



## ACQUIRED SKILLS AND THE COMPETENCIES IN BREAD AND PASTRY PRODUCTION OF GRADE 11 TVL SENIOR HIGH SCHOOL STUDENTS

FRANNIE M. RODIL<sup>1</sup>, EDNA O. BRIONES, Ed.D.<sup>2</sup>

<https://orcid.org/0000-0002-0080-2252X><sup>1</sup>, <https://orcid.org/0000-0002-2619-0450><sup>2</sup>

franniemanalorodil31@gmail.com<sup>1</sup>, edna.briones@lspu.edu.ph<sup>2</sup>

Pagbilao National High School, Department of Education, Philippines<sup>1</sup>  
Laguna State Polytechnic University San Pablo City Campus, Philippines<sup>2</sup>

### ABSTRACT

*This study aimed to assess the acquired skills and the competencies in Bread and Pastry Production of Grade 11 TVL Senior High School Students. The descriptive correlated type of research method was used in the study. The 68 respondents were all Grade 11 students in Pagbilao National High School- SHS, Pagbilao, Quezon. The main instrument used in gathering data was the self-made and adopted survey questionnaire checklist using the Likert scale. The statistical treatments used were mean, frequency distribution, standard deviation, and Pearson Product Moment Correlation Coefficient. The data revealed that acquired skills as to analytical was significantly related to core competencies in Bread and Pastry Production in terms of preparing and producing bakery products, preparing and producing pastry, preparing and presenting gateaux, tortes and cakes, preparing and displaying petit fours. Moreover, conceptual skills were significantly related to core competencies in terms of preparing and producing bakery products. Furthermore, communication skills were significantly related to core competencies in terms of preparing and producing bakery products, preparing and presenting gateaux, tortes and cakes. Likewise, interpersonal skills were significantly related to core competencies in terms of preparing and producing pastry products and preparing and presenting gateaux, tortes and cakes which have the same  $r$  – value. Similarly, leadership skills were significantly related to core competencies in terms of preparing and producing bakery products, preparing and producing pastry products. However, some acquired skills as to conceptual, communication interpersonal, leadership, and teamwork had no significant relationship with some competencies in Bread and Pastry Production in terms of preparing and producing bakery products, preparing and producing pastry products, preparing and presenting gateaux, tortes and cakes and preparing and displaying petit fours. Therefore, the hypothesis that there is no significant relationship between the acquired skills of the students and their competencies in Bread and Pastry Production is sustained, while for those with significant relationship is not sustained.*

**Keywords:** *Acquired Skills, Analytical Skills, Bread and Pastry Production, Core Competencies, Conceptual Skills*

### INTRODUCTION

The K to 12 Basic Education Curriculum Senior High School (SHS) Program began in 2016-2017. The Technical-Vocational and Livelihood (TVL) Track, one of the four tracks in the Senior High School, corresponds to formal

vocational education offered in other countries. The TVL track was dubbed as a terminal course for high school since the economically challenged students perceived it as a venue where they can empower themselves for immediate employment after high school (Inocencio, 2014).

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Technology and Livelihood Education (TLE) for Junior High School and Technical Vocational Livelihood (TVL) for Senior High School are tracks in the implementation of the K to 12 Basic Education Program. It is divided into four sections: Agricultural and Fishery Arts, Home Economics, Industrial Arts, and Information and Communication Technology. Students in Grades 7 and 8 may enrol in an exploratory course on the subject, which focuses on the common competencies required for a career in TLE/TVL. The knowledge and skills are developed from Grades 9 and 10 up to Senior High School. The learning resource focuses on Home Economics course Bread and Pastry Production for Grade 11 students (TESDA, 2012).

Students must participate in an experiential, contextualized, and authentic teaching-learning process because TLE is primarily a skill subject. It is a subject in which students learn best by doing. A new feature in the teaching of TLE courses is based on the learning outcomes and performance criteria stated in the Training Regulations (TR) of the Technical Education and Skills Development Authority (TESDA). This TR Based teaching approach is required to prepare K to 12 graduates for lucrative work. The students must earn a National Certificate (NC) I, II, or even a higher-level NC that is required by industries.

The competencies acquired in Home Economics help the students to have educational and technical skills which they need to enter the workforce in the labor market.

Technical Vocational Education can be an aid to an individual to be equipped with the necessary skills and competencies to be globally competitive and meet the demands of industries. It is also an important work mechanism for socioeconomic political, technological development, and vocational efficiency (Vicera, et al., 2019).

Bread and Pastry Production course leads to National Certificate Level II. This subject is designed for high school students to develop knowledge, skills, and attitude to perform the task on Bread and Pastry Production. It covers core competencies namely prepare and produce bakery; prepare

and produce pastry products; prepare and present gateau tortes and cake; prepare and display petit fours and present dessert. The preliminaries of this specialization subject include the following: explain core concepts in bread and pastry production; discuss the relevance of the course; and explore opportunities for baker or chef as a career.

Bread and Pastry Production NC II is a TESDA registered short course/program that provides knowledge and skills in baking. This program includes baking cakes, bread, and pastries according to the required and relevant standards in the industry, maintaining cleanliness and food safety. It aims to produce graduates who are equipped to work in the hotel industry or any other food-related businesses. The program will teach the students how to develop rapport with the guests and embody the right attitude of being a professional chef.

In a study published in Statistica.com, the income in the Bread and Bakery Products segment amounts to US\$1,610m in 2018 and for the previous years, the revenue in the aforesaid segment continued to grow with much consistency. Today it can be observed that innovations remain important to address the needs in terms of variety, which can be more pronounced in food packaging. The development of new products is directed either towards producing that is tastier or healthier. However, reinventions are no longer limited to bread loaves and cakes, now the popular, pandesal (salted bread), comes with a different flavor. Malunggay enriched pandesal for example is now available at Kambal Pandesal and also in Pan De Manila branches. On the other hand, the Food and Nutrition Research Institute or FNRI promotes the yellow pandesal, a nutritious squash flavored bread that can be distributed to schools to improve children's nutrition.

With this continuous growth of the bread and pastry industry and with the new curriculum in education that includes a study on it, it is just fitting to conduct further investigation on current practices and innovation in the aforesaid industry and include current working practices into the lecture room, which in turn can help produce



better future bakeshop owners and pastry chefs or at least help learners become truly job-ready.

In today's classroom, textbooks and other reference materials serve the purpose of teaching concepts, definitions, and methods, case studies and actual integration of industry practices help in training and equipping with necessary skills for the job. It is known that "experience is the best teacher." However, the "experience" doesn't necessarily have to be undergone individually but can be learned through others as well, especially those from the actual industry.

The study was conducted to determine the acquired skills of Grade 11 TVL Senior High School students in Bread and Pastry Production as perceived in the following acquired skills such as communication, conceptual, analytical, teamwork, leadership, and interpersonal skills. It also aimed to assess the relationship between acquired skills and the core competencies of Bread and Pastry Production.

### OBJECTIVES OF THE STUDY

This study aimed to assess the acquired skills and the competencies of Grade 11 TVL Senior High School Students in Bread and Pastry Production. Specifically, it aimed to answer the following questions: 1.) to assess the acquired skills of Grade 11 students in Bread and Pastry Production in terms of analytical skills; conceptual skills; communication skills; interpersonal skills; leadership skills; and teamwork skills; 2) to determine the correlation between the acquired skills of students and the core competencies in Bread and Pastry Production.

### METHODOLOGY

The researcher used the descriptive correlated type of research method to determine the relationship between the acquired skills of Grade 11 TVL Senior High School Students and their core competencies in Bread and Pastry Production. The respondents of the study consisted of 68 Grade 11 TVL students of Pagbilao National High School, Mapagong, Pagbilao, Quezon. Purposive sampling technique was used in determining the research

respondents since study was exclusive for Bread and Pastry Production students. The researcher constructed a letter addressed to the Department of Education Division Office Talipan, Pagbilao, Quezon. The letter was signed by the researcher and was noted by the thesis adviser. The researcher also constructed a letter to be distributed to the respondents, which was approved prior by the Thesis Adviser and Dean of the Graduate School. Likewise, the researcher prepared a validation letter to some experts to evaluate and assess the reliability and validity of the instrument. The researcher used Cronbach Alpha to determine the relationship of questions in the instrument.

The researcher sent the letter and questionnaire via online platform and face-to-face to administer the research instruments to the respondents. The researcher also showed the letter as evidence of conducting the study. The researcher gave the respondents a brief background about the study, and then gave enough time for the latter to answer the questionnaire. They were given a week to fill out all necessary data needed before the actual retrieval of the distributed instruments. Once done with the collection, the researcher extended her gratitude to the respondents and assured them of the confidentiality in the responses accorded as it would serve only the purpose of the study.

The researcher utilized the self-made and adopted type of questionnaires as main tool in gathering the necessary information. The contents of the adopted questionnaire were based on the competencies in the Curriculum Guide (CG) of Bread and Pastry Production and aligned with competencies prescribed by TESDA under NC II. The questionnaire was composed of three parts. Part I determined the profile of respondents in terms of age, gender, religion, parents' educational attainment, parents' occupation and parents' monthly salary. The second part was an assessment of the acquired skills in terms of analytical, conceptual, communication interpersonal, leadership and teamwork. The third part was the self-assessment guide questions adopted from TESDA. The prepared instrument was presented to the adviser and other members



of the panel for evaluation and revision of its construction. The panelists gave comments and suggestions concerning the instrument prepared specifically on the appropriateness of each item or indicator to the questions in the objectives of the problem. The instrument was validated by five teachers with specialization in the subject and tried out to seven teachers and three students in a school not covered by the study. They were not included as actual respondents but were used only for validation purposes to determine whether the contents of the questionnaire were reliable. After all the necessary corrections and revisions were made, the questionnaire was reproduced and finally administered to the actual respondents of the study.

The researcher used the following statistical tools to better quantify the present investigation as well as the data collected from the respondents. Frequency and percentage were used to determine the profile of the respondents. Mean and standard deviation were used to determine the acquired skills of Grade 11 TVL Senior High School students and their core competencies in Bread and Pastry Production. Pearson Product – Moment Correlation Coefficient was used to determine the relationship between the acquired skills of students and their core competencies in Bread and Pastry Production.

**RESULTS AND DISCUSSION**

**1. Acquired Skills and the Competencies in Bread and Pastry Production of Grade 11 TVL Senior High School Students**

**1.1. in terms of Analytical Skills**

As shown in Table 1, the respondents perceived that the skills to solve problems immediately got the highest mean of 3.66 and verbally interpreted as “developed.” This implies that problem-solving is essential both to individuals and organizations. Students must develop problem-solving skills as well as the personal strength to face the challenges and pressure that may arise as a result of a problem.

**Table 1**  
*Respondents’ Perception on the Development of their Analytical Skills*

Indicators	Mean	SD	VI
<b>For analytical skills I...</b>			
1. collect, organize, visualize and assimilate data.	3.59	0.90	D
2. forecast/foresee events/situations that may occur.	3.34	0.80	MD
3. solves problems immediately.	3.66	1.0	D
4. apply critical thinking to evaluate information.	3.40	1.0	MD
5. theorize and brainstorm any certain events and situations.	3.40	0.80	MD
<b>Over All</b>	<b>3.48</b>	<b>0.36</b>	<b>D</b>

On the other hand, the skills in applying critical thinking to evaluate information (Mean=3.40), and theorize and brainstorm any certain events and situations (Mean=3.40) have the lowest means among the indicators as perceived by the students. It can be interpreted that while these indicators were given verbal interpretations of “developed,” students need more lessons and discussions on analytical skills to develop their creative thinking skills. In general, the respondents perceived Acquired Skills in terms of analytical skills were verbally interpreted as “developed” with an overall mean of 3.48. This implies that if the teacher will focus on teaching the importance and concepts of analytical thinking skills during the discussion and hands-on applications, students’ acquired skills will be developed among them. The indicated standard deviation implies that the students’ responses were homogenous.

**1.2. In terms of Conceptual Skills**

Presented in Table 2, the respondents’ perceived that the skills understand better complex scenarios got the highest mean of 3.87 and verbally interpreted as “developed.” This mean that these skills were necessary for the workplace because it allows people to come up with multiple solutions to complex issues.

Meanwhile, the skill transforms thoughts and ideas into action-driven solutions got the lowest mean of 3.46, and interpreted as “developed.” It signifies that these skills should be



emphasized in the lessons so that the students' acquired skills will be developed and can think creatively and give possible solutions to the problems that may arise. In general, the respondents "developed" ( $\bar{x}=3.49$ ) with the development of their conceptual skills.

**Table 2**  
*Respondents' Perception on the Development of their Conceptual Skills*

Indicators	Mean	SD	VI
<b>For conceptual skills I...</b>			
1. understand better complex scenarios.	3.87	0.90	D
2. transform thoughts and ideas into action-driven solutions.	3.46	1.0	D
3. have good attention to detail, the ability to analyse, and show resourcefulness when facing a problem.	3.84	0.90	D
4. immediately address when problems arise.	3.49	0.80	D
5. think creatively and understand abstract ideas.	3.74	0.90	D
<b>Over All</b>	<b>3.49</b>	<b>0.32</b>	<b>D</b>

This implies that educators must plan future curricula, develop methods, and prepare the students to be future innovators. To bring the industry into the 21<sup>st</sup> century, they will need to have exceptional human and conceptual skills. The indicated standard deviations imply that their responses were common.

### 1.3. In terms of Communication Skills

Table 3 reflected how the respondents perceived the acquired skills in terms of communication. Indicators number 1 and 3 communicate with my peers in terms of my abilities to influence them to work well and use the active listening process to better understand clear procedures and instructions both got the highest mean of 4.00 and were given an interpretation of "developed." This result means that students were able to develop active listening and public speaking. Students can express themselves and improve their personal and professional relationships by effective communication skills.

**Table 3**  
*Respondents' Perception on the Development of their Communication Skills*

Indicators	Mean	SD	VI
<b>For communication skills I...</b>			
1. communicate with my peers in terms of my abilities to influence them to work well.	4.00	0.90	D
2. use a strong and confident speaking voice specially when presenting information to a few or a group of people.	3.82	1.0	D
3. use the active listening process to better understand clear procedures and instructions.	4.00	0.90	D
4. write clearly to express my ideas and opinions.	3.69	1.0	D
5. use visuals and codes in the field of my specialization along with written and/or verbal communication.	3.47	0.90	D
<b>Over All</b>	<b>3.80</b>	<b>0.34</b>	<b>D</b>

Listening and communicating clearly help the students express themselves in job interviews, business meetings, and their personal lives. Likewise, indicator number 5 uses visuals and codes in the field of my specialization along with written and/or verbal communication garnered the lowest mean of 3.47, and given an interpretation of "developed." According to the responses of the students, majority of the respondents avoided codes. They preferred to wait for the teachers to discuss the lessons and have demonstrations. In general, the respondents "developed" (3.80) the ways how their communication skills are developed. The indicated standard deviations imply that there was unity in their responses. It implies that communication skills are important for the teacher in transmitting education, managing the classroom, and interacting with students. The teacher must teach the students how to think in different ways. The teacher must employ communication skills that motivate the students toward their learning (Sng Bee, 2012).

### 1.4. In terms of Interpersonal Skills

Table 4 depicted how the respondents perceived their interpersonal skills. Indicator number 2 care about other people (my classmates, teachers, and other people) garnered



the highest mean of 4.34 and was given an interpretation of “highly developed. Based on the results, students have developed concern with other people. Students must have these skills because they teach virtues such as patience, understanding, and loyalty, which are beneficial in both personal and professional lives.

**Table 4**  
*Respondents’ Perception on the Development of their Interpersonal Skills*

Indicators	Mean	SD	VI
1. For interpersonal skills I...			
2. become aware of myself and other people around me.	4.15	0.90	D
3. care about other people (my classmates, teachers and other person).	4.34	0.80	HD
4. collaborate and work well together with my classmates and teachers.	4.22	0.80	HD
5. show patience and empathy to people.	3.84	1.1	D
6. network and build relationship.	3.87	0.80	D
<b>Over All</b>	<b>4.08</b>	<b>0.34</b>	<b>D</b>

On the other hand, indicator number 5 shows patience and empathy to people got the lowest mean of 3.84 and given an interpretation of “developed.” This connotes that some of the students need to show empathy to other people. Teachers must integrate these skills in the discussions because they help the students understand how others are feeling so they can respond appropriately to the situation. Thus, the respondents generally “developed” with the development of their interpersonal skills with an overall mean of 4.08.

As a whole, the standard deviation denotes homogeneity in their responses. It implies that these skills are necessary in establishing and maintaining meaningful personal relationships at work. Good interpersonal communication skills can form healthy relationships with the co-workers and can work more effectively as a team. The result implies that interpersonal skills, such as empathy, warmth, engagement, respect (with students and colleagues), openness, honesty, transparency, and trust, are important not only for individual growth, but also for the development of educational organizations, such as ethos, climates, and cultures. Strong interpersonal skills

make an educational organization a happy place where people act with purpose

### 1.5. In terms of Leadership Skills

Table 5 shows the respondents’ perception that the skills show my ability to teach, mentor, and team building got the highest mean of 4.04 and verbally interpreted as “developed.” Based on the responses of the students, it appeared that majority of the respondents were willing to teach, mentor, and build rapport with others.

**Table 5**  
*Respondents’ Perception on the Development of their Leadership Skills*

Indicators	Mean	SD	VI
<b>For leadership skills I...</b>			
1. make decisions in accordance with its agreed roles and responsibilities	3.71	0.80	D
2. demonstrate reliability and dependability while working with my colleagues.	3.57	0.80	D
3. illustrate creativity and positivity while working with my colleagues/classmates.	4.00	0.80	D
4. respond to people’s requests and concerns.	3.99	1.0	D
5. show my ability to teach, mentor, and team building.	4.04	0.80	D
<b>Over All</b>	<b>3.86</b>	<b>0.51</b>	<b>D</b>

Teachers acted as a partner of the students in their academic journey, assisting them in becoming independent learners and change agents. They demonstrated understanding for the students' hopes and fears, and supported their success by acting as an advocate for students' best interests. However, indicator number 2 demonstrates reliability and dependability while working with my colleagues got the lowest mean of 3.57 and interpreted as “developed.” This implies that being dependable tells others that their time is important and that they respect them. Generally, the respondents “developed” with the indicators for the development of their leadership skills with an overall mean of 3.86. The indicated standard deviations suggest that students’ responses were homogenous. This implies that leaders are important to the organizations to



produce more competent products as well as a more effective and efficient organization.

### 1.6. In terms of Teamwork Skills

Displayed in Table 6 are the respondents' perceptions on the development of their teamwork skills. Indicator number 1 develop team commitment and cooperation got the highest mean of 4.10 and verbally interpreted as "developed."

**Table 6**  
*Respondents' Perception on the Development of their Teamwork Skills*

Indicators	Mean	SD	VI
<b>For teamwork skills I...</b>			
1. develop team commitment and cooperation.	4.10	0.8	D
2. set a good example for how the team should work together.	4.07	0.8	D
3. develop mutual concern and camaraderie in the team.	3.90	0.9	D
4. collaborate efforts to obtain organizational/workplace goals.	4.04	0.9	D
5. work effectively with team members of different work style, aspirations, culture and perspective.	3.99	0.9	D
<b>Over All</b>	<b>3.99</b>	<b>0.32</b>	<b>D</b>

This implies that good communication and effective decision making, promotes concern and camaraderie and foster team commitment and cooperation among team members. On the other hand, indicator 3 develops mutual concern and camaraderie in the team got the lowest mean of 3.90 with a corresponding interpretation of "developed." It implies that mutual concern and camaraderie must be emphasized to develop among the team. In general, the respondents "developed" with the indicators for the development of their teamwork skills with an overall mean of 3.99. The indicated standard deviations imply that there was unity in their responses. This implies that collaboration is essential in all organizations or workplaces. It denotes that the team was working toward a common purpose and common goals while sharing their diverse skills in complementing roles

and cooperating with one another. This skill is important to the assigned leader of the group or team and students must learn how to work as a team. Teamwork skills can be learned as part of a student's educational experience. This appears reasonable given that the AACU identified teamwork as one of the important skills to develop among students.

### 2. Correlation between the acquired skills of students and the core competencies in Bread and Pastry Production

**Table 7**  
*Correlation between Acquired Skills and the Core Competencies in Bread in Pastry Production*

Variables	A	B	C	D
Analytical	.277*	.336**	.353**	.313**
Conceptual	.240*	.169	.123	.136
Communication	.325**	.198	.254*	.141
Interpersonal	.233	.246*	.246*	.149
Leadership	.296*	.264*	.152	.142
Teamwork	.180	.154	.139	.041

Presented in Table 7 is the correlation between acquired skills and the core competencies in Bread and Pastry Production.

The data revealed that acquired skills as analytical were significantly related to core competencies in Bread and Pastry Production in terms of preparing and producing bakery products (0.277\*), preparing and producing pastry products (0.336\*\*), preparing and presenting gateaux, tortes, and cakes (0.353\*\*), preparing and displaying petit fours (0.313\*\*). According to Yulina et al. (2019), analytical thinking is the fundamental high-level thinking skills for honing 21<sup>st</sup> century skills such as critical thinking, problem-solving, creativity, and decision-making. Analytical thinking skills are important for teachers as fundamental skills. Students were able to think logically about the relationship between concepts and situations they face, because analytical thinking entails the ability to categorize the problem into its parts and understand the passage, explain the function of a system, the reason of something to happen, solving a problem, and comparing two phenomena. This implies that if the teacher will focus on teaching the importance and concepts of analytical thinking



skills during the discussion and hands-on applications, students' acquired skills in terms of preparing and presenting gateaux, tortes, and cakes and preparing and producing pastry products will be developed among students. Moreover, conceptual skills are significantly related to core competencies in terms of preparing and producing bakery products (0.240\*). He described those conceptual skills as the ability to organize thoughts, understand various theories in their fields, act, and see trends based on theoretical conditions needed. It implies that educators must plan future curricula, develop methods, and prepare our students to be future innovators.

To bring the industry into the 21<sup>st</sup> century, they will need to have exceptional human and conceptual skills (Danim 2010, as cited in Mukarromah et., al 2019). Furthermore, communication skills were significantly related to core competencies in terms of preparing and producing bakery products (0.325\*\*), preparing and presenting gateaux, tortes, and cakes (0.254\*). Communication skills were essential for the teacher in transmitting education, managing the classroom, and interacting with the students. The teacher must teach the students how to think in different ways. (Sng Bee, 2012). The teacher must be skilled and competent in all areas so that he/she could teach the students effectively. This means that effective communication between teachers and students is important. It enables teachers to do their jobs well, leading to positive student outcomes. Teachers will serve as a model for improving students' communication skills, which are crucial for the development and future learning of the students.

Likewise, interpersonal skills were significantly related to core competencies in terms of preparing and producing pastry products and preparing and presenting gateaux, tortes, and cakes which have the same r- value (0.246\*). The result implies that interpersonal skills were important in establishing and maintaining meaningful personal relationships at work. Good interpersonal communication skills can form healthy relationships with the co-workers and can work more effectively as a team. Interpersonal skills, such as empathy, warmth, engagement,

respect (with students and colleagues), openness, honesty, transparency, and trust, were important not only for individual growth, but also for the development of educational organizations, such as ethos, climates, and cultures. Strong interpersonal skills make an educational organization a happy place where people act with purpose. This implies that to be holistic individual's practical skills and soft skills were both vital and so teachers need to devise approaches geared towards equipping learners with both soft skills and practical skills.

Emphasis need not be put on practical skills only but also on soft interpersonal skills as these were sustainable compared to the practical skills which are subject to changes in technologies and societal needs. Similarly, leadership skills were significantly related to core competencies in terms of preparing and producing bakery products (0.296\*), preparing and producing pastry products (0.264\*). Silvestri, as cited in Bowman (2014) explained that leadership begins with self-leadership. Individuals who self-govern themselves lead and approach everything from a leadership perspective on how they act and treat others. This implies that the leader should be self-centered and should strive to please the majority, if not all, of his constituents. The leader's way of life should have a positive influence on his followers in order for the group's common goals to be achieved.

The table also shows that conceptual skills had no significant relationship to core competencies in terms of preparing and producing pastry products, preparing and presenting gateaux, tortes, and cakes, and preparing and displaying petit fours. Likewise, communication skills have no significant relationship to core competencies in terms of preparing and producing pastry products and preparing and displaying petit fours. Similarly, interpersonal skills have no significant relationship to core competencies in terms of producing and preparing bakery products and presenting and preparing petit fours. Moreover, leadership skills had no significant relationship to core competencies in terms of preparing and presenting gateaux, tortes, and cakes and preparing and displaying petit fours. Lastly, teamwork skills had no significant



relationship with all the core competencies in Bread and Pastry Production in terms of preparing and producing bakery products, preparing and producing pastry products, preparing and presenting, gateaux, tortes, and cakes, and preparing and displaying petit fours.

Based on the result, it shows that the indicators listed were not practiced by the students anymore because of the new modality of education that the country is facing nowadays. This implies that different acquired skills relate significantly to how competent they were in terms of core competencies in Bread and Pastry Production. This means that the more the teacher engaged the students in the hands-on applications or practices the more competencies developed which also resulted to the improvement of the students' acquired skills.

## CONCLUSION

Based from the result of this study, this conclusion has been drawn. Acquired skills in terms of analytical is significantly related to the core competencies in Bread and Pastry Production in terms of preparing and producing bakery products, preparing and producing pastry products, preparing and presenting gateaux, tortes and cakes and preparing and displaying petit fours. Conceptual is significantly related to the core competencies in terms of preparing and producing bakery products. Communication skills are also significantly related to the core competencies in terms of preparing and producing bakery products and presenting gateaux, tortes and cakes. Similarly, interpersonal is significantly related to the core competencies in terms of preparing and producing pastry products, preparing and presenting gateaux, tortes and cakes.

Meanwhile, leadership skills are significantly related to the core competencies in terms of preparing and producing bakery products, preparing and producing pastry products. However, some acquired skills as to conceptual, communication, interpersonal, leadership, and teamwork have no significant relationship with some competencies in Bread and Pastry Production in terms of preparing and

producing bakery products, preparing and producing pastry products, preparing and presenting gateaux, tortes and cakes and preparing and displaying petit fours. Therefore, the hypothesis that there is no significant relationship between the acquired skills of the students and their competencies in Bread and Pastry Production is sustained, while for those with significant relationship is not sustained.

## RECOMMENDATIONS

The researcher offered the following recommendations based on the significant findings of the study.

1. Since different acquired skills in terms of analytical, conceptual, communication, interpersonal and leadership are significantly related to core competencies in Bread and Pastry Production in terms of preparing and producing bakery products, preparing and producing pastry products, preparing and presenting gateaux, tortes, and cakes and presenting and displaying petit fours, it is suggested that the schools may enforce more lectures and practical classes in bread and pastry production and other Technical Vocational Livelihood specialization to ensure quality of practical application.
2. Students may be encouraged to actively participate and engage themselves in academic and non-academic training to further improve their skills in their field of specialization.
3. Students may be encouraged to become better problem solvers. Allow them in teams or as individuals to apply the process to simple problems with activities that could enhance students' problem-solving skills may be developed by the teachers.
4. TLE and TVL teachers may undergo skill-development training or upskilling to ensure that they acquire up-to-date knowledge and skills in their area of specialization, thus students will be properly coached and trained in the competencies where they need further development and improvement.

5. To ensure that the students will be able to apply the core competencies in bread and pastry production in their daily living and future business ventures, the teacher may consider the integration of acquired skills into bread and pastry production and practice in IDEA (Introduction, Development, Engagement and Assimilation) lesson exemplar.
6. Future researchers may conduct similar studies on the other areas of Technology and Livelihood Education or TVL Senior High School Specialization for enhancement and to obtain better results

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## AUTHORS PROFILE



**Frannie M. Rodil** is a graduate of Master of Arts in Education major in Technology and Home Economics at Laguna State Polytechnic University San Pablo City Campus, on 2021.

He earned a Bachelor of Secondary Education major in Technology and Livelihood Education from Marinduque, State College, Boac Campus on 2009. He holds an NCII for Bread and Pastry Production, Cookery, and Food and Beverage Services. He is also a passer of Trainers Methodology Certificate 1. At present, he is a Teacher II at Pagbilao National High School teaching Bread and Pastry Production, Cookery and Food and Beverage Services.



**Edna O. Briones, Ed.D.** is an Associate Professor at Laguna Polytechnic University, San Pablo City Campus, College of Teacher Education Faculty of Graduate Studies and Applied

Research. She earned Doctor of Education in Educational Management at Technological University of the Philippines, Manila. She served as the Dean of the College of Education – Graduate Studies and Applied Research. She is also a member of AACUP Accreditor. At present, she teaches professional education in both Masters and Doctorate program.

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