

# School-Based Income Generating Project: A Sustainability Program for Learners' Competence in Home Economics

Zerrina Marasigan-Bartolome

zemasigan@gmail.com

Laguna State Polytechnic University, Santa Cruz Laguna 4009, Philippines

---

## Abstract

The focus of this study is to assess the school-based income generating projects of the Pila District and ascertain the positive effects and long-term viability of these initiatives on the performance tasks of home economics students in Don Manuel Rivera Memorial Integrated National High School and Linga National High School. The respondents were selected using the purposive sampling technique and consisted of eighteen (18) teachers and sixty-four (64) grade 10 students taking up the Home Economics specialization.

The study revealed that the two high schools, Linga National High School and Don Manuel Rivera Memorial Integrated National High Schools, have different learning facilities and IGP support, but both benefit from the same income. Despite having the same income, the learners' IGP support makes a significant difference in the improvement and expansion of learning facilities, skill training for learners, and financial assistance for learners. The level of school-based income generating projects in terms of motivation in doing laboratory tasks, and teamwork and collaboration are very high, while in terms of budget allocation for laboratory, and revolving fund are high. The level of learners' competence in Home Economics relative to knowledge, attitude, and technical skills, is very high, while in terms of entrepreneurial skills, it is high. The school-based income generating project in terms of motivation in doing laboratory tasks, teamwork and collaboration, budget allocation for laboratory materials, and revolving fund has a significant relation to the learners' competence in Home Economics relative to knowledge, attitude, technical skills, and entrepreneurial skills.

As a result, the researcher concluded that the null hypothesis stating "There is no significant relationship between school-based income generating project and learners' competence in home economics" is rejected.

In light of the findings and conclusion, the following recommendations are put forth: Schools should initiate a school based IGPs as a sustainability program for the learners' competence. While schools with an existing IGP should improve their policy and continuously utilize the program since it provides financial assistance and improves the learners' competence. Teachers should initiate income-generating activities and projects to help ease the deficiency of their school budget to provide the necessary learning materials and facilities. Learners should be involved in different income-generating projects and activities since it is evident that it has a positive effect on their learning competence. Lastly, Future researchers should build off of this study to undertake extensive research on the improvement of conducting income-generating projects as a support system to enhance the learners' competence.

Keywords: School-based income generating project; Income Generating Project; Learners' Competence; Home Economics; Sustainability; Financial Support for learners; Motivation; Teamwork and collaboration; Technical skills; Entrepreneurial skills

---

## 1. Main text

The Philippine government has worked incredibly hard over the years to improve the quality of the educational system in the country in order to produce globally competitive Filipinos and to set an example for a progressive society. On May 15, 2013, Republic Act 10533, also known as the Enhanced Fundamental

Education Act of 2013, was passed into law with the goal of improving the country's basic educational system. This act gave rise to the K to 12 programs. With the primary objective of increasing the nation's level of global competitiveness, the Philippines' basic education will now last two additional years, or Senior High School.

There are four possible tracks to choose from upon entering Senior High School, and one of them is the Technical-Vocational-Livelihood track. Home Economics is one of the TVL strands that teaches you a variety of talents, such as cooking, providing food and beverage services, and producing bread and pastries. However, one of the difficulties faced by students enrolled in this program is that the Home Economics strand is a costly one. Consequently, the learners' competence in the subject is compromised.

To address these challenges, teachers are encouraged to consider alternative sources of enhancing the financial capabilities of the school while providing the learners with hands-on training and practical applications of the lessons learned, thus meeting the need for them to learn by doing. One of the encouraging programs is income-generating projects to support some financial deficits and reduce the burden of education financing on the part of parents, by enabling schools to finance materials for the teaching and learning process.

Income-generating projects function as a means for gaining or increasing income. School income-generating projects serve two essential purposes: first is educating the learners in an entrepreneurial environment in which technical knowledge combined with business practices and business management will make them successful upon graduating from school. The second reason is to generate income to support the financial self-sufficiency of the school.

With all this in mind, the researcher aims to develop a School-based Income Generating project as a sustainable program to improve the learners' competence in Home Economics.

This study aims to evaluate school-based income generating project as a sustainability program for learners' competence in Home Economics.

Specifically, the researcher sought to answer the following questions:

1. What is the profile of the school in terms of geographical location, learning facilities, IGP sales for the last three (3) years, and learners gained support from 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. What is the extent of school-based income generating project to the learners' competence in Home Economics relative to:
  - 3.1 knowledge;
  - 3.2 attitude;
  - 3.3 technical skills; and
  - 3.4 entrepreneurial skills?
4. Does the school-based income generating project have significant relationship to the learners' competencies in Home Economics?

## 2. Review of Related Literature

According to the study conducted by Amos and Koda (2018), school based IGAs has been very useful alternative ways of producing additional funds as they enable secondary school managed by the Catholic Dioceses of Moshi (CDM) to solve financial problems. In public schools, budget allocation for laboratory materials usually comes from the MOOE of the school. However, due to the high demand for enrollment, the budget for the operational expenses is also high, resulting in an insufficient budget for the laboratory materials. In order to resolve these challenges, DepEd encourages the schools to conduct income-generating activities that support the learners' academic progress.

Motivation is defined in learning as an internal condition to arouse, direct and maintain people's learning behaviors (Woolfolk, 2019).

Based on the self-determination theory, motivation is categorized as intrinsic motivation and extrinsic motivation (Ryan and Deci, 2017). Intrinsically motivated learners are those who can always "reach within themselves" to find a motive and intensity to accomplish even highly challenging tasks without the need for

incentives or pressure. In contrast, extrinsically motivated behaviors are motivated by external expectations other than their inherent satisfactions (Ryan and Deci, 2020).

Teamwork is an indispensable element in the success and profitability of an organization. Among others, working in a team has the advantage that the workload can be distributed among all the team members. In addition, working as a team can benefit the individual, the team, and the organization (Dugang, 2020).

Competency-based learning begins by identifying specific competencies or skills and enables learners to develop mastery of each competency or skill at their own pace, usually working with a mentor. Learners can develop just the competencies or skills they feel they need (for which increasingly they may receive a 'badge' or some form of validated recognition) or can combine a whole set of competencies into a full qualification, such as a certificate, diploma or increasingly a full degree. Learners work individually, usually online, rather than in cohorts. If learners can demonstrate that they already have mastery of a particular competency or skill, through a test or some form of prior learning assessment, they may be allowed to move to the next level of competency without having to repeat a prescribed course of study for the prior competency (BC Campus, 2015).

Technical skills are sets of abilities or knowledge used to perform practical tasks in the areas of science, the arts, technology, engineering, and math. Technical skills typically require the use of certain tools and the technologies required to use those tools. In this regard, the knowledge in a technical skills capacity is seen as practical in nature because it allows an individual to complete a designated task in a real-world, not theoretical, manner. Given the growth of technology within worldwide and local economies, the need for diverse technical skills and knowledge is likely to continue to grow into the foreseeable future (Rhinehart, 2022).

Entrepreneurial skill is the skill in developing or creating a new product/service that will add value to society and generate monetary benefits for the entrepreneur. Research highlights the importance of the entrepreneurial attributes (risk and innovation aptitude, rapid decision-making, long sight, ability to understand others, ability to read reality factors, ability to deal with complexity, ability to compete) that cannot be generated from scratch but can be developed and should be known by students (Costin et.al., 2018). School-based income generating projects intend to help learners develop their learning competence in home economics in terms of entrepreneurial skills. This program enables learners to generate revenue through the sale of products and services.

The above studies were found to be helpful in making the researcher's current study successful. They provided the researcher with a better understanding, valuable insight, and critical analysis which allowed the researcher to form the hypothesis and research questions. Additionally, the studies provided a basis for comparison, which enabled the researcher to draw meaningful conclusions from their data.

### 3. Research Design

This study uses a quantitative, descriptive research design using correlational analysis. The researcher conducted descriptive research to determine how school-based income-generating projects benefits the learners' competence in home economics. Descriptive research uses quantitative surveys to collect data, which is then objectively examined using pre-established statistical frameworks to obtain adequate and accurate interpretation and findings.

This method involves the collection of data in order to test hypotheses or answer questions. According to Kumar (2014), as cited by Pagandian and Eduardo (2019), this method can systematically describe a situation, problem, phenomenon, service, or programs, or provide information or describe the attitude towards an issue. Also, according to Adan & Keiyoro (2017) as mentioned by Borg and Gall (2000), the purpose of the descriptive survey was to describe existing conditions, identify the standards against which existing conditions can be compared, and investigate the relationships that may exist between events. The survey design enabled the researcher to collect data without manipulating the variables.

Furthermore, the said method could lead this research to determine the support of school-based income generating project to the learning resources needed by the students. Finally, it was also used to determine the extent of IGP to the learners' competence in Home Economics.

#### 4. Result and Discussion

In this study, the respondents are two high schools in the Pila district that are operating a school-based income generating projects to support the learning process of their students in home economics.

##### 4.1 School Profile

Table 1 shows the profile of these two high schools in terms of Geographical locations, learning facilities, IGP gross sale, and learners' gained support. The distance between the town market and Linga National High School and Don Manuel Rivera Memorial Integrated National High School is shown to be within 1000 meters and 1001 to 5000 meters, respectively. Whereas DMRMINHS has HE Laboratory Canteen/Cafeteria, Oven, Laboratory utensils and materials, Industrial Tables, Electric Mixers, and Refrigerator, LNHS has HE Laboratory Canteen/Cafeteria, Oven, Refrigerator, and Cooling Racks as its learning facilities. The annual IGP gross selling for each high school ranges from 1000 to 5000. The Learners' Gained Support from IGP still makes a significant difference despite having the same income. While DMRMINHS supports its learners from IGP in the improvement and expansion of learning facilities, they also fund learning materials, give skill training for learners, and provide financial assistance for learners. LNHS funds the learning materials of their learners from their IGP.

**Table 1. School Profile**

School	Geographical Location	Learning Facilities	IGP Gross Sale	Learners' Gained Support
LINGA NHS	Within 1001 - 5000 meters from the town market	HE Laboratory Canteen/Cafeteria, Oven, Refrigerator, Cooling Racks	1,000 - 5,000 per annum	Funds for learning materials
DMRMINHS	Within 1000 meters from the town market	HE Laboratory Canteen/Cafeteria, Oven, Laboratory utensils and materials, Industrial, Tables Electric, Mixers, Refrigerator	1,000 - 5,000 per annum	Improvement and additional learning facilities, Funds for learning materials, Skills training for learners, and Financial assistance for learners

##### 4.2 Level of School-based Income Generating Project

As shown in table 2 below, motivation affects how learners see their own competence, values, and existing interests in particular learning activities.

**Table 2. Level of School-based Income Generating Project in terms of Motivation in Doing Laboratory Tasks**

STATEMENT	Mean	SD	Remarks
The learners show...			
...preparedness and readiness for every laboratory task by wearing their full PPE and observing proper hygiene.	4.37	0.60	Strongly Agree
...punctuality and excitement to perform the given task.	4.30	0.60	Strongly Agree
...willingness to invest effort and use the skills they	4.35	0.64	Strongly Agree

have acquired in performing a given task			
...eagerness to produce a high-quality finished product in laboratory tasks.	4.23	0.61	Strongly Agree
...commitment towards completing a given tasks.	4.33	0.61	Strongly Agree
...cooperation when doing group laboratory activities.	4.37	0.60	Strongly Agree
...a desire to finish the tasks on time.	4.29	0.60	Strongly Agree
...the ability to record their completed tasks and monitor their own progress.	4.15	0.59	Agree
...willingness to learn through task persistence and acceptance of errors.	4.28	0.48	Strongly Agree
...initiative to select challenging tasks, even though they may not initially succeed.	4.12	0.53	Agree
<b>Grand Mean</b>	<b>4.28</b>		<b>Strongly Agree</b>
<b>Interpretation</b>	<b>Very High</b>		

The above table indicates the level of school-based income generating project in terms of motivation in doing laboratory tasks. The respondents strongly agree that the learners prepare for every laboratory task by wearing full PPE and observing proper hygiene and they cooperate when doing group laboratory activities, it both obtained the highest ( $M=4.37$ ,  $SD=0.60$ ). However, they agreed that the learners initiate to select challenging tasks, even though they may not initially succeed, it yielded the lowest ( $M=4.12$ ,  $SD=0.53$ ).

Overall, the level of school-based income generating project in terms of motivation in doing laboratory tasks gained the grand mean of 4.28 and was interpreted "Very High" as evaluated by the respondents. This means further that the IGP serves to motivate the learners in doing their laboratory activities.

Participating in an activity that generates income can help a student acquire skills like teamwork and collaboration. The capacity to work with others to achieve a common goal is a skill that may be used in other areas of life. Students can gain crucial teamwork and communication skills by taking part in team activities.

**Table 3. Level of School-based Income Generating Project in terms of Teamwork and Collaboration**

STATEMENT	Mean	SD	Remarks
The learners...			
...possess absolute clarity about their role in doing tasks.	4.21	0.54	Strongly Agree
...do the tasks with an effective mechanism for conflict resolution.	4.24	0.66	Strongly Agree
...encourage everyone in their group while performing their tasks.	4.33	0.59	Strongly Agree
...consider every decision I make while doing the tasks.	4.33	0.55	Strongly Agree
...involve a fair distribution of work assignments.	4.22	0.54	Strongly Agree
...carry out ideas, opinions, and suggestions equally.	4.40	0.61	Strongly Agree
...identify whom to coordinate in times of difficulty.	4.35	0.62	Strongly Agree
...inspire others to do their best when working in a team.	4.34	0.53	Strongly Agree
...support others when completing their tasks.	4.34	0.57	Strongly Agree
...contribute timely feedback for the group improvement.	4.22	0.54	Strongly Agree
<b>Grand Mean</b>	<b>4.30</b>		<b>Strongly Agree</b>
<b>Interpretation</b>	<b>Very High</b>		

Table 3 indicates the level of school-based income-generating projects in terms of teamwork and collaboration. The indicative statement that the learners carry out ideas, opinions, and suggestions equally obtained the highest response ( $M = 4.40$ ,  $SD = 0.61$ ), and it was interpreted as “strongly agree”. However, the statement that the learners possess absolute clarity about their role in doing tasks yielded the lowest score ( $M = 4.21$ ,  $SD = 0.54$ ), but was still interpreted as “strongly agree”.

Therefore, the level of school-based income-generating projects in terms of teamwork and collaboration reached a grand mean of 4.30 and was interpreted as "Very High" as evaluated by the respondents. This indicates that the IGP serves to promote and contribute to teamwork and collaboration among the learners when accomplishing the tasks.

**Table 4. Level of School-based Income Generating Project in terms of Budget Allocation for Laboratory Materials**

STATEMENT	Mean	SD	Remarks
The learners...			
...are provided with ingredients needed in doing the laboratory tasks.	4.12	0.53	Agree
...are supplied with enough space, tools and materials needed in laboratory works.	3.95	0.54	Agree
...are provided with budget for replacement of worn-out tools and utensils in laboratory.	3.93	0.68	Agree
...are given the opportunity to perform laboratory tasks for free.	4.12	0.66	Agree
...are provided with budget needed to purchase tools that are not available in school laboratory.	3.87	0.58	Agree
...are supplied with preparatory materials needed in doing the laboratory task.	4.12	0.64	Agree
...are provided with sustainable laboratory materials from the IGP's saved funds.	3.93	0.62	Agree
...benefited from the IGP as a primary source of funds to finance laboratory tasks.	4.06	0.62	Agree
...are provided with other consumable materials needed in laboratory.	3.96	0.48	Agree
...are provided with finishing materials needed in producing finish products.	4.10	0.68	Agree
<b>Grand Mean</b>	<b>4.02</b>		<b>Agree</b>
<b>Interpretation</b>		<b>High</b>	

Table 4 shows that the indicative statements the learners are provided with ingredients needed in doing the laboratory tasks, given the opportunity to perform laboratory tasks for free, and supplied with preparatory materials needed in doing the laboratory task (e.g., dishwashing liquid, sponge, dustpan, broom, rugs, plastic gloves, etc.) were all obtained the highest response ( $M=4.12$ ,  $SD=0.66$ ), and it was interpreted as “Agree”. However, the statement that the learners are provided with budget needed to purchase tools that are not available in school laboratory yielded the lowest score ( $M=3.87$ ,  $SD = 0.58$ ), but was still interpreted as “Agree”.

In the table above, it is shown that the level of school-based income generating projects in terms of budget allocation for laboratory materials reached a grand mean of 4.02 and was interpreted as "High" as evaluated by the respondents. This implies that the school based IGP serves as an alternative source of funding for the acquisition of laboratory materials.

**Table 5. 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.	4.17	0.56	Agree
...has a fair percentage allocation.	3.91	0.57	Agree
...allotted percentage is enough to cover the amount for the sustainability of the project.	3.99	0.58	Agree
...is saved in checking account/cash funds.	3.80	0.64	Agree
...can repurchase consumable materials needed in the project.	3.94	0.60	Agree
...can maintain the facility used in project operations.	3.91	0.53	Agree
...can provide enough amount to make an improvement for the facility used in project operations.	3.94	0.53	Agree
...is the primary source of the finances for project operations.	3.96	0.48	Agree
...can secure resiliency of the project in different situations.	3.99	0.56	Agree
...is used solely for the operations and expenses of the project.	4.02	0.52	Agree
<b>Grand Mean</b>	<b>3.96</b>		<b>Agree</b>
<b>Interpretation</b>		<b>High</b>	

According to the aforementioned table, respondents concurred that the IGP revolving fund is effectively used for the sustainability of the project, has a fair percentage allocation, is saved in checking accounts or cash funds, can be used to repurchase consumable materials needed in the project, can maintain the facility used in project operations, and can provide enough money to make an improvement for the project.

The indicative statement, the IGP revolving fund is properly utilized for the sustainability of the project, had the highest mean score ( $M=4.17, SD=0.56$ ) and marked as "Agree". While the indicator, the IGP revolving fund is saved in checking account/cash funds, received the lowest score ( $M=3.80, SD = 0.64$ ), still marked as "Agree".

As a result, the respondents rated the level of School-based Income Producing Project in terms of revolving fund as "High" with a grand mean of 3.96.

#### 4.3 Level of Learners' Competence in Home Economics

**Table 6. Level of Learners' Competence in Home Economics relative to Knowledge**

STATEMENT	Mean	SD	Remarks
The learners...			
...demonstrate in depth knowledge in kitchen maintenance.	4.21	0.44	Strongly Agree
...exhibit strong awareness of sanitary and safety precautions.	4.38	0.51	Strongly Agree
...display understanding of costing and budgeting	4.28	0.57	Strongly Agree
...show extensive knowledge in preparing ingredients.	4.30	0.51	Strongly Agree
...show suitable technique when performing a given task.	4.13	0.52	Agree
...can give a comprehensive presentation of the finished product.	4.30	0.58	Strongly Agree
...apply acquired learnings in everything they do.	4.23	0.48	Strongly Agree
...ask questions to deepen their understanding	4.26	0.52	Strongly Agree
...provide urgent solutions to challenges met during performance tasks.	4.24	0.49	Strongly Agree
...can follow instructions with minimal ...supervision, and complete tasks on time with high standards	4.26	0.54	Strongly Agree

<b>Grand Mean</b>	<b>4.26</b>	<b>Strongly Agree</b>
<b>Interpretation</b>		<b>Very High</b>

The above table shows the level of learners' competence in Home Economics relative to knowledge. The respondents strongly agree that the learners exhibit strong awareness of sanitary and safety precautions, obtained the highest score ( $M=4.38$ ,  $SD=0.51$ ). However, they agreed that the learners show suitable technique when performing a given task., it yielded the lowest score ( $M=4.13$ ,  $SD=0.52$ ).

Generally, the respondents indicated strongly agreed that the level of learners' competence in home economics relative to knowledge with a grand mean of 4.26 and was interpreted "Very High". This further indicates that the SBIGP contributes to the learners' knowledge of home economics.

**Table 7. Level of Learners' Competence in Home Economics relative to Attitude**

<b>STATEMENT</b>	<b>Mean</b>	<b>SD</b>	<b>Remarks</b>
The learners...			
...share new knowledge to their colleagues.	4.29	0.48	Strongly Agree
...help others accomplish their tasks.	4.32	0.54	Strongly Agree
...embodied hygiene and safety practices.	4.35	0.62	Strongly Agree
...respect others work and property while completing the given tasks.	4.46	0.57	Strongly Agree
...organize time, set goals and monitors their own progress.	4.33	0.59	Strongly Agree
...demonstrate curiosity and search out information about the given tasks.	4.39	0.56	Strongly Agree
...consider the different perspectives and ideas of their classmates when completing tasks.	4.39	0.58	Strongly Agree
...displayed willingness to learn from mistakes.	4.43	0.68	Strongly Agree
...show interest and commitment in completing tasks.	4.37	0.53	Strongly Agree
...are optimistic and excited in completing tasks.	4.20	0.40	Strongly Agree
<b>Grand Mean</b>	<b>4.35</b>		<b>Strongly Agree</b>
<b>Interpretation</b>			<b>Very High</b>

Table 7 indicates the level of learners' competence in home economics relative to attitude. The indicative statement that the learners respect others work and property while completing the given tasks gained the highest score ( $M = 4.46$ ,  $SD = 0.57$ ), and it was interpreted as "strongly agree".

However, the statement that they are optimistic and excited in completing tasks received the lowest score ( $M=4.20,SD=0.40$ ), yet it was still interpreted as "strongly agree".

All in all, the level of learners' competence in home economics relative to attitude reached a grand mean of 4.35 and was interpreted as "Very High" as evaluated by the respondents. This demonstrates how the learners' attitudes toward home economics competencies are influenced by the SBIGP.

In the table below, it is discussed that the learners can clean and/or sanitize kitchen equipment and utensils and it garnered the highest score ( $M=4.38$ ,  $SD=0.58$ ) and interpreted as "strongly agree" by the respondents.

However, the respondents concurred that the learners could produce food products according to standard mixing procedures/formulation/recipes and desired product characteristics, yielded the lowest score ( $M=4.38,SD=0.58$ ) interpreted as "agree".

**Table 8. Level of Learners' Competence in Home Economics relative to Technical Skills**

<b>STATEMENT</b>	<b>Mean</b>	<b>SD</b>	<b>Remarks</b>
The learners can...			
...select appropriate equipment, tools and utensils needed in the given task.	4.34	0.55	Strongly Agree
...produce products according to techniques and	4.27	0.59	Strongly Agree

appropriate conditions; and enterprise requirements and standards.

...perform the given tasks with minimal supervision.	4.23	0.53	Strongly Agree
...produce high quality finish product in most laboratory task.	4.12	0.51	Agree
...perform the various food preparation methods.	4.13	0.58	Agree
...produce food products according to standard mixing procedures/ formulation/recipes and desired product characteristics.	4.11	0.57	Agree
...apply food hygiene and safety principles when doing laboratory tasks.	4.32	0.63	Strongly Agree
...clean and/or sanitize kitchen equipment and utensils.	4.38	0.58	Strongly Agree
...apply preventive measures to avoid accidents and damages while doing laboratory tasks.	4.27	0.55	Strongly Agree
...properly store food item, ingredients and other materials needed in laboratory tasks.	4.30	0.54	Strongly Agree
<b>Grand Mean</b>	<b>4.25</b>		<b>Strongly Agree</b>
<b>Interpretation</b>			<b>Very High</b>

As shown in table 8, the level learners' competence in home economics relative to technical skills reached a grand mean of 4.25 and was interpreted as "Very High" as evaluated by the respondents. This highlights even more how the SBIGP promotes the learners' technical skills in relation to home economics competence.

**Table 9. Level of Learners' Competence in Home Economics relative to Entrepreneurial Skills**

<b>STATEMENT</b>	<b>Mean</b>	<b>SD</b>	<b>Remarks</b>
The learners can...			
...calculate portion yields and costs from raw ingredients.	4.13	0.41	Agree
...assess cost-effectiveness of proposed dishes or food production items and chooses menu items that provide high yield.	4.12	0.43	Agree
...apply menu items costing to ensure maximum profitability.	4.15	0.57	Agree
...analyse and apply current industry data and prices.	4.28	0.50	Strongly Agree
...update financial records.	4.18	0.59	Agree
...monitor daily sales based on customer preferences.	4.00	0.38	Agree
...control portion sizes effectively using calibrated equipment where appropriate.	4.17	0.60	Agree
...take appropriate measures to reduce income loss.	4.20	0.55	Strongly Agree
...communicate effectively to promote sale of menu items.	4.18	0.61	Agree
...adjust menus based on feedback and profitability.	4.16	0.46	Agree
<b>Grand Mean</b>	<b>4.16</b>		<b>Agree</b>
<b>Interpretation</b>			<b>High</b>

The above table indicates the level learners' competence in home economics relative to entrepreneurial skills. The respondents "strongly agree" that the learners can analyze and apply current industry data and prices, it obtained the highest result (M=4.28, SD=0.50). They did, however, concurred that the learners can monitor daily sales based on customer preferences, this yielded the lowest result (M=4.00, SD=0.38), remarked as "agree".

Overall, the level of learners' competence in home economics relative to entrepreneurial skills gained the

grand mean of 4.16 and was interpreted “High” as evaluated by the respondents. This emphasizes how the school-based income generating project fosters learners' entrepreneurial skills in relation to their competence in home economics.

#### 4.4 Significant Relationship between School-based Income Generating Project to the Learners' Competencies in Home Economics

**Table 10. Significant Relationship between School - based Income Generating Project to the Learners' Competencies in Home Economics**

Variables		r-value	Degree of Correlation	p-value	Analysis
Motivation in doing laboratory tasks	Knowledge	0.596	Moderate	0.000	Significant
	Attitude	0.577	Moderate	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
Budget Allocation for Laboratory	Entrepreneurial Skills	0.752	Strong	0.000	Significant
	Knowledge	0.411	Moderate	0.000	Significant
	Attitude	0.405	Moderate	0.000	Significant
Revolving Fund	Technical Skills	0.370	Moderate	0.000	Significant
	Entrepreneurial Skills	0.427	Moderate	0.000	Significant
	Knowledge	0.449	Moderate	0.000	Significant
Revolving Fund	Attitude	0.420	Moderate	0.000	Significant
	Technical Skills	0.482	Moderate	0.000	Significant
	Entrepreneurial Skills	0.507	Moderate	0.000	Significant

\*significant at .05 level of significance

Range	Degree of Correlation
±0.81 – ±1.00	Very Strong
±0.61 – ±0.80	Strong
±0.41 – ±0.60	Moderate
±0.21 – ±0.40	Weak
±0.00 – ±0.20	Negligible

Minitab 14 was used in computing the data gathered and treated them statistically using Pearson's Moment of Correlation Coefficient (Pearson's R). The computed p-values were compared to the level of significance at 0.05 to determine the significant relationship between school-based income generating project to the learners' competencies in Home Economics.

The table above shows that the school-based income generating project in terms of motivation in doing laboratory tasks have a strong to moderate significant relationship to learners' competence in terms of knowledge ( $r=0.596$ ), attitude ( $r=0.577$ ), technical skills ( $r=0.629$ ), and entrepreneurial skills ( $r=0.653$ ) due to p-value (0.000) which was lower than the 0.05 level of significance.

The table also indicates that the school-based income generating project in terms of teamwork and collaboration have a strong significant relationship to learners' competence in terms of knowledge ( $r=0.678$ ), attitude ( $r=0.675$ ), technical skills ( $r=0.714$ ), and entrepreneurial skills ( $r=0.752$ ) due to p-value (0.000) which was lower than the 0.05 level of significance.

It also demonstrates that the school-based income generating project in terms of budget allocation for laboratory have a moderate significant relationship to learners' competence in terms of knowledge ( $r=0.411$ ), attitude ( $r=0.405$ ), technical skills ( $r=0.370$ ), and entrepreneurial skills ( $r=0.462$ ) due to p-value (0.000) which was lower than the 0.05 level of significance.

The pattern also reflected with the school-based income generating project in terms of revolving fund as it is observed to have a moderate significant relationship to learners' competence in terms of knowledge

( $r=0.449$ ), attitude ( $r=0.420$ ), technical skills ( $r=0.482$ ), and entrepreneurial skills ( $r=0.507$ ) due to p-value (0.000) which was lower than the 0.05 level of significance.

All in all, it can be manifested that the level of school-based income generating project convey a significant relationship to learners' competencies as indicated by the obtained r-values ranging from (0.370) to (0.752) with a moderate to strong degree of correlation and p-value (0.000) which was lower than the 0.05 level of significance that supports the result of the analysis.

The findings were supported by Aparicio, (2020) that Income Generating Projects to a greater extent, support the motivation of both teachers and students, ease the burden on parents and generate intervention that focuses on learning new skills while earning an amount of money for school finances and improve academic performance. This further concludes that the school-based income generating project contributes to learners' attainment of the desired competencies in Home Economics.

## 5. Conclusion

The school-based income generating project in terms of motivation in doing laboratory tasks has a significant relationship to learners' competence in home economics terms of knowledge, attitude, technical skills, and entrepreneurial skills as it was interpreted with a strong to moderate degree of correlation.

In the same manner, school-based income generating project in terms of teamwork and collaboration also demonstrates significant relationship to learners' competence in home economics terms of knowledge, attitude, technical skills, and entrepreneurial skills as it was interpreted with a strong degree of correlation.

The same goes with the school-based income generating project in terms of budget allocation for laboratory materials and revolving fund. These variables reveal a significant relationship to the learners' competence in home economics relative to knowledge, attitude, technical skills, and entrepreneurial skills as they show moderate degree of correlation.

As a result, the researcher concluded that the null hypothesis stating "There is no significant relationship between school-based income generating project and learners' competence in home economics" is rejected.

Therefore, school-based income generating project in terms of motivation in doing laboratory tasks, teamwork and collaboration, budget allocation for laboratory materials, and revolving fund has a significant relationship to the learners' competence in Home Economics relative to knowledge, attitude, technical skills, and entrepreneurial skills.

## 6. Recommendations

1. Schools should initiate a school based IGPs as a sustainability program for the learners' competence. While schools with an existing IGP should improve their policy and focus on the support of the program to the learners' academic progress. They should tie up with the community to increase their annual sales and sustain the program's capability to support learning competencies. It is recommended to continuously utilize the program since it provides financial assistance and improves the learners' competence.

2. Teachers should initiate income-generating activities and projects to help ease the deficiency of their school budget to provide the necessary learning materials and facilities. Also, teachers should make use of SBIGPs to expose students to and immerse them in the competencies that can further strengthen their knowledge, attitude, technical skills, and entrepreneurial skills.

3. Learners should be involved in different income-generating projects and activities since it is evident that it has a positive effect on their learning competence. Getting engaged in SBIGPs can help the learners gain strong knowledge, attitude, technical abilities, and entrepreneurial skills towards their chosen specialization.

4. Future researchers should build off of this study to undertake extensive research on the improvement of conducting income-generating projects as a support system to enhance the learners' competence.

## Acknowledgements

The researcher would like to express her profound gratitude and heartfelt appreciation to all who have wholeheartedly and generously extended their valuable assistance and support in the preparation and completion of this study:

First and foremost, the **ALMIGHTY GOD**, the source of all wisdom, knowledge, skills, and inspiration, with His abundant love, grace, and mercy, for giving the researcher the fortitude, courage, and strength to endure and overcome all challenges in order to complete this study;

**NOEL G. BARTOLOME JR.**, researcher's loving, understanding and ever supportive husband, for providing a safe and encouraging company including unconditional support in all means to finish this study;

**YOLANDA G. JOVEN**, researcher's mother, for helping the researcher with the necessary resources to finish this study, not just financially but also mentally, emotionally, and morally;

**DR. ROSARIO G. CATAPANG**, the Thesis Adviser, for her enormous contribution, guidance, moral support, and encouragement to push through and complete this study;

**PANELIST, FAMILY, AND FRIENDS**, and to all people who helped the researcher to make this research possible.

All praise and glory to God!

## References

- Adan, S. M. & Keiyoro, P. (2017). Factors influencing the implementation of income generating projects in public secondary schools in Isiolo North sub county, Kenya. *International Academic Journal of Information Sciences and Project Management*, 2(1), 558-573
- Amos, O., & Koda, G.M. (2018). Contribution of School-Based Income Generating Activities in Quality Education Provision In Secondary Schools Managed By The Catholic Diocese Of Moshi, Tanzania.
- Aparicio, Y. (2020). School-Based Income Generating Projects as Aid to Improve the Academic Performance of TVL Students at Francisco Osorio National High School, TMC-AR-TL-TLE-83
- BC Campus. (2015). 4.5 Competency-based learning – Teaching in a Digital Age. BC Open Textbooks. Retrieved February 27, 2023, from <https://opentextbc.ca/teachinginadigitalage/chapter/6-6-competency-based-learning/>
- Costin, Y., O'Brien, M. P., & Slattery, D. M. (2018). Using Simulation to Develop Entrepreneurial Skills and Mind-Set: An Exploratory Case Study. *International Journal of Teaching and Learning in Higher Education*, 30(1), 136-145.
- Dugang, M. A. P. (2020). School Teamwork and Effectiveness. *Journal of World Englishes and Educational Practices*, 2(2), 92-102.
- Kumar, R. (2014) *Research Methodology: A Step-by-Step Guide for Beginners*. 4th Edition, Sage Publications, London., 22, 34
- Pagandian, J. & Eduardo, J. (2019) Restorative Justice in Cordillera Administrative Region: Tradition and Praxis to-wards a Peace Process Model. *International Journal of Social Science Studies*, 7.
- Rhinehart, C. (2022). Technical Skills You Should List on Your Resume. Investopedia. Retrieved February 27, 2023, from <https://www.investopedia.com/terms/t/technical-skills.asp>
- Ryan, R. M., and Deci, E. L. (2017). *Self-Determination Theory: Basic Psychological Needs in Motivation, Development, and Wellness*. New York, NY: Guilford Publications.
- Ryan, R. M., and Deci, E. L. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective: definitions, theory, practices, and future directions. *Contemp. Educ. Psychol.* 61:101860. doi: 10.1016/j.cedpsych.2020.101860
- Woolfolk, A. (2019). *Educational Psychology*, 14th Edn. London: Pearson..