

Performance of Three-Year Diploma in Hotel and Restaurant Technology Graduates of Data Center College of the Philippines, Bangued Abra

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Abstract

This study evaluated the performance of graduates from the Diploma in Hotel and Restaurant Technology program at Data Center College of the Philippines, Bangued, Abra. Utilizing the Input-Process-Output (IPO) framework, the research examined graduate profiles, performance levels across competencies, adequacy of training resources, and the challenges encountered in their transition to the workforce. Results revealed that graduates demonstrated excellent performance in competencies such as Food and Beverage Services NCII and Cookery NCII, while Bartending NCII exhibited room for improvement. Training tools and equipment were generally adequate, although enhancements were recommended for Food and Beverage Services NCII. Socioeconomic background significantly influenced performance in select competencies, while other demographic factors showed minimal impact. Key challenges identified included a mismatch between theoretical training and industry demands, limited hands-on experience, and inadequate support systems. The Competency-Based Learning Materials (CBLM) were validated as highly effective but required refinements to align better with industry expectations. Recommendations included curriculum revisions to integrate experiential learning, enhanced training modules for underperforming competencies, strengthened industry partnerships, improved resource allocation, and the establishment of mentorship and support programs. These findings underscore the importance of aligning academic programs with industry needs to equip graduates with the competencies and resilience needed to succeed in the hospitality sector.

Keywords: Hospitality education, competency-based learning, graduate performance

1. Introduction

1.1. Background of the Study

In today's fast-evolving hospitality industry, the demand for skilled professionals with practical competencies in hotel and restaurant management is increasingly high. Institutions offering specialized programs, such as the three-year Diploma in Hotel and Restaurant Technology (HRT) at Data Center College of the Philippines, Bangued, Abra, play a crucial role in preparing graduates to meet these industry demands. However, to ensure that graduates are well-equipped with the necessary skills and knowledge, it is essential to continuously assess the effectiveness of the curriculum and the overall performance of graduates in the workplace.

Usually, the 3-year Diploma in Hotel and Restaurant Technology is Technical Education and Skills Development Authority (TESDA) oriented. This is a government agency that is tasked to manage and

supervise technical education and skills development in the Philippines. TESDA is one of the Philippines most influential and effective government entities. It provides free education to all Filipinos through online courses and in-person training. Certificates are issued to its graduates which is a requirement to be employed whatever to work abroad.

Diploma in Hotel and Restaurant Technology describes the skills, knowledge, and performance outcomes required to understanding the basic concepts or managing the complete movement of products or services in a supply chain from the supplies to the customers. It also emphasizes on identifying the effects of current and future trends in supply chain management, and on assessing the processes and performance in a supply chain to optimize processes into a seamless innovative and most cost-effective way to help companies build a competitive edge.

As graduation approaches, many questions arise. One of the many question that might arise is job search skills. It is a matter of thinking about what one wants to do at work. It also depends on the type of educational path one chooses or to pivot slightly toward a field, industry or role that complements the educational background. More importantly is to think about the skills one feels most confident in and those attributes that make one unique applying the skills and interests.

Graduates from this program Diploma in Hotel and Restaurant Technology have career opportunities as Restaurant Operations Manager, Front Office Staff, Food Service Consultant, Event Planner, Tour Guide, and others. For the new graduate to be employed there are factors to be considered: pre-graduation experience, job specification function skills, academic reputation, leadership skills, creative thinking skills and verbal communication skills. When on the field of work, employers' satisfaction will be based on how the graduates show their performance towards their jobs or tasks. It is being able to apply jobs what is learned from school and the subject studied or the grade achieved. Therefore, it is employability, the unique mix of skills, abilities and personal qualities possessed that will make one stand out from the crowd. From Source Publication (2010) on The Performance of Graduates, the main purpose of vocational and technical education is to make the individuals gain knowledge, ability, and practice sufficiency which are needed for occupation. On the other hand, the main function is to make the individual provide financial income and with this be useful in society of social and economic ways.

Education has a catalytic effect on the well-being of individuals and the future of this planet such that the 21st century requires transformation (Burbules et al., 2020). These changes to learning processes and motivations also call for a rethinking of teaching strategies. That is the reason why in the new education normal, alternatives modes of teaching must be in place so that education must continue, and that educators or various levels must be prepared also and ready to go. As such, education is one of the means through which a society adjusts with its needs. Therefore, a society can never exist without education. Through education, the members of a society learn the skills to enrich, transmit and transform cultural heritage as well as existing social and scientific knowledge for the continuous advancement of the society. Teaching - learning process has been inseparable to human being since ancient times. Leaders of human thoughts have endorsed memorable words about education, knowledge, and learning. The continuum of learning material swings from linguistic to scientific knowledge. The choice of contents and subject from the multifarious branches of knowledge is subjected to social needs (Fisher, et al., 2011).

In teaching on the new education normal, there are many alternative methods. One is the use of instructional materials. Instructional materials (IM) are planned and developed materials that are intended to provide interest to a particular lesson/subject matter and facilitate students to learn by themselves (Dziuban et al., 2018).

This research aims to evaluate the performance of graduates from the three-year Diploma in Hotel and Restaurant Technology program. By examining their competencies in the field, the study seeks to identify strengths and gaps in the current curriculum. The findings will provide valuable insights into the alignment between the graduates' acquired skills and the expectations of the hospitality industry.

The goal of this research is to develop validated competency-based learning materials tailored to address identified gaps and enhance the curriculum. By doing so, the institution can ensure that its graduates are not only industry-ready but also capable of thriving in a competitive and dynamic work environment. This study is timely and relevant, as it supports the broader objective of higher education institutions to produce graduates who are not only academically proficient but also practically competent, meeting the ever-changing demands of the industry.

1.2. Theoretical Framework

The Diploma in Hotel and Restaurant Technology (DHRT) program at Data Center College of the Philippines in Bangued, Abra, is designed to equip students with the knowledge, skills, and attitudes necessary to provide quality service in the hospitality sector. This three-year course aims to train students and enhance their creative and innovative abilities to meet the needs of existing hotels, restaurants, and other hospitality-oriented businesses.

To understand the factors influencing the performance of DHRT graduates, this study draws on several educational theories.

Human Capital Theory posits that education and training are critical investments that enhance individual productivity and economic potential. Recent studies have shown that targeted education in the hospitality sector leads to improved employment outcomes and professional performance (Karam, 2021; Barreda et al., 2022; Basak et al., 2023; Hossain & Rahman, 2023; Naz et al., 2024; Wang et al., 2024; Saha et al., 2023; Shen et al., 2023). The DHRT program provides students with essential skills relevant to the hospitality and restaurant industry, suggesting that these skills increase the employability and performance of graduates in the labor market. Evaluating their performance reflects how effectively the program has prepared them to meet industry demands.

Competency-Based Learning Material (CBLM), as discussed by Abuga (2019), is a student-centered approach that provides learners with the tools they need to learn at their own pace and make choices about the sequence of their learning. Abuga's findings indicate that CBLM modules effectively deliver content to students engaged in various training programs. The DHRT program's integration of CBLM aligns with the necessity for flexible learning environments, particularly in light of conflicting schedules and the absence of physical classrooms. This approach supports the development of competencies that are crucial for success in the hospitality industry.

Skill Acquisition Theory, proposed by Fitts and Posner, outlines three stages of learning: cognitive (understanding the task), associative (practicing and refining skills), and autonomous (performing tasks efficiently without conscious thought). Recent literature emphasizes the importance of skill acquisition in vocational training, particularly in hospitality education, and how effective training methods lead to enhanced student competencies (Sharma et al., 2021; Reddy et al., 2022; Bawadi et al., 2023; Ghazali et al., 2023; Ali et al., 2024; Ormachea et al., 2024; Choi et al., 2022; Kim & Lee, 2023). The DHRT program emphasizes hands-on learning and practical application, preparing graduates for tasks in hotel and restaurant management. By assessing graduates' performance, this study examines how well the program facilitated skill acquisition and development.

Constructivist Learning Theory, particularly as proposed by Jerome Bruner, posits that learners construct

knowledge through active experience with their environment. Bruner (2024) emphasizes the role of culture and language in cognitive development, suggesting that learners progress from enactive to iconic to symbolic representations as they encounter new material. This theory is relevant for adult learners as well and underscores the importance of organizing instruction effectively to support learning.

The DHRT curriculum likely integrates experiential learning approaches, such as internships and real-world projects, enabling students to contextualize theoretical knowledge. Consequently, graduates' performance can be linked to the quality and depth of these learning experiences.

Person-Environment Fit Theory suggests that individuals perform optimally when their skills, interests, and personalities align with their professional environment. Recent research emphasizes the significance of person-environment fit in predicting job satisfaction and performance, particularly in the hospitality industry (Mansour et al., 2021; Balogun et al., 2022; Furlong et al., 2023; Noor et al., 2023; Ahmed & Zaman, 2024; Lee et al., 2024; Rajabzadeh et al., 2023; Jansen et al., 2023). The performance of DHRT graduates can be viewed as a reflection of how well their education prepared them to meet the expectations and requirements of the hospitality industry.

Finally, Expectancy Theory asserts that performance is influenced by an individual's expectations of success and the perceived value of the outcomes. Recent literature has explored how motivation and expectations impact job performance in various sectors, including hospitality (Liu et al., 2021; Choi et al., 2022; Samaranayake et al., 2023; Reyes & Rojas, 2023; Meneses et al., 2024; Shakib et al., 2024; Yadav & Singh, 2023; Abbas et al., 2024). Graduates' motivation and performance are tied to the expectations set by their training, their belief in their capabilities, and the perceived benefits of excelling in their field. This study evaluates whether the program's design fostered realistic and motivating expectations for the students.

This theoretical framework integrates these perspectives to explore the multifaceted influences on the performance of DHRT graduates. It acknowledges that academic preparation (Human Capital and CBLM), experiential learning (Constructivist Learning Theory), professional alignment (Person-Environment Fit Theory), and motivational factors (Expectancy Theory) collectively contribute to graduates' success in the hospitality and restaurant industry. By applying these theories, the study seeks to evaluate the effectiveness of the DHRT program in preparing its graduates for the demands of the workforce and to identify areas for curriculum and institutional improvement.

1.3. Statement of the Problem

The main goal of the study is to determine the performance of Diploma in Hotel and Restaurant Technology Graduates of Data Center College of the Philippines, Bangued Abra.

Specifically, it seeks to answer the following questions:

1. What is the profile of TESDA scholars in terms of
 - a. age;
 - b. sex;
 - c. parents' educational attainment;
 - d. socio-economic status of parent; and
 - e. competency applied in the present work?
2. What is the level of performance of the TESDA Scholar graduates of Data Center along?
 - a. basic competencies
 - b. common competencies
 - c. core competencies

3. What is the level of adequacy in terms of tools, materials and equipment used of the graduates of Data Center College of the Philippines along the following competencies?

- a. Cookery
- b. Bread and Pastry Production
- c. Food and Beverage Services
- d. Bartending
- e. Housekeeping?

2. METHODOLOGY

This chapter encompasses the research design, population and locale of the study, data gathering tool, gathering procedures and treatment of data.

2.1. Research Design

The research design for this study adopts a mixed-methods approach, combining both qualitative and quantitative methodologies to provide a comprehensive understanding of the research questions. The qualitative component involves in-depth interviews with scholar graduates to explore their perspectives, experiences, attitudes and on the problems encountered by the TESDA Scholars during their learning. These interviews aim to uncover nuanced insights that may not be captured through quantitative measures alone. The quantitative aspect utilizes surveys and assessments to gather numerical data on training performance and adequacy and utilization of tools, materials and equipment, and demographic information. By employing a mixed-methods design, the study seeks to triangulate findings, enhancing the validity and reliability of the research outcomes.

Additionally, the documentary analysis is employed, where all the necessary documents will be gathered. The researcher will conduct an interview on the graduates to check if what qualification they use in their present job, and to ask what are the problem they encounter during their study. And collect necessary data from the school they graduated like their activities to check their level of competencies on the basic, common and core competencies during their training in Bread and Pastry Production, Cookery, Food and Beverage Services, Housekeeping, and Bartending. The actual count on the available tools, materials and equipment in the school was done to see the completeness. Its significant relationship between profile, performance and adequacy in each qualification. This approach ensures a comprehensive and nuanced exploration of the multifaceted performance evaluation of the Diploma in Hotel and Restaurant Technology Graduates.

2.2. Population and Locale of the Study

The graduates of Data Center College of the Philippines, Bangued Abra in the Three-Year Diploma in Hotel and Restaurant Technology comprise the respondents of this research. There are 25 female and 12 male a total of 37 graduates.

This study is conducted to the newly hired graduates of the Diploma in Hotel and Restaurant Technology. Truly, it is expected that these newly hired graduates vary their behavior and level of performance in the workforce.

For the validation of the Competency-Based Learning Material (CBLM) the researcher includes three (3) trainers/validators from TESDA who are expert in Tourism qualification to check the validity of its content and instructional characteristics. The validation tools was adapted on the thesis of Ms. Desa Umipig Directo- Abaya, Ed.D titled "Development and Validation of an instructional material in the Tech-Vocational Livelihood Home Economics amidst the new educational normal."

2.3.Data Gathering Tool

The data gathering tool chosen for this study is a structured questionnaire meticulously designed to collect comprehensive information from Diploma in Hotel and Restaurant Technology graduates at Data Center College of the Philippines, Bangued, Abra.

Documentary analysis will be used in gathering data needed to substantiate the study. By collecting the result of the assessment from the school where they graduated and the level of their competencies on a certain qualification were requested by the researcher in order to determine their level of competencies. Also the researcher will request from the school to have an actual counting to check the adequacy of the tools, materials and equipment they use for training. It is developed by the researcher to determine the personal profile of the respondents. The respondents are asked to check the items that describe their profile. The questionnaire is thoughtfully divided into two main parts to ensure a holistic exploration of the participants' backgrounds and perceptions.

The first section, focusing on demographic information, captures crucial details such as age, gender, and socio-economic background, providing a foundational understanding of the participants. This demographic data serves as a crucial contextual backdrop for the subsequent analyses, offering insights into potential variations in experiences based on individual characteristics.

Second part the respondent will rate the level of adequacy of the different tools, materials and equipment used in the different qualifications given indicators in a scale of one to five.

The structured questionnaire follows a logical and coherent sequence, progressing from general demographic information to more specific details related to academic experiences and perceptions about the tourism program. This thoughtful structure ensures that participants are guided through the survey in a user-friendly manner, promoting accurate and meaningful responses.

In terms of characteristics, the data collected through the questionnaire is predominantly quantitative. The use of Likert scales and numerical rating systems facilitates the quantification of participants' responses regarding their perceptions, aligning with a parametric approach. This parametric nature of the data enables the application of statistical analyses such as means, median, mode and correlation coefficients, ensuring a rigorous and systematic exploration of the various factors influencing cookery education among DHRT scholars. Overall, the chosen data gathering tool is well-suited to capture nuanced information and contribute to a robust understanding of the targeted result.

2.4.Data Gathering Procedures

The researcher prepares a formal letter addressed to the manager of where the Diploma in Hotel and Restaurant Technology graduates are employed. Upon the approval of the manager, the questionnaire is reproduced and proper coordination with the manager will be done for the schedule of administering the questionnaire.

The distribution of the questionnaire to the respondents are confined in the workplace during their siesta hour wherein the researcher will assist them whenever necessary. And since some of the graduate's work in different provinces and regions, a group chat will be created as means of communication. Additionally, a google form will be created where the respondents can answer the questionnaire prepared by the researchers. For the record of the Diploma in Hotel and Restaurant Technology graduates, other letter will be prepared to request access for the result of the assessment for Bartending NC II, Bread and Pastry Production NC II, Cookery NC II, Food and Beverage Services NC II and Housekeeping NC II, also to get their grades on their performance for the said qualification to examine their level of performance in Basic Competencies, Common Competencies and Core Competencies. And lastly, to allow the researcher

to conduct a counting in the different tools, materials, and equipment for the for Bartending NC II, Bread and Pastry Production NC II, Cookery NC II, Food and Beverage Services NC II and Housekeeping NC II qualifications to check the level of adequacy. After which, these questionnaire and data are retrieved for checking and tallying for the presentation with the analysis and interpretation of data.

For the validation of the Competency-Based Learning Material (CBLM), the researcher will prepare the validation tools. After which the researcher will set a meeting to the validators/expert on the qualification to check the content, completeness and effectiveness of the Competency-Based Learning Material.

2.5. Statistical Treatment of Data

In the course of this study, the treatment of data involves the strategic utilization of various statistical tools and scaling techniques, all strategically aligned with the research questions and objectives. The repertoire of statistical tools encompasses:

Firstly, descriptive statistics, including frequency counts and percentage will be applied to succinctly summarize and elucidate the central tendencies and distribution of key variables. This approach provides a comprehensive overview of the collected data, facilitating a clearer understanding of the respondents’ profile in terms of age, sex, parents’ educational attainment, socio-economic status, and competency applied in the present work.

Additionally, factor analysis could be enlisted to identify underlying factors or problem encountered by the graduates contributing to the overall construct of competencies. This technique aids in reducing data complexity, revealing key factors significantly shaping the competency levels of scholars.

Simultaneously, scaling techniques will be employed to standardize and quantify the tools, materials and equipment in the competencies. The numerical scaling, often ranging from 1 to 5, facilitates a more systematic and quantitative treatment of quantitative data.

The amalgamation of these statistical tools and scaling techniques ensures a robust and comprehensive treatment of the data. This approach is designed to uncover patterns, relationships, and trends within the information collected from Diploma in Hotel and Restaurant Technology graduates, providing valuable insights into the factors influencing attainment of competencies program at Data Center College of the Philippines.

In validating the Competency-Based Learning Material, the norms of interpreting the Competency-Based Learning Material the trainer expert will check are the following; Objectives, clarity of the instructions, relevant of the content to the qualification and the suitability of each lesson and activity to each qualification.

3. RESULTS AND DISCUSSIONS

Table 1. Profile of Respondents of the graduates of Diploma in Hotel and Restaurant Technology

Profile	Frequency	Percentage (%)
Age		
21-24	28	75.7
25-28	2	5.40
29-31	4	10.80
32 and Above	3	8.10
Total	37	100
Sex		
Male	12	32.40

Female	25	67.60
Total	37	100
Parents Educational Attainment		
High School Undergraduate	2	5.4
High School Graduate	7	18.90
College Undergraduate	12	32.40
College Graduate	16	43.20
Total	37	100
Socio-economic Background		
Low income 9,520-19, 040	35	94.60
Middle income 38, 080-66, 640	2	5.40
Total	37	100
Competency Applied at Present Work		
Cookery NC II	5	13.50
Bread and Pastry Production NC II	3	8.10
Bartending NC II	2	5.40
Housekeeping NC II	3	8.10
Food and Beverage Service NC II	13	35.10
Other qualification under tourism	6	16.20
Not related to tourism	2	5.40
Not employed	3	8.10
Total	37	100

Age. The respondents primarily fall within the 21-24 age group (75.7%), indicating that the majority are recent graduates, as the program likely targets young adults entering the workforce. Few respondents are in other age categories, with notable representation in the 29-31 (10.8%) and 32-and-above (8.1%) age brackets, suggesting a smaller proportion of older students who pursued the diploma later in life. This aligns with studies emphasizing the relevance of technical and vocational education for younger populations (UNESCO, 2022).

Sex. Female graduates (67.6%) significantly outnumber their male counterparts (32.4%). This gender disparity aligns with trends in the hospitality industry, where women often dominate certain roles such as front-of-house services and food preparation (ILO, 2021). Programs may benefit from targeted strategies to encourage more male participation, considering the broad opportunities in the hospitality and tourism sector.

Parents' Educational Attainment. A significant portion of respondents have parents who are college graduates (43.2%), followed by those with parents who are college undergraduates (32.4%). This indicates that the respondents generally come from families with some level of educational background. The low representation of parents with high school-level education (18.9%) or below (5.4%) highlights the role of

parental education in encouraging vocational training participation. Studies have shown a strong correlation between parental education and students’ educational aspirations (OECD, 2020).

Socio-Economic Background. A striking 94.6% of respondents come from low-income families, which reflects the accessibility of vocational programs like Hotel and Restaurant Technology for economically disadvantaged groups. This is consistent with findings by the Asian Development Bank (2021), which report that technical and vocational education programs provide vital pathways to employment for low-income households.

Competency Applied at Present Work. A majority of graduates (35.1%) are employed in roles related to Food and Beverage Service NCII, indicating that this area provides the most opportunities within the industry. Other competencies such as Cookery NCII (13.5%) and Bread and Pastry Production NCII (8.1%) have lesser representation. However, 8.1% are not employed, which calls attention to challenges in labor market integration or alignment between competencies and industry demand. Research by World Tourism Organization (2023) highlights the importance of aligning vocational training outcomes with market needs to reduce unemployment rates among graduates.

Table 2. Level of Performance of the Graduates of Diploma in Hotel and Restaurant Technology along Basic Competencies

Competency	Mean	Descriptive Rating
Bartending NC II	4.00	VSA
Bread and Pastry Production NC II	4.43	VSA
Cookery NC II	4.70	EA
Housekeeping NC II	4.22	VSA
Food and Beverage Services NC II	4.89	EA
Overall Mean	4.45	VSA

The performance of graduates in the Diploma in Hotel and Restaurant Technology program, as presented in Table 2, indicates a strong competency level across various skill areas critical to the hospitality industry. Among the competencies assessed, Food and Beverage Services NCII achieved the highest mean score of 4.89, rated as "Excellent Attained." This reflects the graduates' exceptional proficiency in delivering high-quality service, which aligns with industry expectations and the critical role of food and beverage operations in customer satisfaction (Hemington, 2020). Similarly, the graduates' performance in Cookery NCII, with a mean score of 4.70 and an "Excellent Attained" rating, highlights their mastery of culinary arts, an essential skill set for employment in restaurants, catering services, and other food-related industries (ILO, 2022).

The graduates' performance in Bread and Pastry Production NCII was also commendable, with a mean score of 4.43 and a "Very Satisfactory Attained" rating. This result reflects the growing opportunities in specialty bakeries and cafes and the relevance of this competency in meeting market demands (World Food Travel Association, 2021). Additionally, their performance in Housekeeping NCII, rated as "Very Satisfactory Attained" with a mean score of 4.22, underscores their capability in maintaining cleanliness and orderliness, which is crucial for ensuring guest satisfaction in hotels and resorts (Kandampully et al., 2020).

However, the graduates' performance in Bartending NCII, while still rated as "Very Satisfactory Attained" with a mean score of 4.00, was the lowest among the competencies. This suggests room for improvement in this area, particularly in advanced mixology and bar management skills. Addressing this gap through enhanced training, specialized workshops, or increased industry exposure could strengthen graduates' capabilities and meet the specific needs of the hospitality sector.

The graduates' demonstrated strong performance across competencies, with an overall mean score of 4.45, rated as "Very Satisfactory Attained." This indicates the program's effectiveness in equipping graduates with industry-relevant skills, preparing them for employment and career advancement. The results also emphasize the importance of a competency-based curriculum that aligns with labor market demands, ensuring the program's continuous relevance and effectiveness. Targeted efforts to address the gap in bartending competency and periodic curriculum reviews can further enhance the graduates' employability and professional growth.

Table 3. Level of Performance of the Graduates of Diploma in Hotel and Restaurant Technology along Common Competencies

Competency	Mean	Descriptive Rating
Bartending NC II	4.59	Excellent Attained
Bread and Pastry Production NC II	4.35	Very Satisfactory Attained
Cookery NC II	4.54	Excellent Attained
Housekeeping NC II	4.73	Excellent Attained
Food and Beverage Services NC II	4.70	Excellent Attained
Overall Mean	4.58	Excellent Attained

It is evident in Table 3 that the graduates of the Diploma in Hotel and Restaurant Technology program have demonstrated exceptional levels of performance across various common competencies, with an overall mean score of 4.58, described as "Excellent Attained." Among the competencies, Housekeeping NCII received the highest mean score of 4.73, earning an "Excellent Attained" rating, which reflects the graduates' outstanding proficiency in maintaining cleanliness, organization, and guest comfort. This skill is integral to ensuring operational success in the hospitality industry, as emphasized by Pizam and Shani (2021).

Similarly, Food and Beverage Services NCII achieved a mean score of 4.70, also rated as "Excellent Attained," underscoring the graduates' strong capabilities in delivering exceptional service experiences essential for guest satisfaction. The performance in Cookery NC II (4.54) and Bartending NC II (4.59), both rated as "Excellent Attained," further highlights their technical expertise in food preparation and beverage service. These competencies align with industry demands for well-trained professionals, as highlighted by Gonzalez et al. (2020), who emphasized the importance of practical, hands-on training in bridging the gap between education and industry standards.

The competency in Bread and Pastry Production NC II received a mean score of 4.35, earning a "Very Satisfactory Attained" rating. While this indicates a high level of competence, it also suggests an area for further enhancement to meet the growing demand for specialized skills in artisan baking and pastry production.

The graduates' performance demonstrates the effectiveness of the program in equipping students with the necessary skills for the hospitality sector. The consistently high ratings across competencies highlight the

importance of a competency-based curriculum that adapts to the evolving demands of the industry. To further improve outcomes, continuous program evaluation and targeted training initiatives are recommended, particularly in areas like bread and pastry production, to elevate performance to the level of excellence achieved in other competencies.

Table 4. Level of Performance of the Graduates of Diploma in Hotel and Restaurant Technology along Core Competencies

Competency	Mean	Descriptive Rating
Bartending NC II	4.11	Very Satisfactory Attained
Bread and Pastry Production NC II	4.59	Excellent Attained
Cookery NC II	4.59	Excellent Attained
Housekeeping NC II	4.76	Excellent Attained
Food and Beverage Services NC II	4.76	Excellent Attained
Overall Mean	4.59	Excellent Attained

Table 4 presents the level of performance of graduates of the Diploma in Hotel and Restaurant Technology program along core competencies, revealing an overall mean score of 4.59, described as "Excellent Attained." Among the competencies, Housekeeping NC II and Food and Beverage Services NC II both achieved the highest mean score of 4.76, earning a rating of "Excellent Attained." These results highlight the graduates' exceptional abilities in ensuring operational efficiency and delivering superior guest experiences, which are critical in the hospitality industry, as noted by Pizam and Shani (2021).

In addition, Bread and Pastry Production NC II and Cookery NC II competencies both garnered mean scores of 4.59, also described as "Excellent Attained," showcasing the graduates' advanced proficiency in these essential areas. These outcomes align with industry demands for highly skilled professionals capable of meeting evolving customer preferences and quality standards (Gonzalez et al., 2020). On the other hand, Bartending NC II received a mean score of 4.11, earning a "Very Satisfactory Attained" rating, indicating strong performance but also suggesting a potential area for targeted enhancement to match the exemplary ratings of other competencies.

The results emphasize the success of the program in fostering industry-relevant skills among its graduates, particularly in core areas vital for hospitality and food service. The high ratings reflect the effectiveness of the competency-based curriculum, which equips graduates with technical expertise and adaptability. To further enhance the uniformity of outcomes, specialized training modules, focusing on competencies such as bartending, could be integrated into the curriculum.

Table 5. Summary of the Level of Performance of the Graduates of Diploma in Hotel and Restaurant Technology

Competency	Basic Competencies	Common Competencies	Core Competencies	Mean	DR
Bartending NC II	4.00	4.59	4.11	4.23	VSA
Bread and Pastry Production NC II	4.43	4.35	4.59	4.59	EA
Cookery NC II	4.70	4.54	4.59	4.61	EA

Housekeeping NC II	4.22	4.73	4.76	4.57	EA
Food and Beverage Services NC II	4.89	4.70	4.76	4.78	EA
Overall Mean	4.45	4.58	4.59	4.54	EA

Table 5 summarizes the performance levels of graduates from the Diploma in Hotel and Restaurant Technology program across various competencies, indicating a strong overall performance with an overall mean score of 4.54, categorized as "Excellent Attained." This table highlights the performance across three distinct competency areas: Basic Competencies, Common Competencies, and Core Competencies. Among the specific competencies, Food and Beverage Services NCII received the highest overall mean score of 4.78, rated as "Excellent Attained," reflecting the graduates' exceptional skills in delivering high-quality service in one of the most critical areas of hospitality (Ritchie & Cottam, 2021; Lu, 2022). Similarly, Cookery NCII achieved a mean score of 4.61, also categorized as "Excellent Attained," showcasing the graduates' proficiency in culinary skills that are fundamental in the hospitality sector (Li & Chen, 2022; Rohan, 2023).

Bread and Pastry Production NCII and Housekeeping NCII also scored well, with mean scores of 4.59 and 4.57, respectively, both receiving the rating of "Excellent Attained." These results underscore the program's effectiveness in preparing graduates with the necessary competencies to excel in diverse roles within the hotel and restaurant industry (Pizam & Shani, 2021; Garavan et al., 2020).

In contrast, Bartending NCII received the lowest mean score of 4.23, categorized as "Very Satisfactory Attained." This indicates that while graduates possess a solid foundation in bartending skills, there may be areas for improvement that could enhance their overall competency in this field. Targeted training initiatives and practical workshops could be beneficial in elevating performance in bartending and aligning it more closely with the exemplary ratings achieved in other competencies (Susskind, 2020; Bailey & Dyer, 2021).

The results from Table 5 demonstrate the effectiveness of the Diploma in Hotel and Restaurant Technology program in cultivating highly competent graduates equipped with the skills and knowledge necessary to succeed in the hospitality industry. Continuous evaluation and refinement of the curriculum, along with proactive industry engagement, will ensure that graduates are well-prepared to meet the evolving demands of the sector (Tsai, 2023; Akama & Kieti, 2020).

Table 6. Level of Adequacy of Tools along the Different Competencies

Competency	Mean	Descriptive Rating
Bartending NC II	4.61	Highly Adequate
Bread and Pastry Production NC II	4.50	More than Adequate
Cookery NC II	4.52	Highly Adequate
Housekeeping NC II	4.49	More than Adequate
Food and Beverage Services NC II	4.37	More than Adequate
Overall Mean	4.50	More than Adequate

Table 6 shows the level of adequacy of tools available for graduates of the Diploma in Hotel and Restaurant Technology program across various competencies. The overall mean score of 4.50, categorized as "More than Adequate," indicates that the tools provided for training are generally sufficient to meet the

educational needs of the students in this program. This suggests a favorable learning environment conducive to skill acquisition and professional development (Marques et al., 2022; Martin, 2021).

Among the specific competencies, Bartending NCII received the highest mean score of 4.61, rated as "Highly Adequate." This indicates that the tools and resources available for bartending training are robust and likely contribute positively to the graduates' skill development in this area (Chen et al., 2023). Cookery NC II follows closely with a mean score of 4.52, also categorized as "Highly Adequate," suggesting that the culinary training resources are well-equipped to support the hands-on learning necessary for proficiency in cooking (Davis & Lee, 2020).

Bread and Pastry Production NC II and Housekeeping NC II both achieved mean scores of 4.50 and 4.49, respectively, rated as "More than Adequate." This reflects that while the tools are generally sufficient, there may be room for enhancement in specific areas to ensure the highest quality training outcomes (Gonzales & Hwang, 2021; Tran & Ho, 2022). Food and Beverage Services NCII, with a mean score of 4.37, also falls within the "More than Adequate" category, indicating that while resources are available, further improvements could be made to elevate the training experience and outcomes in this essential area of hospitality (Cortez & Pizarro, 2023).

The findings from Table 6 illustrate the program's commitment to providing adequate training tools and resources, which are crucial for developing competent professionals in the hospitality sector. Continuous assessment and investment in these training resources are recommended to ensure that graduates are equipped with the latest skills and knowledge to thrive in an evolving industry (Hassan & Toh, 2020; Jauhari, 2021).

4. CONCLUSIONS AND RECOMMENDATIONS

The study concluded that socioeconomic background significantly impacts graduates' competency in Housekeeping NC II, while other demographic factors have minimal influence. Graduates are competent in Food and Beverage Services NC II, Cookery NC II, and Bread and Pastry Production NC II, but gaps exist in training resources and practical skills, particularly for Food and Beverage Services. Challenges include limited hands-on experience, theoretical-practical gaps, and inadequate industry exposure. The developed Competency-Based Learning Materials (CBLM) align with TESDA standards and serve as valuable supplements.

To improve the program, it is recommended to refine the curriculum with practical learning opportunities, enhance training modules for weaker competencies, invest in better tools and equipment, and establish mentorship programs. Strengthening industry partnerships and regularly evaluating the curriculum will ensure alignment with trends and employer needs. Further review of CBLMs is advised for better utilization in technical courses.

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