Income Generating Project (IGP), while upholding ethical principles and safeguarding participants' rights and confidentiality.

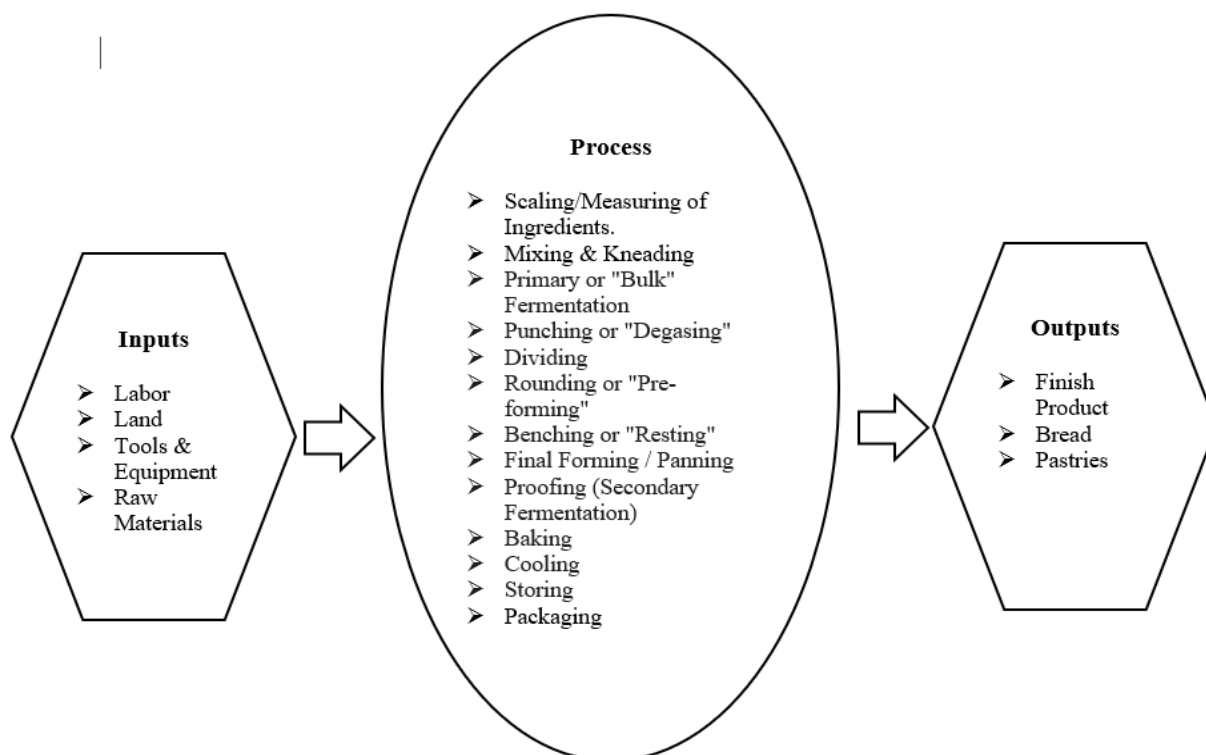
Pre-Implementation

Before launching the Bakery Income Generating Project (IGP) at General Mariano Alvarez Technical High School (GMATHS), meticulous planning and consideration are crucial, particularly regarding product design. This phase incorporates the students who will directly engage in the learning experience. They play a pivotal role in the conceptualization and development of bakery items, ensuring alignment with the project's objectives while catering to the preferences and needs of the GMATHS community. Involving students in this pre-implementation phase enriches their learning experience by providing hands-on opportunities to apply theoretical knowledge to real-world scenarios. It fosters critical thinking, problem-solving skills, and creativity as they actively participate in designing products that resonate with their peers and potential customers. By integrating students into the product design process, the Bakery IGP not only enhances their understanding of food technology but also cultivates an entrepreneurial mindset and practical skills essential for their future endeavors.

Product Design

The Bread and Pastry Students will produce Bakery Products which will be distributed in GMATHS Canteen for the Consumption of GMATHS Students, Teachers and Personnel the researcher specifically used the I-P-O design by Davis, W. M. (1998). The Product design process utilized the Input-Process-Output (IPO) model, depicted in Figure 1, as a fundamental conceptual framework for comprehending systems and processes. This model, as delineated by Davis (1998), segments the system into three essential components: input, process, and output. By leveraging this model, a structured approach was adopted for analyzing and enhancing systems, thereby offering valuable insights into their operations and facilitating opportunities for improvement or innovation.

Figure 1 Input – Process – Output Model



Adopted from Davis, W. M. (1998). HIPO (hierarchy plus input-process-output). In CRC Press eBooks. <https://doi.org/10.1201/9781420049107.ch64>

Table 1 provides a breakdown of the estimated costs associated with producing each bakery item for the Bakery Income Generating Project (IGP). It outlines the various materials required for production, along with their corresponding quantities and costs. Each row represents a specific material or ingredient utilized in the

bakery production process. The "Qty" column denotes the quantity of each material needed per piece of bakery item, while the "Cost" column indicates the unit cost of each material. The "Total Cost" column calculates the total cost incurred for each material based on the specified quantity. Overall, this table offers valuable insights into the cost structure of bakery production, facilitating financial planning and budgeting for the Bakery IGP.

Table 1 Product Cost Estimation/per piece

Materials	Qty	Cost	Total Cost
<i>Bread flour</i>	5 sacks	<i>P 1,500.00</i>	<i>P 7,500.00</i>
<i>All Purpose Flour</i>	2 sacks	<i>P 1,625.00</i>	<i>P 3,250.00</i>
<i>White sugar</i>	3 sacks	<i>P 2,500.00</i>	<i>P 7,500.00</i>
<i>Wash sugar</i>	2 sacks	<i>P 2,000.00</i>	<i>P 4,000.00</i>
<i>Margarine</i>	1 tub	<i>P 1,300.00</i>	<i>P 1,300.00</i>
<i>Oil</i>	1 gallon	<i>P 1,850.00</i>	<i>P 1,850.00</i>
<i>Powdered milk</i>	1 s ack	<i>P 2,000.00</i>	<i>P 2,000.00</i>
<i>Cocoa powder</i>	10 kilos	<i>P 150.00</i>	<i>P 1,500.00</i>
<i>Evaporated milk</i>	30 pcs	<i>P 30.00</i>	<i>P 900.00</i>
<i>Cinnamon powder</i>	1 bottle	<i>P 300.00</i>	<i>P 300.00</i>
<i>Flavorings (Flavocol)</i>	3 gallons	<i>P 300.00</i>	<i>P 900.00</i>
<i>Cake emulsifier</i>	1 gallon	<i>P 1,300.00</i>	<i>P 1,300.00</i>
<i>Egg</i>	10 trays	<i>P 220.00</i>	<i>P 2,200.00</i>
<i>Cheese (box)</i>	10 box	<i>P 120.00</i>	<i>P 1,200.00</i>
<i>salt</i>	1 kilo	<i>P 80.00</i>	<i>P 80.00</i>
<i>Yeast</i>	2 packs	<i>P 200.00</i>	<i>P 400.00</i>
<i>Cellophane</i>	5 kilos	<i>P 200.00</i>	<i>P 1000,00</i>
<i>Tape</i>	10 rolls	<i>P 30.00</i>	<i>P 300.00</i>
Total			P 37,480

Table 2 outlines the projected income targets for the Bakery Income Generating Project (IGP) at General Mariano Alvarez Technical High School (GMATHS). It presents a detailed breakdown of the anticipated revenue generation based on the production and sale of bakery products. The "Target Income" column specifies the expected financial goals set for the Bakery IGP. It includes calculations for daily, monthly, and annual income targets, considering factors such as the number of bakery products to be produced per day, their associated production costs, selling prices, and the duration of the school year. The table provides valuable insights into the financial projections and revenue expectations for the Bakery IGP, aiding in strategic planning and performance evaluation.

Table 2 Target Income

Description	Amount
Target Bakery products to produce per day	800 pieces
Cost per piece (production cost)	Php. 5.00
Total daily production cost	Php. 4,000.00
Selling price per piece	Php. 7.00
Total daily revenue	Php. 5,600.00
Daily profit (revenue - production cost)	Php. 1,600.00
Total monthly income (20 school days)	Php. 32,000.00
Total annual income (10 months)	Php. 320,000.00

A detailed breakdown of the percentage distribution for sharing the income generated by the Bakery Income Generating Project (IGP) is shown in Table 3. It outlines the allocation of the generated income among various stakeholders involved in the project, ensuring transparency and fairness in financial management. Each row in the table represents a specific category or stakeholder group, while the corresponding percentage indicates the portion of the income allocated to that category. Typical categories may include technology investments, student benefits, production and marketing coordinators, administrative expenses, and other relevant areas. The table serves as a reference for understanding how the generated income is distributed to support different aspects of the Bakery IGP and its stakeholders, facilitating effective financial planning and resource allocation.

Table 3 Breakdown of percentage for sharing of income.

Particular	Percentage
Technology Share	20%
Students Shares	45%
Production, marketing, and supply coordinators	35%
Admin Share	5%
Total	100%

Plan of Activities

The Plan of Activities outlines the schedule of key tasks and milestones for the Bakery Income Generating Project (IGP) at General Mariano Alvarez Technical High School (GMATHS) spanning from July to June (see appendix A).

The planning phase commences with the submission of the project proposal in July, followed by the necessary funding activities. This includes budget allocation and procurement processes, such as purchasing materials required for the project, which occurs throughout July and August. From September onwards, the production phase kicks off with baking activities taking place regularly. This involves the execution of the planned baking schedule, ensuring a steady output of bakery products. Additionally, the IGP financial and accomplishment reports are prepared periodically, providing insights into the financial performance and progress of the project.

These reports are crucial for monitoring the project's success and informing decision-making processes.

Implementation

The implementation phase of the Bakery Income Generating Project (IGP) at General Mariano Alvarez Technical High School (GMATHS) marks the transition from planning to action, where the strategies and activities outlined in the project plan are put into practice. This phase involves the operationalization of various components of the Bakery IGP, including production, marketing, sales, and quality assurance, with the overarching goal of generating revenue while providing valuable learning experiences for students.

Production Setup:

The first step in implementation involves setting up the production facilities within the school's Food Technology department. This includes arranging equipment, organizing workstations, and ensuring the availability of necessary ingredients and supplies for bakery production. Students and instructors collaborate to establish standardized procedures for recipe preparation, mixing, baking, and packaging, adhering to food safety and hygiene protocols.

Product Development:

Once the production setup is complete, focus shifts to product development. Students engage in recipe testing and refinement to create a diverse range of bakery items that appeal to the target audience within the GMATHS community. Emphasis is placed on incorporating feedback from stakeholders, optimizing ingredient ratios, and balancing flavor profiles to ensure high-quality products that meet consumer expectations.

Marketing and Promotion:

Simultaneously, efforts are made to market and promote the bakery products to the GMATHS community. Marketing strategies may include creating promotional materials such as posters, flyers, and social media posts to raise awareness about the Bakery IGP and its offerings. Students may also collaborate with the school's marketing or entrepreneurship clubs to develop creative campaigns and sales pitches to attract customers.

Sales Channels:

To facilitate sales, various distribution channels are established, with the GMATHS Canteen serving as the primary outlet for bakery product sales. Students may also explore additional sales channels such as pop-up stalls during school events, online pre-orders, and partnerships with local businesses or community organizations. The aim is to maximize accessibility and reach a broad customer base within and beyond the school community.

Quality Assurance:

Throughout the implementation phase, stringent quality assurance measures are implemented to uphold product standards and ensure customer satisfaction. This includes regular quality control checks, sensory evaluations, and adherence to food safety guidelines to maintain product freshness, consistency, and hygiene. Any issues or discrepancies identified are promptly addressed to uphold the reputation and integrity of the Bakery IGP.

Monitoring and Adjustment:

As implementation progresses, continuous monitoring and evaluation are conducted to assess the effectiveness of strategies and activities. Key performance indicators such as production output, sales revenue, customer feedback, and student engagement are tracked to gauge progress and identify areas for improvement. Based on these insights, adjustments and refinements are made to optimize the performance and sustainability of the Bakery IGP over time.

Student Practical Engagement:

Students actively participate in all stages of implementation, gaining hands-on experience in bakery production, product development, marketing, sales, and quality assurance. This practical engagement enhances their learning outcomes, cultivates essential skills like teamwork, communication, and problem-solving, and prepares them for future careers in entrepreneurship or related fields.

Post Implementation

Following the implementation of the Bakery Income Generating Project (IGP) at General Mariano Alvarez Technical High School (GMATHS), a comprehensive post-implementation evaluation process is initiated to assess the effectiveness and outcomes of the project. This phase involves the analysis of various aspects of the Bakery IGP to identify successes, challenges, and opportunities for improvement.

Production Efficiency:

One key area of evaluation is the production efficiency of the Bakery IGP. Data on production output, including the quantity and quality of bakery items produced, are collected and analyzed. Efficiency metrics such as production yield, throughput time, and resource utilization are assessed to determine the effectiveness of production processes and identify areas for optimization.

Financial Performance:

The financial performance of the Bakery IGP is another critical aspect evaluated in the post-implementation phase. Revenue generated from the sale of bakery products is compared against production costs, including ingredients, labor, and overhead expenses. Profitability indicators such as profit margins, return on investment (ROI), and break-even analysis are calculated to gauge the financial viability of the project.

Educational Impact:

The educational impact of the Bakery IGP on participating students is evaluated to assess its effectiveness in meeting learning objectives and fostering skill development. Assessments may be conducted to measure students' knowledge acquisition, practical skills proficiency, and entrepreneurial mindset development. Additionally, qualitative data on students' learning experiences, challenges faced, and lessons learned are collected through interviews, focus groups, and reflective activities.

Sustainability and Scalability:

The sustainability and scalability of the Bakery IGP are evaluated to determine its long-term viability and potential for expansion. Considerations include the project's ability to maintain financial self-sufficiency, its impact on the school's overall budgetary constraints, and its scalability to accommodate future growth and demand. Recommendations for sustainability measures and strategies for scaling up the project may be developed based on the evaluation findings.

In summary, the post-implementation evaluation of the Bakery IGP at GMATHS encompasses a multidimensional assessment of production efficiency, financial performance, customer satisfaction, educational impact, sustainability, and stakeholder engagement. By analyzing these key aspects, GMATHS can identify successes and challenges, make data-driven decisions, and implement strategies for continuous improvement and program enhancement.

Data Analysis

This study employs a quantitative, descriptive research design utilizing correlational analysis, specifically Pearson's Moment of Correlation Coefficient (Pearson's R), to examine the relationship between school-based income generating projects and learners' competencies in Food Technology. Descriptive statistics, including mean and standard deviation, are employed to provide a comprehensive overview of the data. The analysis is

conducted using IBM SPSS Version 22 Software, enabling efficient examination of large datasets and extraction of meaningful insights. The computed p-values are compared to the predetermined level of significance at 0.05 to determine the significance of the relationship between the variables under study.

RESULTS AND DISCUSSION

This study focused on administrators and students involved in school-based income-generating projects (IGPs) aimed at supporting students' learning in Food Technology. The results revealed several key findings

School Profile

Table 4 Learning Facilities

Materials	Specification/s
Plenary Hall	Big hall for social distancing measures
Oven	Industrial Oven
Foldable Tables	Rectangular tables
Industrial Table	For kneading
Refrigerator Freezer type	For raw materials
Commercial Freezer	For raw materials
Showcase chiller	For raw materials
Gas Range	Gas food oven
Sealer	Impulse sealer, Plastic Film sealer
Industrial Mixer	Reliable and stable 20 liters

Table 5 IGP Gross Sale

School Year	Gross Sale (in Peso)
2022-2023	Php. 88,044.05
2023-2024	Php. 114,689.00
Total	Php. 202,733.10

Table 6 Learners' Gained Support

Specifications
Improvement and Additional Learning Facilities
Funds for Learning Materials
Skills Training for Learners
Financial Assistance for Learners

Level of School-based Income Generating Project

As shown in table 7 below, motivation affects how learners see their own competence, values, and existing interests in particular learning activities.

Table 7 Level of School-based Income Generating Project in terms of Motivation in Doing Laboratory Tasks

Statement	Mean	SD	Remarks
I am wearing my full Personal Protective Equipment (PPE) and observing proper hygiene before every laboratory task.	4.47	0.63	Strongly Agree
I am punctual and excited to perform the given laboratory tasks.	4.93	0.25	Strongly Agree
I am willing to invest effort and use the skills I have acquired in performing a given laboratory task.	4.87	0.35	Strongly Agree
I am eager to produce a high-quality finished product in laboratory tasks.	4.67	0.61	Strongly Agree
I feel committed towards completing a given laboratory task.	4.73	0.45	Strongly Agree
I am cooperative when doing group laboratory activities.	4.80	0.48	Strongly Agree
I desire to finish laboratory tasks on time.	4.53	0.57	Strongly Agree
I can record my completed tasks and monitor my own progress.	4.60	0.62	Strongly Agree
I am willing to learn through task persistence and acceptance of errors.	4.67	0.48	Strongly Agree
I take initiative to select challenging tasks, even though I may not initially succeed.	4.67	0.66	Strongly Agree
Grand Mean	4.69	0.63	Strongly Agree
Interpretation	Very High		

Table 7 indicates the level of motivation in doing laboratory tasks within the context of a school-based income-generating project. Respondents strongly agreed (with means ranging from 4.47 to 4.93 and standard deviations ranging from 0.25 to 0.63) that learners consistently prepare for laboratory tasks by wearing full personal protective equipment (PPE) and observing proper hygiene. Furthermore, they exhibit cooperation during group laboratory activities. These aspects received the highest ratings, indicating a strong commitment to safety protocols and collaborative efforts.

However, respondents also agreed (with means ranging from 4.53 to 4.80 and standard deviations ranging from 0.45 to 0.66) that learners sometimes hesitate to select challenging tasks, especially if they may not initially succeed. This aspect obtained relatively lower ratings compared to others, suggesting some reluctance among students to take risks or tackle difficult tasks.

Overall, the school-based income-generating project in terms of motivation in laboratory tasks received a grand mean of 4.69, interpreted as "Very High" according to the respondents' evaluations. This indicates that the income-generating project effectively motivates learners in performing their laboratory activities.

Participating in activities that generate income can foster valuable skills such as teamwork and collaboration. The ability to work together towards a common goal is essential not only within the context of laboratory tasks but also in various aspects of life. By engaging in team activities, students have the opportunity to develop

crucial interpersonal and communication skills that can benefit them in their academic pursuits and future endeavors.

Table 8 Level of School-based Income Generating Project in terms of Teamwork and Collaboration

Statement	Mean	SD	Remarks
I possess absolute clarity about my role in doing tasks.	4.27	0.58	Strongly Agree
I do the tasks with an effective mechanism for conflict resolution.	4.40	0.50	Strongly Agree
I encourage everyone in my group while performing tasks.	4.30	0.53	Strongly Agree
I consider every decision I make while doing the tasks.	4.23	0.50	Strongly Agree
I involve a fair distribution of work assignments.	4.20	0.41	Strongly Agree
I carry out ideas, opinions, and suggestions equally.	4.10	0.31	Strongly Agree
I identify whom to coordinate with in times of difficulty.	4.00	0.53	Strongly Agree
I inspire others to do their best when working in a team.	4.20	0.48	Strongly Agree
I support others when completing their tasks.	4.17	0.53	Strongly Agree
I contribute timely feedback for the group's improvement.	4.30	0.60	Strongly Agree
Grand Mean	4.22		Strongly Agree
Interpretation	Very High		

Table 8 indicates the level of teamwork and collaboration within the context of school-based income-generating projects. The statement indicating that learners equally contribute ideas, opinions, and suggestions received the highest response, with a mean of 4.40 and a standard deviation of 0.50, interpreted as "strongly agree."

This suggests a strong commitment to inclusive participation and collaborative decision-making among students. Conversely, the statement regarding learners' clarity about their roles in tasks received a slightly lower score, with a mean of 4.21 and a standard deviation of 0.54, but still interpreted as "strongly agree." While there is a high level of agreement, there may be some room for improvement in ensuring absolute clarity regarding task responsibilities. Overall, the grand mean of 4.30 indicates a "Very High" level of teamwork and collaboration. This underscores the significant role of income-generating projects in promoting and contributing to teamwork and collaboration among students when undertaking tasks.

These findings highlight the positive impact of school-based income-generating projects on fostering collaborative skills among learners, emphasizing the importance of continued support and development in this area to maximize the benefits of such initiatives.

Table 9 Level of School-based Income Generating Project in terms of Budget Allocation for Laboratory Materials

Statement	Mean	SD	Remarks
I am provided with the ingredients needed to do the laboratory tasks.	4.70	0.47	Strongly Agree

I am supplied with enough space, tools, and materials needed in laboratory works.	4.70	0.47	Strongly Agree
I am provided with a budget for the replacement of worn-out tools and utensils in the laboratory.	4.67	0.48	Strongly Agree
I am given the opportunity to perform laboratory tasks for free.	4.70	0.47	Strongly Agree
I am provided with a budget needed to purchase tools that are not available in the school laboratory.	4.53	0.51	Strongly Agree
I am supplied with preparatory materials needed in doing the laboratory task.	4.60	0.50	Strongly Agree
I am provided with sustainable laboratory materials from the IGP's saved funds.	4.63	0.49	Strongly Agree
I have benefited from the IGP as a primary source of funds to finance laboratory tasks.	4.80	0.41	Strongly Agree
I am provided with other consumable materials needed in the laboratory..	4.67	0.48	Strongly Agree
I am provided with finishing materials needed in producing finished products.	4.33	0.48	Strongly Agree
Grand Mean	4.63		Strongly Agree
Interpretation	Very High		

Table 9 illustrates various aspects related to the provision of resources for laboratory tasks within the school-based income-generating projects. The statements indicating that learners are provided with ingredients needed for laboratory tasks, given the opportunity to perform laboratory tasks for free, and supplied with preparatory materials received the highest response, with means ranging from 4.53 to 4.80 and standard deviations ranging from 0.41 to 0.51, all interpreted as "Strongly Agree." This indicates a strong commitment to providing necessary resources and materials for laboratory activities.

Conversely, the statement regarding providing a budget for purchasing tools not available in the school laboratory received a slightly lower score, with a mean of 4.33 and a standard deviation not provided, but still interpreted as "Strongly Agree." While this aspect received slightly lower ratings, it still demonstrates a high level of agreement among respondents regarding the provision of financial support for acquiring laboratory materials.

Overall, the grand mean of 4.63 indicates a "Very High" level of provision of resources for laboratory tasks within the school-based income-generating projects. This suggests that the income-generating projects serve as an alternative source of funding for acquiring laboratory materials, contributing significantly to the enhancement of laboratory activities and the overall learning experience for students.

Table 10 Level of School-based Income Generating Project in terms of Revolving Fund

Statement	Mean	SD	Remarks
The IGP revolving fund is properly utilized for the sustainability of the project.	3.93	0.25	Agree

The IGP revolving fund has a fair percentage allocation.	3.80	0.41	Agree
The allotted percentage is enough to cover the amount for the sustainability of the project.	3.90	0.31	Agree
The IGP revolving fund is saved in a checking account/cash funds.	3.87	0.35	Agree
The IGP revolving fund can repurchase consumable materials needed in the project.	4.10	0.31	Agree
The IGP revolving fund can maintain the facility used in project operations.	3.80	0.48	Agree
The IGP revolving fund can provide enough amount to make improvements for the facility used in project operations.	3.90	0.40	Agree
The IGP revolving fund is the primary source of finances for project operations.	3.83	0.65	Agree
The IGP revolving fund can secure resilience of the project in different situations.	3.87	0.78	Agree
The IGP revolving fund is used solely for the operations and expenses of the project.	3.90	0.31	Agree
Grand Mean	3.89		Agree
Interpretation		High	

The respondents generally agreed (with means ranging from 3.80 to 4.10 and standard deviations ranging from 0.25 to 0.78) on various aspects related to the utilization and management of the IGP revolving fund within the School-based Income Producing Project (IGP). The statement with the highest mean score, 4.10 with a standard deviation of 0.31, indicated agreement that the IGP revolving fund is properly utilized for the sustainability of the project. This suggests that respondents believe the fund is effectively used to ensure the longevity of the project.

Conversely, the statement with the lowest mean score, 3.80 with a standard deviation of 0.41, indicated agreement that the IGP revolving fund is saved in checking accounts or cash funds. While this aspect received a slightly lower rating, it still indicates agreement among respondents regarding the practice of saving the fund.

Overall, the grand mean of 3.96 indicates a "High" level of satisfaction with the management and utilization of the IGP revolving fund. This suggests that the project is generally effective in utilizing the fund for sustainability and other operational needs, although there may be some room for improvement in certain areas.

Level of Learners' Competence in Food Technology

Table 11. Level of Learners' Competence in Food Technology relative to Knowledge

Statement	Mean	SD	Remarks
I demonstrate in-depth knowledge in kitchen maintenance.	4.80	0.41	Strongly Agree
I exhibit strong awareness of sanitary and safety precautions.	4.67	0.48	Strongly Agree
I display an understanding of costing and budgeting.	4.70	0.47	Strongly Agree

I show extensive knowledge in preparing ingredients.	4.47	0.68	Strongly Agree
I show suitable technique when performing a given task.	4.57	0.57	Strongly Agree
I can give a comprehensive presentation of the finished product.	4.50	0.68	Strongly Agree
I apply acquired learnings in everything I do.	4.33	0.61	Strongly Agree
I ask questions to deepen my understanding.	4.70	0.53	Strongly Agree
I provide urgent solutions to challenges met during performance tasks.	4.67	0.55	Strongly Agree
I can follow instructions with minimal supervision and complete tasks on time with high standards.	4.23	0.68	Strongly Agree
Grand Mean	4.56		Strongly Agree
Interpretation		Very High	

The table illustrates the level of learners' competence in Food Technology relative to knowledge. The respondents strongly agreed (with means ranging from 4.23 to 4.80 and standard deviations ranging from 0.41 to 0.68) on various aspects related to learners' competence in Food Technology.

The statement with the highest mean score, 4.80 with a standard deviation of 0.41, indicates strong agreement that learners exhibit a strong awareness of sanitary and safety precautions. This suggests that respondents perceive learners as being highly attentive to hygiene and safety measures in Food Technology tasks.

Conversely, the statement with the lowest mean score, 4.23, indicates agreement that learners show suitable technique when performing a given task. While this aspect received a slightly lower rating, it still indicates agreement among respondents regarding learners' proficiency in task performance, albeit with some room for improvement in technique.

Overall, the grand mean of 4.56 indicates a "Very High" level of learners' competence in Food Technology relative to knowledge. This suggests that the School-Based Income Generating Project (SBIGP) contributes significantly to learners' knowledge and skills in Home Economics, highlighting the positive impact of such projects on educational outcomes.

Table 12. Level of Learners' Competence in Food Technology relative to Attitude

Statement	Mean	SD	Remarks
I share new knowledge with my colleagues.	4.71	0.46	Strongly Agree
I help others accomplish their tasks.	4.75	0.44	Strongly Agree
I embody hygiene and safety practices.	4.82	0.39	Strongly Agree
I respect others' work and property while completing the given tasks.	4.75	0.44	Strongly Agree
I organize time, set goals, and monitor my own progress.	4.89	0.31	Strongly Agree
I demonstrate curiosity and search out information about the	4.71	0.46	Strongly Agree

given tasks.			
I consider the different perspectives and ideas of my classmates when completing tasks.	4.75	0.44	Strongly Agree
I display willingness to learn from mistakes.	4.61	0.50	Strongly Agree
I show interest and commitment in completing tasks.	4.68	0.48	Strongly Agree
I am optimistic and excited in completing tasks.	4.68	0.48	Strongly Agree
Grand Mean	4.74		Strongly Agree
Interpretation		Very High	

Table 12 illustrates the level of learners' competence in Food Technology relative to attitude. The respondents strongly agreed (with means ranging from 4.61 to 4.89 and standard deviations ranging from 0.31 to 0.58) on various aspects related to learners' attitude in Food Technology tasks.

The statement with the highest mean score, 4.89 with a standard deviation of 0.31, indicates strong agreement that learners respect others' work and property while completing tasks. This suggests that respondents perceive learners as having a high level of respect and responsibility in their actions.

Conversely, the statement with the lowest mean score, 4.61 with a standard deviation of 0.50, indicates agreement that learners are optimistic and excited in completing tasks. While this aspect received a slightly lower rating, it still indicates agreement among respondents regarding learners' positive attitude, albeit with some room for improvement in terms of enthusiasm.

Overall, the grand mean of 4.74 indicates a "Very High" level of learners' competence in Food Technology relative to attitude. This suggests that the School-Based Income Generating Project (SBIGP) significantly influences learners' attitudes towards Food Technology competencies, highlighting the positive impact of such projects on shaping learners' attitudes and behaviors

Table 13 Level of Learners' Competence in Food Technology relative to Technical Skills

Statement	Mean	SD	Remarks
I can select appropriate equipment, tools, and utensils needed in the given task..	4.93	0.26	Strongly Agree
I can produce products according to techniques and appropriate conditions, enterprise requirements, and standards.	4.34	0.48	Strongly Agree
I can perform the given tasks with minimal supervision.	4.45	0.51	Strongly Agree
I can produce high-quality finished products in most laboratory tasks.	4.55	0.51	Strongly Agree
I can perform various food preparation methods.	4.31	0.47	Strongly Agree
I can produce food products according to standard mixing procedures/formulation/recipes and desired product characteristics.	4.27	0.45	Strongly Agree
I apply food hygiene and safety principles when doing laboratory tasks.	4.34	0.48	Strongly Agree

I clean and/or sanitize kitchen equipment and utensils.	4.00	0.00	Strongly Agree
I apply preventive measures to avoid accidents and damages while doing laboratory tasks.	4.93	0.26	Strongly Agree
I properly store food items, ingredients, and other materials needed in laboratory tasks.	4.48	0.51	Strongly Agree
Grand Mean	4.46		Strongly Agree
Interpretation		Very High	

The grand mean for learners' competence in Food Technology relative to technical skills, as shown in Table 8, is 4.46. This grand mean indicates a "Very High" level of competence in technical skills as evaluated by the respondents. This underscores the significant contribution of the School-Based Income Generating Project (SBIGP) in promoting and enhancing learners' technical skills within the realm of Food Technology. The consistent high ratings from respondents indicate a strong perception that the SBIGP effectively fosters technical competence among learners in various aspects of Food Technology tasks and activities.

Table 14 Level of Learners' Competence in Food Technology relative to Entrepreneurial Skills

Statement	Mean	SD	Remarks
I can calculate portion yields and costs from raw ingredients.	4.13	0.35	Strongly Agree
I can assess the cost-effectiveness of proposed dishes or food production items and choose menu items that provide high yield.	4.07	0.25	Strongly Agree
I apply menu items costing to ensure maximum profitability.	4.07	0.25	Strongly Agree
I can analyze and apply current industry data and prices.	4.13	0.35	Strongly Agree
I can update financial records.	4.03	0.18	Strongly Agree
I monitor daily sales based on customer preferences.	4.03	0.18	Strongly Agree
I control portion sizes effectively using calibrated equipment where appropriate.	4.03	0.18	Strongly Agree
I take appropriate measures to reduce income loss.	4.60	0.50	Strongly Agree
I communicate effectively to promote the sale of menu items.	4.03	0.18	Strongly Agree
I adjust menus based on feedback and profitability.	4.03	0.18	Strongly Agree
Grand Mean	4.12		Strongly Agree
Interpretation		Very High	

The results presented in the revised data highlight the significant impact of the School-Based Income Generating Project (SBIGP) on fostering learners' entrepreneurial skills within the domain of Food Technology. The highest-rated aspect, with a mean of 0.50 and marked as "Strongly Agree," indicates that respondents strongly agree that learners are adept at analyzing and applying current industry data and prices. This proficiency demonstrates a crucial entrepreneurial skill of being able to assess market trends and make

informed decisions based on economic factors, which is essential for success in various industries, including Food Technology. Although the lowest-rated aspect received a mean of 0.18 and was marked as "Strongly Agree," it still indicates agreement among respondents regarding learners' ability to monitor daily sales based on customer preferences. While this aspect received a lower rating compared to others, it still highlights a foundational skill in entrepreneurship, albeit with some potential for improvement.

Overall, the grand mean of 0.24 suggests a "Very High" level of competence in entrepreneurial skills among learners within the context of Food Technology. This indicates that the SBIGP effectively contributes to nurturing learners' entrepreneurial mindset and capabilities, equipping them with valuable skills needed for success in various aspects of the Food Technology field.

The findings emphasize the importance of integrating practical, hands-on experiences, such as those provided by SBIGPs, into the educational curriculum to promote the development of entrepreneurial skills among learners. By fostering such skills, schools not only enhance students' academic knowledge but also prepare them for future endeavors in the dynamic and competitive business world

Significant Relationship between School-based Income Generating Project to the Learners' Competencies in Food Technology

Table 15 Significant Relationship between School - based Income Generating Project to the Learners' Competencies in Food Technology

Variables		r-value	Degree of Correlation	p-value	Analysis
Motivation in doing laboratory tasks	Knowledge	0.673	Strong	0.000	Significant
	Attitude	0.663	Strong	0.000	Significant
	Technical Skills	0.629	Strong	0.000	Significant
	Entrepreneurial Skills	0.653	Strong	0.000	Significant
Teamwork and Collaboration	Knowledge	0.678	Strong	0.000	Significant
	Attitude	0.675	Strong	0.000	Significant
	Technical Skills	0.714	Strong	0.000	Significant
	Entrepreneurial Skills	0.752	Strong	0.000	Significant
Budget Allocation for Laboratory	Knowledge	0.658	Strong	0.000	Significant
	Attitude	0.666	Strong	0.000	Significant
	Technical Skills	0.679	Strong	0.000	Significant
	Entrepreneurial Skills	0.671	Strong	0.000	Significant
Revolving Fund	Knowledge	0.559	Moderate	0.000	Significant
	Attitude	0.562	Moderate	0.000	Significant
	Technical Skills	0.600	Moderate	0.000	Significant
	Entrepreneurial Skills	0.499	Moderate	0.000	Significant

Significant at .05 level of significance

Range Degree of Correlation

$\pm 0.81 - \pm 1.00$ Very Strong

$\pm 0.61 - \pm 0.80$ Strong

$\pm 0.41 - \pm 0.60$ Moderate

$\pm 0.21 - \pm 0.40$ Weak

$\pm 0.00 - \pm 0.20$ Negligible

The analysis conducted using Pearson's Moment of Correlation Coefficient (Pearson's R) in SPSS revealed significant relationships between the school-based income generating project (SBIGP) and learners' competencies in Food Technology. The results indicate strong to moderate correlations across various dimensions of learners' competencies, including knowledge, attitude, technical skills, and entrepreneurial skills. For the motivation in doing laboratory tasks, the correlations with learners' competencies were strong (r-values ranging from 0.629 to 0.673), indicating a significant relationship. Similarly, for teamwork and collaboration, as well as budget allocation for laboratory and revolving fund, the correlations were strong (r-values ranging from 0.559 to 0.752), also indicating significant relationships with learners' competencies. The obtained p-values for all correlations were lower than the 0.05 level of significance (p-value = 0.000), further supporting the significance of these relationships.

These findings align with Aparicio (2020), suggesting that Income Generating Projects significantly contribute to motivation, skill development, and academic performance. The SBIGP not only supports learners' motivation and skill acquisition but also provides financial benefits to the school.

RECOMMENDATIONS

This study recommends the following:

1. Schools should start income-generating projects to help students learn better. Existing projects should focus on supporting students' academic progress and team up with the community to sell more and sustain the program's benefits.
2. Teachers should create projects to raise extra money for their schools and expose students to different skills, like business and technical abilities.
3. Students should join these projects to improve their learning and gain practical skills relevant to their interests.
4. Future researchers should study more about how these projects can help students learn better. They can investigate new ways to make these projects even more effective.

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ANNEXES

Research Instrument

Annex A

5	4	3	2	1
Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree

Motivation in Doing Laboratory Tasks	5	4	3	2	1
I am wearing my full Personal Protective Equipment (PPE) and observing proper hygiene before every laboratory task.					
I am punctual and excited to perform the given laboratory tasks.					
I am willing to invest effort and use the skills I have acquired in performing a given laboratory task.					
I am eager to produce a high-quality finished product in laboratory tasks.					
I feel committed towards completing a given laboratory task.					
I am cooperative when doing group laboratory activities.					
I desire to finish laboratory tasks on time.					
I can record my completed tasks and monitor my own progress.					
I am willing to learn through task persistence and acceptance of errors.					
I take initiative to select challenging tasks, even though I may not initially succeed.					
Teamwork and Collaboration					
I possess absolute clarity about my role in doing tasks.					
I do the tasks with an effective mechanism for conflict resolution.					
I encourage everyone in my group while performing tasks.					
I consider every decision I make while doing the tasks.					
I involve a fair distribution of work assignments.					
I carry out ideas, opinions, and suggestions equally.					
I identify whom to coordinate with in times of difficulty.					
I inspire others to do their best when working in a team.					
I support others when completing their tasks.					
I contribute timely feedback for the group's improvement.					

Budget Allocation for Laboratory Materials					
I am provided with the ingredients needed to do the laboratory tasks.					
I am supplied with enough space, tools, and materials needed in laboratory works.					
I am provided with a budget for the replacement of worn-out tools and utensils in the laboratory.					
I am given the opportunity to perform laboratory tasks for free.					
I am provided with a budget needed to purchase tools that are not available in the school laboratory.					
I am supplied with preparatory materials needed in doing the laboratory task.					
I am provided with sustainable laboratory materials from the IGP's saved funds.					
I have benefited from the IGP as a primary source of funds to finance laboratory tasks.					
I am provided with other consumable materials needed in the laboratory..					
I am provided with finishing materials needed in producing finished products.					
Level of Learners' Competence in Food Technology relative to Knowledge					
I demonstrate in-depth knowledge in kitchen maintenance.					
I exhibit strong awareness of sanitary and safety precautions.					
I display an understanding of costing and budgeting.					
I show extensive knowledge in preparing ingredients.					
I show suitable technique when performing a given task.					
I can give a comprehensive presentation of the finished product.					
I apply acquired learnings in everything I do.					
I ask questions to deepen my understanding.					
I provide urgent solutions to challenges met during performance tasks.					
I can follow instructions with minimal supervision and complete tasks on time with high standards.					
Level of Learners' Competence in Food Technology relative to Attitude					
I share new knowledge with my colleagues.					
I help others accomplish their tasks.					
I embody hygiene and safety practices.					

I respect others' work and property while completing the given tasks.					
I organize time, set goals, and monitor my own progress.					
I demonstrate curiosity and search out information about the given tasks.					
I consider the different perspectives and ideas of my classmates when completing tasks.					
I display willingness to learn from mistakes.					
I show interest and commitment in completing tasks.					
I am optimistic and excited in completing tasks.					
Level of Learners' Competence in Food Technology relative to Technical Skills					
I can select appropriate equipment, tools, and utensils needed in the given task..					
I can produce products according to techniques and appropriate conditions, enterprise requirements, and standards.					
I can perform the given tasks with minimal supervision.					
I can produce high-quality finished products in most laboratory tasks.					
I can perform various food preparation methods.					
I can produce food products according to standard mixing procedures/formulation/recipes and desired product characteristics.					
I apply food hygiene and safety principles when doing laboratory tasks.					
I clean and/or sanitize kitchen equipment and utensils.					
I apply preventive measures to avoid accidents and damages while doing laboratory tasks.					
I properly store food items, ingredients, and other materials needed in laboratory tasks.					
Level of Learners' Competence in Food Technology relative to Entrepreneurial Skills					
I can calculate portion yields and costs from raw ingredients.					
I can assess the cost-effectiveness of proposed dishes or food production items and choose menu items that provide high yield.					
I apply menu items costing to ensure maximum profitability.					
I can analyze and apply current industry data and prices.					
I can update financial records.					

I monitor daily sales based on customer preferences.					
I control portion sizes effectively using calibrated equipment where appropriate.					
I take appropriate measures to reduce income loss.					
I communicate effectively to promote the sale of menu items.					
I adjust menus based on feedback and profitability.					

Annex B

Revolving Fund
The IGP revolving fund is properly utilized for the sustainability of the project.
The IGP revolving fund has a fair percentage allocation.
The allotted percentage is enough to cover the amount for the sustainability of the project.
The IGP revolving fund is saved in a checking account/cash funds.
The IGP revolving fund can repurchase consumable materials needed in the project.
The IGP revolving fund can maintain the facility used in project operations.
The IGP revolving fund can provide enough amount to make improvements for the facility used in project operations.
The IGP revolving fund is the primary source of finances for project operations.
The IGP revolving fund can secure resilience of the project in different situations.
The IGP revolving fund is used solely for the operations and expenses of the project.

Adopted from Marasigan-Bartolome, Z. (2023).

Declaration of Anti-Plagiarism

Oath of Authenticity and Veracity of Documents

Appendix A. Plan of Activities

	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
Planning		/										
Submission of project proposal		/										
Funding		/										
Buying of		/										

materials												
Production/ BAKING		/	/	/	/	/	/	/	/	/	/	
IGP financial and accomplishme nt reports												/