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Integration of Entrepreneurship Education in Cookery 9 and its relation to Entrepreneurial skills

May Ann C. Mandigma¹, Teacher I, Ninevetch Grace O. Marco², DBM-HM

Gaudencio B. Lontok Memorial Integrated School, Lipa City, Batangas, 4217, Philippines Laguna State Polytechnic University, San Pablo City Campus, 4009, Philippines

ABSTRACT:

The major thrust of this study was to determine if there is a significant relationship between entrepreneurship education and entrepreneurial skills. This study employed Quantitative – Descriptive Correlational Research Design.

This quantitative research method aims to describe two or more variables and their relationships. Descriptive correlational design was used in this study because it aimed to determine whether a significant relationship exists between entrepreneurship education and entrepreneurial skills of the students in Cookery 9. The Grade 9 Cookery learners in Gaudencio B. Lontok Memorial Integrated School, Division of Lipa City enrolled during SY 2024-2025 were the respondents of this study with a total population of 106. They were chosen as the respondents of this study as they are the grade level handled by the researcher, and they were also the ones who are taking up cookery courses. The mode of the data gathering is the survey questionnaire method. Each respondent is given a well-structured and well-instructed set of statements to assess the entrepreneurial skills of the students. The Pearson product-moment correlation coefficient, also known as Pearson's r was utilized in this study to assess the linear relationship between the integration of entrepreneurship education in Cookery 9 and entrepreneurial skills of the students.

Keywords: Entrepreneurial Skills, Entrepreneurship Education, Experiential Learning, Performance Task, Skills

Introduction

The K-12 Basic Education Program by the Department of Education integrates entrepreneurship to prepare students for college and employment, as mandated by Republic Act 10566. This approach connects learning to real-life problems, motivating students and enhancing their engagement. Technology and Livelihood Education (TLE) as a subject focusing on teaching livelihood skills and career-oriented knowledge. The integrative approach in the teaching process is more realistic concerning the life problems that students face in their lives. The approach's connection to life will motivate the students and increase their motivation to learn.

The researcher wants to find out the perception of Grade 9 TLE Learners regarding the integration of entrepreneurship in all areas of TLE, specifically Cookery and how it relates to their entrepreneurial skills. The goal is to understand how this integration influences their entrepreneurial skills, such as knowledge acquisition, skill development, attitude and mindset, and application of knowledge and skills, and impact and success. Furthermore, we may be able to predict that if most of the students are eager to learn entrepreneurship, especially if they have a positive attitude toward it, we may be able to perceive that prospective and profitable businesses will flourish and contribute to our country's economic growth.

As part of enhancing the TLE curriculum implementation in the Junior High School, Schools Division of Lipa City developed an innovative approach to integrate entrepreneurship competencies in the implementation of performance tasks dubbed as TLE Pitching. This program aims to: 1) enhance the entrepreneurial competence of the learners in the Key Stage 3 through the enhancement of existing learning activities, requirements, and performance tasks along the four components of TLE, 2) monitor the curriculum implementation and guide the schools in identifying performance tasks in TLE that leads in the development of entrepreneurial competence, and 3) showcase best practices on learning activities and assessments in TLE to provide opportunities for enhancement of entrepreneurial skills, knowledge, and values through pitching process.

With this in mind, it is essential to understand that entrepreneurship education seeks to provide students with the knowledge, skills, and mindset required to identify opportunities, take calculated risks, and generate value. Incorporating entrepreneurship education into different areas of TLE specifically in Cookery 9 exposes students to the practical applications of entrepreneurial concepts. Giving students real-world experiences is critical for entrepreneurship education. These experiences enable students to apply their knowledge and develop vital entrepreneurial skills.

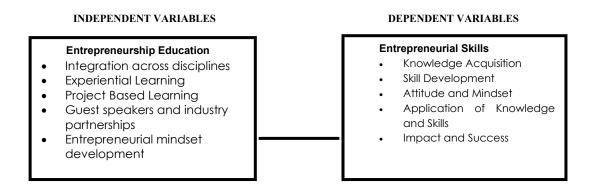


Figure 1. Research Paradigm

Research Problem

This study determined whether a significant relationship exists between entrepreneurship education and entrepreneurial skills of the students in Cookery 9. Specifically, it aims to answer the following questions:

1. How may the profile of the respondents be described as to:

- 1.1 age;
- 1.2 sex:
- 1.3 parents' highest educational attainment;
- 1.4 parents' occupation;
- 1.5 family monthly income?

2. What is the perceived extent of integration of entrepreneurship education in Cookery 9 as to:

- 2.1 integration across disciplines;
- 2.2 experiential learning;
- 2.3 project based learning;
- 2.4 guest speakers and industry partnerships;
- 2.5 entrepreneurial mindset development?

3. What is the perceived level of entrepreneurial skills of students in Cookery 9 in terms of:

- 3.1 knowledge acquisition;
- 3.2 skill development;
- 3.3 attitude and mindset;
- 3.4 application of knowledge and skills;
- 3.5 impact and success?
- 4. Is there a significant relationship between entrepreneurship education and entrepreneurial skills of students in Cookery 9?

3. Materials and Methods

Research Design

 $This \ study \ employed \ Quantitative-Descriptive \ Correlational \ Research \ Design.$

This quantitative research method aims to describe two or more variables and their relationships. Descriptive correlational design is used in research studies that aim to provide static pictures of situations as well as establish the relationship between different variables (McBurney & White, 2009).

Respondent / Participants

The researcher chose Grade 9 Cookery learners, with a total population of 106 in Gaudencio B. Lontok Memorial Integrated School, Division of Lipa City, enrolled during SY 2024-2025. They were chosen as the study's respondents as they were the grade level handled by the researcher and were also the ones taking cookery courses.

Instruments of the Study

In the study entitled "Integration of Entrepreneurship Education in Cookery 9 and its relation to Entrepreneurial Skills", the researcher utilized an instrument, which is a survey questionnaire. The researcher-made questionnaire consists of three parts. The first part is the students' profile which consists of age, sex, parents' occupation, parents' highest educational attainment, and family monthly income. The second part is the extent of integration of entrepreneurship education in Cookery 9 as to integration across disciplines, experiential learning, project-based learning, guest speakers and industry partnerships, and entrepreneurial mindset development wherein the students rated the indicators using the Likert scale. The last part is the level of entrepreneurial skills of students in Cookery 9 in terms of knowledge acquisition, skill development, attitude and mindset, application of knowledge and skills, and impact and success that was also assessed using the Likert scale.

Procedure

The mode of data gathering was the survey questionnaire method. Each respondent was given a well-structured and well-instructed set of statements to assess the entrepreneurial skills of the students. The researchers carried out the following procedures.

- 1. The questionnaire was validated by the experts and then followed by the approval of the Dean and the School Head of the chosen institution to conduct the proposed study.
- 2. With the approval of the Dean and the School Head of the chosen institution, the researcher personally distributed the survey questionnaires to the selected participants to answer during their free time. The survey questionnaires were given to students before the end of the Second Quarter.
- 3. The researcher collected the questionnaires and checked if all the items were answered religiously for the conduct of the study.

Data Analysis

The various data gathered were analyzed to answer cited questions. Statistical tools that were used in the study were as follows:

The Frequency distribution was used to refer to the number of respondents who indicated a specific answer.

The Percentage was used to determine the percentage of each piece of data.

The Weighted Mean and Standard Deviation were used to determine the extent of integration of entrepreneurship education and the level of entrepreneurial skills of students in Cookery 9.

The Pearson product-moment correlation coefficient was used in this study to assess the linear relationship between the integration of entrepreneurship education in Cookery 9 and the students' entrepreneurial skills.

4. Result and Discussions

This section presents the findings according to the study's research questions. They were presented in the form of tables and gave the reader a concrete and itemized view of the item.

Table 1.

Profile of the Respondents

Demographics	Classification	Frequency	Percentage
	14 years old	74	69.8%
Age	15 years old	29	27.4%
A go	16 years old	3	2.8%
	Total	106	100%
	Male	45	42.5%
Sex	Female	61	57.5%
	Total	106	100%
	Elementary Graduate	8	7.5%
Parents' Highest Educational	Highschool Graduate	61	57.5%
Attainment	College Graduate	37	34.9%
	Total	106	100%
	Government Employee	12	11.3%
	Entrepreneur / Businessman	24	22.6%
Parents' Occupation	OFW	13	12.3%
	Unemployed	0	0
	Others	57	53.8%
	Total	106	100%
	P10,000 and below	56	52.8%
	P10,001 – P30,000	37	34.9%
Family Monthly Income	P30,001 – P50,000	7	6.6%
	P50,001 and above	6	5.7%
	Total	106	100%

As indicated in Table 1, it shows that there are 74 respondents whose age is 14 years old, 29 respondents whose age is 15 years old, and only 3 respondents whose age is 16 years old. Majority of the respondents (69.8%) are 14 years old, followed by 15-years-old (27.4%). Very few (2.8%) are 16 years old, indicating a younger demographic.

The table also shows that there are 45 male respondents and 61 female respondents. Clearly, there are more female respondents (57.5%) compared to males (42.5%). This suggests a slightly female-dominated sample. Out of 106 respondents, there are 8 respondents who are elementary graduates, 61 respondents who are high school graduates and 37 respondents who are college graduates. Most respondents are high school graduates (57.5%), while 34.9% have completed college. A small portion (7.5%) are elementary graduates, possibly indicating limited higher education access. The table also reveals that there are 12 respondents who are government employees, 24 respondents who are entrepreneurs/businessmen, 13 respondents who are OFW, and there are 57 respondents who answered "Others". A majority (53.8%) fall into the "Others" category, which may include professionals and other job titles. Entrepreneurs/business owners make up 22.6%, which is a promising figure for economic growth. Government employees (11.3%) and OFWs (12.3%) are present in smaller proportions.

As for family monthly income, there are 56 respondents whose monthly income is \$\mathbb{P}10,000\$ and below, 37 respondents whose monthly income is \$\mathbb{P}10,001\$ — \$\mathbb{P}30,000\$, 7 respondents whose monthly income is \$\mathbb{P}30,001\$ — \$\mathbb{P}50,000\$, and 6 respondents whose monthly income is \$\mathbb{P}50,001\$ and above. More than half of the respondents (52.8%) earn \$\mathbb{P}10,000\$ or below, indicating a low-income group. About 34.9% earn between \$\mathbb{P}10,001\$ — \$\mathbb{P}30,000\$, making up the middle-income sector. Only 12.3% earn above \$\mathbb{P}30,000\$, suggesting limited high-income representation.

Table 2.

Respondents' perception on the integration of Entrepreneurship Education as to: Integration across disciplines

	Indicators	Mean	SD	VI
1.	In our school, entrepreneurship is always integrated in any TLE courses.	3.61	.545	Strongly agree
2.	There is a culminating activity at the end of every quarter wherein we can apply our knowledge and skills in entrepreneurship.	3.64	.520	Strongly agree
3.	We enjoyed every culminating activity and gained insights as key takeaways.	3.62	.624	Strongly agree
4.	Everything that we learned in our TLE courses as well as the integration of entrepreneurship is highly beneficial for us.	3.68	.508	Strongly agree
5.	The integration of entrepreneurship prepares us for an uncertain future.	3.58	.703	Strongly agree
	Overall	3.63	.421	Strongly agree

Legend: 1.0-1.49 (Strongly Disagree); 1.50-2.49 (Disagree); 2.50-3.49 (Agree); 3.50-4.00 (Strongly Agree)

This table presents the results of a survey evaluating respondents' perceptions of the integration of entrepreneurship education as to integration across disciplines. All five indicators received mean scores between 3.58 and 3.68, all interpreted as "Strongly Agree." This shows a high level of agreement across the board. The highest-rated statement is Item 4 ("Everything that we learned... is highly beneficial"), with a mean of 3.68, highlighting the perceived practical value of entrepreneurship education. The lowest-rated item is Item 5 ("...prepares us for an uncertain future") with a mean of 3.58, which is still very positive but suggests slightly less confidence in long-term preparedness. The highest standard deviation is for Item 5 (0.703), indicating that responses to this item were more varied compared to others.

The overall mean score is 3.63, which falls in the "Strongly Agree" range. This suggests that students strongly perceive entrepreneurship as well integrated and beneficial in their TLE courses. The overall standard deviation is 0.421, indicating relatively consistent responses across students.

Table 3.

Respondents' perception on the integration of Entrepreneurship Education as to: Experiential Learning

	Indicators	Mean	SD	VI
1.	I easily learn through application of knowledge and skills.	3.42	.616	Agree
2.	I like activities based on real-life situations.	3.70	.520	Strongly agree
3.	I gain knowledge in entrepreneurship through experience.	3.57	.633	Strongly agree
4.	I involve myself in hands-on experience in entrepreneurship.	3.38	.682	Agree
5.	I strongly believe that through practical application, I can achieve lifelong learning.	3.55	.634	Strongly agree
	Overall	3.52	.466	Strongly agree

Legend: 1.0-1.49 (Strongly Disagree); 1.50-2.49 (Disagree); 2.50-3.49 (Agree); 3.50-4.00 (Strongly Agree)

This table shows surveys evaluating respondents' perceptions of the integration of entrepreneurship education in TLE as to experiential learning. Item 2 ("I like activities based on real-life situations") has the highest mean score of 3.70, with a low standard deviation (0.520). This suggests students especially enjoy real-world-based activities. Item 4 ("I involve myself in hands-on experience in entrepreneurship") has the lowest mean of 3.38, interpreted as "Agree" rather than "Strongly Agree." This suggests that while students recognize the importance of hands-on experience, they may not always actively engage in it.

The overall mean score is 3.52, which falls under "Strongly Agree." This indicates that students highly value and recognize the importance of practical, experience-based learning. The overall standard deviation of 0.466 suggests fairly consistent responses among the students.

Table 4.Respondents' perception on the integration of Entrepreneurship Education as to: Project Based Learning

	Indicators	Mean	SD	VI
1.	I am able to create a business plan.	2.96	.804	Agree
2.	I have a good understanding of how to manage a business.	3.07	.831	Agree
3.	I am good at defining priorities and making an action plan.	3.11	.772	Agree
4.	I have a strong desire to achieve positive results even when it requires a great deal of effort.	3.46	.588	Agree
5.	I am interested in launching my own business in the future.	3.26	.820	Agree
	Overall	3.17	.576	Agree

Legend: 1.0-1.49 (Strongly Disagree); 1.50-2.49 (Disagree); 2.50-3.49 (Agree); 3.50-4.00 (Strongly Agree)

This table presents survey results about respondents' perceptions of the integration of entrepreneurship education in TLE as to project-based learning. Item 4 ("I have a strong desire to achieve positive results...") has the highest mean of 3.46, showing stronger motivation and perseverance among students compared to other skills. Item 1 ("I am able to create a business plan") has the lowest mean of 2.96, indicating that students feel less confident in the technical skill of creating a business plan.

The overall mean score is 3.17, classified as "Agree." This indicates that students generally believe they possess entrepreneurial skills and attitudes, though not as strongly as in the previous two tables. The overall standard deviation is 0.576, suggesting moderate consistency among student responses.

Table 5.Respondents' perception on the integration of Entrepreneurship Education as to: Guest speakers and industry partnerships

	Indicators	Mean	SD	VI
1.	I would love to attend training and seminars that talk about how a business works.	3.11	.760	Agree
2.	I feel motivated when there is someone who shares his/her success story and I feel like I can do it too.	3.55	.619	Strongly agree
3.	Guest speakers provide invaluable real-world insights through lectures and business forums.	3.33	.672	Agree
4.	Active engagement with industry professionals captures engagement and sparks curiosity in the learning process.	3.32	.698	Agree
5.	Guest speakers and industry partners, sharing their knowledge and expertise, help us be more motivated in pursuing business endeavors in the future.	3.43	.648	Agree
	Overall	3.35	.499	Agree

Legend: 1.0-1.49 (Strongly Disagree); 1.50-2.49 (Disagree); 2.50-3.49 (Agree); 3.50-4.00 (Strongly Agree)

This table shows survey results about respondents' perceptions of the integration of entrepreneurship education in TLE as to guest speakers and industry partnerships. Item 2 ("I feel motivated when there is someone who shares his/her success story...") has the highest mean of 3.55, falling under "Strongly Agree." This indicates that personal success stories are particularly powerful motivators for students. Item 1 ("I would love to attend training and seminars...") has a mean of 3.11, the lowest among the items, but still interpreted as "Agree." This suggests students are somewhat willing to attend seminars, but not as enthusiastic compared to hearing direct personal success stories.

The overall mean score is 3.35, classified as "Agree." This suggests that students generally value the role of guest speakers and external engagement in their entrepreneurship education, although the enthusiasm is moderate. The overall standard deviation is 0.499, indicating relatively consistent responses among students.

 Table 6.

 Respondents' perception on the integration of Entrepreneurship Education as to: Entrepreneurial mindset development

	Indicators	Mean	SD	VI
1.	When I think about it, the term "entrepreneur" would fit me pretty well.	2.92	.770	Agree
2.	I think I have enough skills and abilities to start a business.	3.01	.834	Agree
3.	I believe that starting a business is a good career option.	3.36	.665	Agree
4.	I have been thinking about a business idea that can potentially grow into a real business.	3.04	.804	Agree
	Overall	3.08	.626	Agree

Legend: 1.0-1.49 (Strongly Disagree); 1.50-2.49 (Disagree); 2.50-3.49 (Agree); 3.50-4.00 (Strongly Agree)

This table reports survey results about respondents' perceptions of the integration of entrepreneurship education in TLE as to entrepreneurial mindset development. Item 3 ("I believe that starting a business is a good career option") has the highest mean of 3.36. This reflects that students positively view entrepreneurship as a good career choice, even if they are still developing personal readiness. Item 1 ("When I think about it, the term 'entrepreneur' would fit me pretty well") has the lowest mean of 2.92. This shows that while students agree that they could be entrepreneurs, they are less confident in personally identifying as entrepreneurs.

The overall mean score is 3.08, classified as "Agree." This indicates that students generally see entrepreneurship as a fitting and viable option for themselves, but with moderate confidence and commitment. The overall standard deviation is 0.626, suggesting moderate consistency among students' views.

Table 7.Summary of respondents' perception on the integration of Entrepreneurship Education

	Entrepreneurship Education	Mean	SD	VI
•	Integration across disciplines	3.63	.421	Strongly agree
	Experiential Learning	3.52	.466	Strongly agree
	Project Based Learning	3.17	.576	Agree
•	Guest Speakers and Industry Partnerships	3.35	.499	Agree
٠	Entrepreneurial Mindset Development	3.08	.626	Agree
	Overall	3.63	.518	Strongly agree

Legend: 1.0-1.49 (Strongly Disagree); 1.50-2.49 (Disagree); 2.50-3.49 (Agree); 3.50-4.00 (Strongly Agree)

The data presented in the table highlights respondents' perceptions of various components of entrepreneurship education. Overall, the results suggest a strong positive reception, with an overall mean of 3.63 and a verbal interpretation of "Strongly agree," indicating general consensus on the effectiveness of the entrepreneurship education approach. Among the components, "Integration across disciplines" received the highest mean score of 3.63, suggesting that respondents strongly support the inclusion of entrepreneurial principles across various fields of study. "Experiential Learning" also received a high rating, with a mean of 3.52, reflecting a strong agreement on the importance of hands-on, real-world experiences in fostering entrepreneurial skills. "Project-Based Learning" and "Guest Speakers and Industry Partnerships" were both rated with a verbal interpretation of "Agree," with mean scores of 3.17 and 3.35, respectively. These results indicate general approval, though slightly less enthusiastic compared to the top-rated components. "Entrepreneurial Mindset Development" received the lowest mean score of 3.08 and the highest standard deviation (0.626), suggesting that while there is still agreement on its value, opinions are more varied, and this area may require further emphasis or clearer strategies to strengthen its impact. Overall, the findings reflect a strong endorsement of entrepreneurship education practices, especially those that emphasize interdisciplinary integration and experiential learning.

Table 8.Respondents' level of entrepreneurial skills as to Knowledge Acquisition

	Indicators	Mean	SD	VI
1.	It matters most that what is learned in lessons corresponds	3.50	.590	Strongly agree
	to the skills required for the future.			
2.	Entrepreneurship Education is more than just learning	3.58	.599	Strongly agree
	how to start a business, but also teaches us the knowledge			
	and skills necessary for the future.			
3.	I acknowledge that success requires more than an	3.43	.618	Agree
	excellent entrepreneurial concept.			
4.	Learning TLE is fun, obtaining knowledge is power.	3.69	.575	Strongly agree
5.	By integrating entrepreneurship, I can observe how	3.42	.703	Agree
	entrepreneurial concepts are applied into practice.			
	Overall	3.53	.463	Strongly agree

Legend: 1.0-1.49 (Strongly Disagree); 1.50-2.49 (Disagree); 2.50-3.49 (Agree); 3.50-4.00 (Strongly Agree)

Legend: Strongly Disagree (Did Not Meet Expectation); Disagree (Needs Improvement); Agree (Sufficiently Developed); Strongly Agree (Developed and Commendable)

This table presents the respondents' level of entrepreneurial skills as to knowledge acquisition. The data reveal that the respondents strongly agree that entrepreneurship education significantly contributes to their knowledge acquisition, as reflected by the overall mean of 3.53. Students acknowledged that what they learn in lessons corresponds to the skills required for their future endeavors. They also agreed that entrepreneurship education is not limited to learning how to start a business but extends to developing vital skills and knowledge necessary for success in a competitive world. Notably, students found learning in TLE enjoyable and empowering, making it the highest-rated item (mean = 3.69). While students recognized that success in entrepreneurship requires more than just having a good idea, and that practical application of concepts is important, these areas received slightly lower, but still positive, mean scores. Overall, the findings indicate that students value the integration of entrepreneurial concepts in their education, although greater emphasis on practical and real-world applications may further enhance their learning experience.

Table 9.Respondents' level of entrepreneurial skills as to Skill Development

	Indicators	Mean	SD	VI
1.	With my background knowledge in entrepreneurship, I can recognize opportunities to start a small business.	3.23	.694	Agree
2.	I am fully aware that in putting up a business, I need to carefully plan and assess the pros and cons of it.	3.42	.703	Agree
3.	I need to be financially literate so I can ensure that our business will be profitable.	3.32	.750	Agree
4.	I have creative ideas on how to do marketing strategies that can help boost our business.	3.17	.798	Agree
5.	I have a good networking that could possibly help our business flourish.	3.08	.801	Agree
	Overall	3.24	.552	Agree

Legend: 1.0-1.49 (Strongly Disagree); 1.50-2.49 (Disagree); 2.50-3.49 (Agree); 3.50-4.00 (Strongly Agree)

Legend: Strongly Disagree (Did Not Meet Expectation); Disagree (Needs Improvement); Agree (Sufficiently Developed); Strongly Agree (Developed and Commendable)

This table presents the respondents' level of entrepreneurial skills as to skill development. The findings show that respondents generally agree that they possess the skills needed for recognizing business opportunities and planning ventures, with an overall mean of 3.24. Students believe that their background knowledge in entrepreneurship helps them identify opportunities and that careful planning is essential when starting a business, which is the most highly rated skill. Financial literacy was also recognized as a key component for ensuring business profitability. However, students expressed moderate confidence in their creativity for marketing strategies and in their ability to build networks that could support business growth. The variation in responses, particularly regarding networking, suggests that students have differing levels of confidence and experience in this area. Overall, while students demonstrate a strong foundational understanding of opportunity recognition and business planning, more targeted efforts could help enhance their entrepreneurial readiness, especially in practical aspects like networking and marketing.

Table 10.Respondents' level of entrepreneurial skills as to Attitude and Mindset

	Indicators	Mean	SD	VI
1.	As an entrepreneur, I understand the importance of embracing risk and making calculated decisions that could either make or break our business.	3.42	.645	Agree
2.	I should be resilient especially in facing unexpected challenges, so that our business will be able to recover quickly and may continue to operate efficiently.	3.44	.634	Agree
3.	I believe that creativity is necessary in running a business.	3.65	.570	Strongly agree
4.	I believe that entrepreneurship education stimulates economic growth and creates job opportunities not just for adults but also for us, as a student.	3.65	.586	Strongly agree
	Overall	3.54	.488	Strongly agree

Legend: 1.0-1.49 (Strongly Disagree); 1.50-2.49 (Disagree); 2.50-3.49 (Agree); 3.50-4.00 (Strongly Agree)

Legend: Strongly Disagree (Did Not Meet Expectation); Disagree (Needs Improvement); Agree (Sufficiently Developed); Strongly Agree (Developed and Commendable)

This table presents the respondents' level of entrepreneurial skills as to attitude and mindset. The data reveals that the respondents strongly agree that they possess an entrepreneurial attitude and mindset, with an overall mean score of 3.54. Students strongly recognize the importance of creativity and the role of entrepreneurship in fostering economic growth and job creation. They also agree that resilience in facing challenges and the ability to embrace and manage risks are vital qualities for successful entrepreneurs. Although students showed slightly lower agreement on risk-taking and resilience compared to creativity and economic impact, their responses were largely consistent, as reflected by the low standard deviation. Overall, the results suggest that students have developed a positive and proactive entrepreneurial mindset that supports future success in business endeavors.

Table 11.Respondents' level of entrepreneurial skills as to Application of Knowledge and Skills

	Indicators	Mean	SD	VI
1.	I can apply the knowledge and skills learned from our TLE course, along with the essential entrepreneurial activities.	3.46	.706	Agree
2.	Entrepreneurship Education gives us real- world experiences and true to life applications of knowledge and skills.	3.61	.595	Strongly agree

3.	I am aware that I need the appropriate skills and knowledge if I want to pursue a career in entrepreneurship.	3.56	.618	Strongly agree
4.	I need a strong educational foundation and relevant industry experience in starting my own business.	3.54	.572	Strongly agree
5.	I believe that the integration of entrepreneurship education in our Cookery course is intended to raise our awareness of the importance of entrepreneurship values in our everyday lives.	3.59	.629	Strongly agree
	Overall	3.55	.468	Strongly agree

Legend: 1.0-1.49 (Strongly Disagree); 1.50-2.49 (Disagree); 2.50-3.49 (Agree); 3.50-4.00 (Strongly Agree)

Legend: Strongly Disagree (Did Not Meet Expectation); Disagree (Needs Improvement); Agree (Sufficiently Developed); Strongly Agree (Developed and Commendable)

This table presents the respondents' level of entrepreneurial skills as to application of knowledge and skills. The data reflects that students strongly agree with their ability to apply the knowledge and skills learned in their TLE course to entrepreneurial activities, with an overall mean of 3.55. The integration of entrepreneurship education has allowed them to experience real-world applications, and they are highly aware that the right skills and knowledge are crucial for a successful career in entrepreneurship. Additionally, they strongly believe that the educational foundation and industry experience are essential when starting their own business. Although students rate their ability to apply what they've learned slightly lower, their strong agreement with the benefits of entrepreneurship education suggests that they are well-prepared for future entrepreneurial endeavors.

Table 12.Respondents' level of entrepreneurial skills as to Impact and Success

	Indicators	Mean	SD	VI
1.	I am inspired by my acquaintances who are now managing their own businesses.	3.34	.702	Agree
2.	With my combined knowledge and skills in entrepreneurship, I know I'll be able to put up and manage my own business too.	3.27	.711	Agree
3.	I am dedicated to starting even with a small enterprise in the future.	3.30	.807	Agree
4.	I want to be an inspiration, as well to those inspiring and young entrepreneurs.	3.46	.692	Agree
	Overall	3.34	.574	Agree

Legend: 1.0-1.49 (Strongly Disagree); 1.50-2.49 (Disagree); 2.50-3.49 (Agree); 3.50-4.00 (Strongly Agree)

Legend: Strongly Disagree (Did Not Meet Expectation); Disagree (Needs Improvement); Agree (Sufficiently Developed); Strongly Agree (Developed and Commendable)

This table presents the respondents' level of entrepreneurial skills as to impact and success. The overall mean score of 3.34, with a standard deviation of 0.574, falls within the "Agree" range. This suggests that respondents generally hold a positive entrepreneurial outlook and exhibit favorable attitudes toward the idea of starting and managing their own businesses. The relatively low variability among responses indicates consistency in the respondents' views.

Among the four indicators, the highest mean score 3.46 was attributed to the statement "I want to be an inspiration, as well to those inspiring and young entrepreneurs." This highlights a strong internal drive not only to succeed but also to serve as a role model for others. On the other hand, the lowest mean score which is 3.27 was recorded for the statement "With my combined knowledge and skills in entrepreneurship, I know I'll be able to put up and manage my own business too".

In summary, the data indicates that the participants possess a positive and motivated attitude toward entrepreneurship, influenced by external role models and driven by a desire to become inspirational figures themselves. Their responses reveal a willingness to start small, a recognition of the need for further growth in skills, and an overall readiness to pursue entrepreneurial ventures. These findings underscore the importance of entrepreneurial education, mentoring, and exposure to successful role models in fostering a sustainable entrepreneurial mindset.

Table 13.Summary of respondents' level of entrepreneurial skills

	Entrepreneurial Skills	Mean	SD	VI
•	Knowledge Acquisition	3.53	.463	Strongly agree
•	Skill Development	3.24	.552	Agree
•	Attitude and Mindset	3.54	.488	Strongly agree
•	Application of Knowledge and Skills	3.55	.468	Strongly agree
•	Impact and Success	3.34	.574	Agree
	Overall	3.44	.454	Agree

Legend: 1.0-1.49 (Strongly Disagree); 1.50-2.49 (Disagree); 2.50-3.49 (Agree); 3.50-4.00 (Strongly Agree)

Legend: Strongly Disagree (Did Not Meet Expectation); Disagree (Needs Improvement); Agree (Sufficiently Developed); Strongly Agree (Developed and Commendable)

This table summarizes respondents' level of entrepreneurial skills across five different areas. In Knowledge Acquisition, the mean score of 3.53 indicates that respondents strongly agree they are actively gaining relevant entrepreneurial knowledge. This suggests that educational or training initiatives may be effective in providing access to information and resources that support entrepreneurship. The low standard deviation (0.463) indicates that this view is shared consistently among respondents. Skill Development received a slightly lower mean of 3.24, interpreted as "Agree." While this shows that respondents generally feel they are acquiring entrepreneurial skills, it is one of the lower-rated dimensions. This could imply a need for more hands-on training, mentorship, or practice-based learning opportunities to further enhance practical competencies. The higher SD (0.552) compared to other dimensions also indicates a wider range of experiences or confidence levels in this area.

In contrast, Attitude and Mindset earned a strong rating, with a mean score of 3.54 and a low SD of 0.488. This reflects a high level of confidence in possessing the right mindset for entrepreneurship, such as risk-taking, initiative, resilience, and opportunity recognition. Having a positive entrepreneurial mindset is often considered a foundational element of success, which makes this finding significant. The dimension of Application of Knowledge and Skills scored the highest overall (3.55), with a similarly low SD (0.468), suggesting that not only do respondents feel well-prepared, but they also believe they can effectively apply what they know in real-world entrepreneurial contexts. This practical confidence is a strong indicator of readiness to engage in entrepreneurial activities beyond the classroom or training environment. Lastly, Impact and Success was rated with a mean of 3.34, falling under "Agree." Although this score is still positive, it is relatively lower compared to the other dimensions marked "Strongly Agree." This may indicate that while respondents are confident in their capabilities, they are either in the early stages of their entrepreneurial journey or still building the tangible outcomes (such as business growth, profit, or social impact) that signify success.

The overall mean score of 3.44 suggests that respondents generally agree they possess entrepreneurial skills, with notable strengths in knowledge acquisition, mindset, and application. The relatively low overall SD of 0.454 reinforces that there is a strong level of agreement among respondents. However, the findings also highlight areas that could benefit from targeted interventions, especially in skill development and achieving measurable outcomes. These insights could inform curriculum designers, training providers, or policy makers in refining entrepreneurial education programs to better support aspiring entrepreneurs.

Table 14.Relationship between Entrepreneurship Education and Entrepreneurial Skills

	Entrepreneurial Skills					
Entrepreneurship Education	Knowledge Acquisition	Skill Development	Attitude and Mindset	Application of Knowledge and Skills	Impact and Success	
Integration Across Disciplines	.688**	.445**	.606**	.644**	.315**	
Experiential Learning	.673**	.606**	.582**	.661**	.659**	
Project Based Learning	.403**	.695**	.426**	.452**	.715**	
Guest Speakers and Industry Partnerships	.691**	.775**	.722**	.665**	.649**	
Entrepreneurial Mindset Development	.383**	.733**	.420**	.443**	.679**	

**Correlation is significant at the 0.01 level (2-tailed). *Correlation is significant at the 0.05 level (2-tailed).

Verbal Interpretation of r-value: ± 1.0 Perfect positive ± 1.0 Per

As indicated in Table 14, there is a significant relationship among various variables related to Entrepreneurship Education (EE) and Entrepreneurial Skills (ES). The table presents correlation coefficients (r-values) that quantify the strength and direction of the relationships between these variables, with significance levels marked by "**" (p < 0.01), indicating a strong level of statistical significance.

The table reveals several key observations regarding factors that are significantly related to entrepreneurial skills. One of the strongest correlations is between guest speakers and industry partnerships and skill development (r = 0.775), which suggests that exposure to industry experts and professionals plays a crucial role in enhancing students' entrepreneurial abilities. This emphasizes the need for programs to include more collaborations with the industry, guest speaker sessions, internships, and real-world networking opportunities to bridge the gap between theory and practice. Another important correlation is between project-based learning and impact & success (r = 0.715), indicating that students who engage in hands-on, real-world projects are more likely to succeed in entrepreneurial endeavors. This implies that educational curricula should prioritize project-driven learning, where students can tackle real business challenges, thereby gaining valuable problem-solving skills and entrepreneurial insights. Additionally, the correlation between entrepreneurial mindset development and skill development (r = 0.733) highlights that cultivating an entrepreneurial mindset is essential for enhancing skills. This finding suggests that education programs should focus on developing qualities like creativity, innovation, resilience, and strategic thinking, which are foundational to entrepreneurial success. Overall, these observations point to the importance of experience-driven education and mindset cultivation in preparing students for successful entrepreneurial careers.

The table also highlights several moderate to strong correlations (r = 0.6 - 0.7) that are significant in shaping entrepreneurial skills, albeit slightly less potent than the previous group. One notable correlation is between integration across disciplines and knowledge acquisition (r = 0.688), which indicates that learning across various fields can enhance students' ability to acquire knowledge. This suggests that interdisciplinary collaboration should be encouraged within educational programs, as exposure to different perspectives can deepen understanding and foster innovative thinking. Another important relationship is between experiential learning and knowledge acquisition (r = 0.673), showing that hands-on, real-world experiences help students retain and absorb knowledge more effectively. This implies that introducing more opportunities for internships, case studies, and simulations would be beneficial in enhancing learning outcomes. Similarly, experiential learning is also strongly linked to the application of knowledge and skills (r = 0.661), demonstrating that students with practical experience are better equipped to apply their theoretical knowledge. Lastly, the correlation between

guest speakers and industry partnerships and attitude & mindset (r = 0.722) highlights that exposure to experts in the field can positively shape students' entrepreneurial attitudes. This emphasizes the importance of including industry collaborations and guest speaker events to help foster a growth-oriented and entrepreneurial mindset in students. These moderate to strong correlations underline the value of experiential learning, interdisciplinary exposure, and industry connections in shaping well-rounded, successful entrepreneurs.

The table also reveals moderate correlations (r = 0.4 - 0.6), which, while still meaningful, are weaker than the previously discussed relationships. One such correlation is between project-based learning and attitude & mindset (r = 0.426). While real-world problem-solving does play a role in shaping entrepreneurial attitudes, it appears to have a slightly weaker impact compared to the influence of guest speakers or direct mindset training. This suggests that while project-based learning is valuable in cultivating an entrepreneurial mindset, it may need to be complemented with other approaches, such as exposure to industry experts or more focused mindset development sessions, to be fully effective. Another moderate correlation is between entrepreneurial mindset development and knowledge acquisition (r = 0.383). This indicates that having an entrepreneurial mindset can support students in acquiring knowledge, but this effect is less pronounced than the impact of interdisciplinary learning. It suggests that while a strong entrepreneurial mindset is beneficial for knowledge retention and application, it may not be as powerful in driving knowledge acquisition as exposure to diverse fields and perspectives. These moderate correlations highlight the importance of combining multiple strategies—such as project-based learning, entrepreneurial mindset development, and interdisciplinary approaches—though each factor may contribute to varying degrees.

The weakest correlation in the table is between integration across disciplines and impact & success (r = 0.315). This suggests that, while interdisciplinary learning helps enhance knowledge and skills, it does not have a strong direct effect on entrepreneurial success. The implication of this finding is that simply providing interdisciplinary learning opportunities may not be sufficient to guarantee entrepreneurial success. Additional support mechanisms, such as mentorship, access to funding, and practical, real-world experience, may be necessary to fully translate the knowledge and skills gained from interdisciplinary learning into tangible entrepreneurial outcomes. This correlation emphasizes the need for a more holistic approach to fostering entrepreneurial success, where knowledge is complemented by other key factors.

The findings highlight several key factors that contribute to entrepreneurial success. Industry exposure, through guest speakers and partnerships, is crucial for skill development and mindset formation. This underscores the importance of integrating more industry collaborations, mentorship programs, and expert talks into educational programs, as they offer students valuable insights and connections to the professional world. Additionally, project-based learning has the strongest impact on entrepreneurial success, suggesting that schools should prioritize real-world projects, entrepreneurial competitions, and practical problem-solving tasks in their curricula. These experiences enable students to apply their knowledge and develop the skills necessary for entrepreneurial ventures.

Experiential learning also plays a vital role in both knowledge acquisition and application. Expanding opportunities for internships, case studies, and hands-on learning will help students gain practical experience, furthering their understanding of entrepreneurial concepts. Lastly, while interdisciplinary learning improves knowledge acquisition, it has a weaker link to direct entrepreneurial success. Therefore, cross-disciplinary collaborations should be complemented with additional support, such as business incubation programs, mentorship, and practical experience, to better equip students for entrepreneurial endeavors. By addressing these areas, educational institutions can provide a more well-rounded and effective foundation for nurturing successful entrepreneurs.

5. CONCLUSION

After a thorough analysis of the data gathered, the researcher was able to draw this conclusion.

1. Since the study revealed a significant relationship between Entrepreneurship Education and Entrepreneurial Skills, the hypothesis stated earlier in this research is not sustained.

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