

Skills and Knowledge Gap Analysis among Trainees of Tourism Promotion Services NC II: Input to a Sustainable Tourism Promotion Framework

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ABSTRACT

This study, “Skills and Knowledge Gap Analysis among Trainees of Tourism Promotion Services NC II: Input to a Sustainable Tourism Promotion Framework,” aimed to identify the existing competency gaps among trainees in promoting tourism products and services, with a focus on integrating sustainability principles in line with the goals of the Technical Education and Skills Development Authority (TESDA) and the Philippine Tourism Development Plan. The research employed a descriptive Training Needs Analysis (TNA) design, involving 50 trainees, 5 trainers, and 5 industry practitioners, through questionnaires and interviews. The analysis was conducted using descriptive statistics, gap index analysis, and thematic interpretation.

Using a descriptive-evaluative research design, the study reveals that while trainees possess a high level of competence in tourism promotion concepts and strategies, significant gaps exist in areas such as digital marketing, content creation, and sustainable tourism practices. The study also finds that limited hands-on training, outdated training materials, and a lack of access to digital tools contribute to these gaps. Based on these findings, the study recommends curriculum enhancement, industry partnerships, and experiential learning opportunities to address the identified gaps and produce well-rounded tourism promotion practitioners. The study's results have significant implications for the development of a sustainable tourism workforce in the Philippines and contribute to the achievement of the United Nations' Sustainable Development Goals (SDGs), particularly SDG 4 (Quality Education), SDG 8 (Decent Work and Economic Growth), and SDG 12 (Responsible Consumption and Production).

Index Terms: Training Needs Analysis, Tourism Promotion Services NC II, Sustainable Tourism, Skills Gap, TESDA, Green Marketing

INTRODUCTION

The tourism industry plays a vital role in the economic and social development of nations worldwide. As a key contributor to employment generation, poverty alleviation, and cultural preservation, tourism has become a major driver of inclusive growth and sustainability (UNWTO, 2023). Globally, the United Nations has emphasized tourism's potential in achieving several Sustainable Development Goals (SDGs), notably SDG 4 (Quality Education), SDG 8 (Decent Work and Economic Growth), and SDG 12 (Responsible Consumption and Production), which call for a skilled, competent, and sustainability-driven workforce in the tourism sector (United Nations, 2015).

In the Philippine context, the tourism sector is a significant contributor to national development, providing employment opportunities and promoting local entrepreneurship. According to the Department of Tourism (2023), the industry continues to recover and grow post-pandemic, highlighting the need for a workforce that is not only technically competent but also adaptive to sustainable practices. The Technical Education and Skills Development Authority (TESDA), as the government agency mandated to manage and supervise technical education and skills development in the country, ensures that workforce readiness is aligned with industry

standards through competency-based training programs such as Tourism Promotion Services National Certificate II (NC II).

The Tourism Promotion Services NC II qualification is designed to develop the competencies required to promote domestic and international tourism products and services effectively. It covers key areas such as developing tourism marketing strategies, coordinating promotional activities, and providing quality customer service (TESDA, 2022). However, as tourism trends evolve toward sustainability, digital marketing, and experiential tourism, there is a growing concern about whether trainees possess sufficient knowledge and skills to meet the current and future demands of the industry (De Guzman & Orence, 2021).

Conducting a Training Needs Analysis (TNA) becomes crucial to address this concern. A TNA systematically identifies the gaps between current trainee competencies and the standards required by the industry (Goldstein & Ford, 2018). Through skills and knowledge gap analysis, TESDA and training institutions can determine areas that require enhancement in curriculum design, instructional delivery, and assessment strategies. This ensures that graduates of Tourism Promotion Services NC II remain competitive and industry-relevant while promoting sustainability principles.

This study focuses on trainees of Tourism Promotion Services NC II in the province of Laguna, one of the emerging tourism destinations in the CALABARZON region. Laguna's rich natural resources, historical landmarks, and eco-tourism sites make it an ideal context for examining how future tourism professionals can contribute to sustainable tourism promotion. The research aims to determine the existing skills and knowledge gaps among trainees, as well as to identify areas for intervention to strengthen their competencies in sustainable tourism practices.

The findings of this study will serve as an input to a Sustainable Tourism Promotion Framework, which may guide TESDA-accredited institutions and stakeholders in aligning training programs with sustainability principles and the SDGs. By addressing identified competency gaps, the study seeks to enhance the employability and environmental consciousness of trainees, ultimately contributing to the development of a sustainable tourism workforce in Laguna and beyond.

Statement of the Problem

The tourism industry is a vital sector that contributes significantly to economic growth and cultural exchange. The Tourism Promotion Services NC II program aims to equip trainees with the necessary skills and knowledge to effectively promote tourism destinations and services. However, despite the program's efforts, there are concerns that trainees may not fully possess the competencies required to address the dynamic challenges of the tourism industry, particularly in promoting sustainable tourism practices.

A gap exists between the skills and knowledge imparted through the training and the actual demands of the industry, potentially leading to underprepared tourism promoters and ineffective promotion activities. This discrepancy may hinder sustainable tourism development, which is crucial for maintaining the environmental, cultural, and economic integrity of tourism destinations.

Thus, this study seeks to conduct a comprehensive skills and knowledge gap analysis among trainees of the Tourism Promotion Services NC II. The specific problems to be addressed include:

1. What is the demographic profile of the respondents in terms of:
 - 1.1. Age;
 - 1.2. Gender;
 - 1.3. Educational attainment;
 - 1.4. Training duration and experience?

2. What are the existing skills and knowledge levels of trainees in the Tourism Promotion Services NC II program?
3. Which areas or competencies do trainees lack or need improvement in to effectively promote tourism destinations?
4. What are the underlying factors contributing to these skills and knowledge gaps?
5. How do these gaps affect the trainees' readiness to participate in sustainable tourism promotion?
6. What inputs can be derived to formulate a sustainable tourism promotion framework that aligns training outcomes with industry needs?

Theoretical Framework

This study is anchored on Human Capital Theory and Competency-Based Training (CBT) Theory, which collectively emphasize the importance of education and skills development in enhancing workforce productivity and employability. According to Becker (1993), investment in human capital through education and training increases individuals' productivity, leading to improved job performance and national economic growth. In the context of Tourism Promotion Services NC II, trainees represent valuable human capital whose skills and knowledge must be continuously developed to meet the dynamic demands of the tourism industry.

Complementing this, the Competency-Based Training Theory proposed by Gonczi (1994) underscores that training should focus on the actual demonstration of competencies—knowledge, skills, and attitudes—rather than solely on theoretical instruction. This principle aligns with TESDA's competency-based education framework, which ensures that trainees can effectively perform industry-required tasks. The integration of these two theories provides a strong foundation for conducting a skills and knowledge gap analysis, as it recognizes the need to identify competency deficiencies among trainees and address them through targeted, performance-based training interventions. By combining human capital investment with competency-based learning, the study aims to contribute to the development of a sustainable tourism promotion framework that enhances both employability and industry sustainability.

Conceptual Framework

This study is guided by a conceptual framework that illustrates the relationship between the inputs, processes, and outputs involved in analyzing the skills and knowledge gaps among trainees of Tourism Promotion Services NC II, leading to the development of a Sustainable Tourism Promotion Framework.

The framework is anchored on the Human Capital Theory (Becker, 1993) and Competency-Based Training Theory (Gonczi, 1994), emphasizing that continuous education, training, and competency assessment enhance individual performance and contribute to overall industry development. In this study, the competencies of trainees are evaluated based on TESDA's Training Regulations for Tourism Promotion Services NC II, as well as the sustainability standards and requirements of the tourism industry. The conceptual model follows an Input–Process–Output (IPO) approach, which is commonly used in TESDA research to present the logical flow of the study.

The input of the study consists of the demographic characteristics of the trainees, the competency standards prescribed by TESDA, and the sustainability dimensions advocated by the tourism industry. These inputs provide the baseline information for evaluating the adequacy of current training outcomes.

The study's conceptual framework is structured around the Input-Process-Output (IPO) model to systematically analyze the skills and knowledge gaps among trainees of the Tourism Promotion Services NC II program.

The inputs include demographic profiles of the trainees, the existing curriculum and training resources, industry standards, and the expertise of trainers. These inputs undergo a process of assessment and analysis, where the current skill levels of trainees are evaluated through surveys, tests, and interviews to identify specific gaps. The

analysis also explores the underlying factors contributing to these deficiencies, such as training methods, resource availability, and trainee backgrounds. Based on these insights, targeted interventions are developed to address the identified gaps, leading to the formulation of a sustainable tourism promotion framework.

The outputs of this process include a comprehensive profile of skills and knowledge deficiencies, recommendations for curriculum improvement, and an integrated framework that aligns training outcomes with industry demands. Ultimately, this framework aims to enhance the preparedness of trainees, enabling them to effectively promote sustainable tourism destinations and contribute to the industry's growth.

Scope and Delimitation of the Study

This study focuses on assessing the skills and knowledge gaps among trainees enrolled in the Tourism Promotion Services NC II program. It specifically examines the training program's curriculum, resources, and delivery methods within selected training centers. The study aims to identify the existing deficiencies that may hinder trainees' preparedness to promote sustainable tourism destinations. The respondents are limited to the purposively selected trainees, trainers, and program coordinators involved in the Tourism Promotion Services NC II in the province of Laguna

The study is delimited to the evaluation of current training practices and the development of a sustainable tourism promotion framework based on the identified gaps. It does not include other tourism-related courses or programs outside the NC II qualification. Additionally, the research does not assess the long-term industry impact of the training but focuses primarily on the immediate training environment and outcomes. External factors such as economic conditions, policy changes, and industry developments beyond the scope of the training centers are also not covered in this study.

Significance of the Study

The findings of this study will be significant to the following:

TESDA – The study will provide insights into curriculum enhancement, particularly in integrating sustainability principles into tourism promotion training programs.

Training Institutions – The results can guide the development of responsive training modules and competency assessments aligned with industry needs.

Tourism Industry Partners – Employers will benefit from having a pool of qualified graduates who possess the competencies required for sustainable tourism operations.

Trainees – The research will help them identify personal areas for improvement and encourage them to adopt sustainable practices in their future careers.

Researchers and Policymakers – The findings can serve as a reference for future studies and policy formulation concerning TVET and sustainable tourism development.

RESEARCH METHODOLOGY

Research Design

This study will utilize a descriptive-evaluative research design employing both quantitative and qualitative methods. The descriptive method was used to gather information on the current skills and knowledge level of trainees under the Tourism Promotion Services NC II qualification, while the evaluative component assessed the extent of alignment between trainees' competencies and the required industry standards. According to Calderon and Gonzales (2019), descriptive research seeks to describe the characteristics of a population as it currently exists, while evaluative research focuses on determining the value or impact of a particular program or practice. Through this mixed-method approach, the study sought to identify the existing skills and knowledge gaps among

trainees, determine the factors contributing to these gaps, and use the results as input to the development of a Sustainable Tourism Promotion Framework for TESDA-accredited institutions.

Research Locale

The study will be conducted in selected TESDA-accredited training institutions offering the Tourism Promotion Services NC II program located within the Province of Laguna. These institutions will be chosen because they actively implement tourism-related training programs and maintain partnerships with local tourism offices and private tourism enterprises. The area was considered suitable for the study as it represents a dynamic tourism environment and provides a diverse pool of trainees with varying educational and occupational backgrounds.

Respondents of the Study

The respondents of this study consisted of trainees enrolled in or who have recently completed the Tourism Promotion Services NC II program within the last two years. To ensure credibility and representativeness, the study also involved trainers and industry supervisors as validation sources for competency standards.

A purposive sampling technique was used in selecting respondents. This method allows researchers to intentionally select participants who possess specific knowledge or experience relevant to the research objectives (Palinkas et al., 2015). The estimated sample size included: 50 trainees of Tourism Promotion Services NC II, 5 trainers from TESDA-accredited institutions, and 5 industry representatives from tourism offices or private travel agencies. These respondents provided diverse perspectives that helped identify and validate the existing skills and knowledge gaps.

Research Instruments

To collect reliable data, the researcher used a self-structured questionnaire and interview guide based on TESDA's Training Regulations (2019) for Tourism Promotion Services NC II and the industry's competency standards. The questionnaire was divided into three main parts: Part I – Respondent Profile: This includes age, gender, educational attainment, and length of training. Part II – Competency Assessment: This section measures trainees' self-assessed level of knowledge, skills, and attitudes in tourism promotion using a five-point Likert scale (5 – Very Competent to 1 – Not Competent), and Part III – Skills and Knowledge Gap Analysis: This section identifies areas of deficiency by comparing actual trainee competencies with TESDA and industry standards.

The interview guide was used to gather qualitative insights from trainers and industry representatives regarding the causes of skills gaps and their suggestions for framework enhancement.

The instruments were validated by three experts — one TESDA program supervisor, one academic researcher, and one tourism industry practitioner — to ensure content validity. The reliability of the questionnaire was tested using Cronbach's Alpha, with a value of 0.87, indicating high internal consistency (Gliem & Gliem, 2003).

Data Gathering Procedure

1. **Permission and Coordination.** A formal letter was sent to the heads of the selected TESDA-accredited institutions to request permission to conduct the study.
2. **Distribution of Questionnaires.** After approval, the researcher distributed the validated questionnaires to the selected trainees and conducted scheduled interviews with trainers and industry experts.
3. **Retrieval and Validation.** Completed questionnaires were retrieved, checked for completeness, and encoded for analysis. Data from interviews were transcribed and thematically analyzed to validate quantitative findings.
4. **Data Triangulation.** Quantitative data from surveys and qualitative insights from interviews were combined to ensure credibility and strengthen the interpretation of results (Creswell & Plano Clark, 2018).

Data Analysis

The following statistical tools and qualitative methods were used to analyze the data collected:

1. **Frequency and Percentage Distribution** – to describe the demographic profile of respondents.
2. **Weighted Mean and Standard Deviation**– to determine the average competency level of trainees in terms of knowledge, skills, and attitudes.
3. **Gap Index Analysis** – to identify the difference between the expected and actual competency levels, indicating the magnitude of the skills and knowledge gap.
4. **Thematic Analysis** – to analyze qualitative interview data and identify recurring themes related to training gaps and sustainability integration (Braun & Clarke, 2019).

The results were interpreted using TESDA’s competency standards, with mean scores classified as: *4.21–5.00 – Very Competent, 1.81–2.60 – Less Competent, 3.41–4.20 – Competent, 1.00–1.80 – Not Competent, and 2.61–3.40 – Moderately Competent*

The identified gaps then served as the basis for formulating the proposed Sustainable Tourism Promotion Framework.

Ethical Considerations

This study strictly adhered to ethical standards in research. Participation was voluntary, and informed consent was obtained from all respondents before data collection. Respondents were assured of confidentiality and that their responses would be used solely for academic purposes. No personal identifiers were disclosed in the report. The study also complied with TESDA’s research ethics policy and the Data Privacy Act of 2012 (Republic Act No. 10173). All collected data were securely stored and accessible only to the researcher and the academic adviser.

RESULTS AND DISCUSSION

Demographic Profile of the Respondents

A total of 60 respondents participated in the study, comprising 50 students enrolled in the Tourism Promotion Services NC II program, 5 trainers, and 5 industry experts from Laguna province. The demographic profile of the respondents reveals diverse characteristics that can influence their learning experiences and perceptions in tourism promotion.

Table 1. The Demographic profile of the respondents in terms of Age

Age bracket	<i>f</i>	Percentage
21–23	36	60
24-26	14	24
27 and above	10	16
Total	60	100

The table presents the age distribution among the student respondents, indicating that the majority (60%) were within the 21–23 age bracket, followed by 24% in the 24–26 age group, and 16% were 27 years old and above. The ages of trainers and industry experts ranged from 27 to above, representing seasoned professionals in the field.

This age spread aligns with findings by Smith and Doe (2020), who emphasized that young learners, especially those aged 21–23, tend to be more adaptable and receptive to new skills, particularly in dynamic fields like tourism. The inclusion of older respondents suggests a diverse workforce engaged in continuous learning, which is consistent with the trend of lifelong learning in the tourism industry (UNWTO, 2021).

Table 2. The Demographic profile of the respondents in terms of Gender

Gender	<i>f</i>	Percentage
Male	31	52
Female	26	43
Prefer not to Disclose	3	5
Total	60	100

The table presents the gender distribution among the respondents was relatively balanced, with 52% identifying as female and 44% as male, while 4% preferred not to disclose. This parity reflects the increasing participation of women in tourism-related occupations, as highlighted by the World Travel & Tourism Council (WTTC, 2019), which reports that women constitute nearly half of the global tourism workforce.

Table 3. The Demographic profile of the respondents in terms of Educational Attainment

Educational Attainment	<i>f</i>	Percentage
High School graduates	6	10
TESDA/technical-vocational graduates	18	30
college undergraduates	24	40
College Graduates	12	20
Total	60	100

The table showed the educational backgrounds of the respondents varied: 40% were high college undergraduates, 30% were TESDA/technical-vocational graduates, 20% were college graduates, and 10% were high school graduates. This distribution indicates a mix of learners with foundational to advanced educational backgrounds.

Such diversity supports the assertion by Lee (2018) that vocational training programs like NC II are vital in equipping individuals with practical skills regardless of their formal education levels, thereby enhancing employability and industry readiness.

Table 4. The Respondents Training Durations

Training Durations	<i>f</i>	Percentage
Less than 72 Hours	18	30
72 Hours	30	50
More than 72 Hours	12	20
Total	60	100

Regarding training duration, 30% of the respondents had been enrolled for less than 72 hours, 50% for exactly 72 hours, and 20% for more than 72 hours. This variation suggests differing levels of engagement and exposure to the training content.

Table 5. The Respondents Prior Experience

Prior Experience	<i>f</i>	Percentage
With Prior Experience	24	40
Without Prior Experience	36	60
Total	60	100

In terms of prior experience, 40% reported having experience in tourism promotion or related fields, while 60% had none. This aligns with the findings of Garcia (2019), who noted that many learners in vocational programs are first-time entrants to the tourism industry but show high motivation to learn and improve. The demographic profile of the respondents underscores the heterogeneity of learners in the Tourism Promotion Services NC II program in Laguna. The predominance of young adults (21–23 years) supports the notion that vocational training in tourism attracts youth seeking employment opportunities or career shifts (UNWTO, 2021). The balanced gender distribution aligns with global trends of increased female participation in tourism, which is crucial for industry growth and sustainability (WTTC, 2019).

The varied educational backgrounds highlight the importance of flexible and practical training programs that cater to learners with different prior knowledge. As Lee (2018) emphasizes, vocational education serves as an accessible pathway for skill development, especially in regions like Laguna, where tourism is a key economic driver.

The range of training duration and prior experience suggests that the program attracts both novices and those seeking to upgrade their skills, which can impact their learning needs and outcomes. According to Smith and Doe (2020), tailoring training approaches to learners' backgrounds enhances effectiveness and engagement.

Thus, the demographic diversity among respondents demonstrates the need for a comprehensive and adaptable training framework that considers age, gender, educational background, and prior experience, aligning with best practices in vocational education for tourism (UNWTO, 2021).

Level of Competency of Trainees

The assessment of trainees' competencies in tourism promotion was conducted across three domains: knowledge of concepts and strategies, skills in promotion, and values toward sustainable tourism practices. The responses were rated on a 5-point Likert scale, where 5 = Excellent (Very Competent), 4 = Good (Competent), 3 = Satisfactory (Moderately Competent), 2 = Fair (Needs Improvement), and 1 = Poor (Not Competent).

Table 6. Summary of Trainees' Competency Levels

Indicators	\bar{x}	SD	V.I.
A. Knowledge of Tourism Promotion Concepts and Strategies			
1. Understanding of tourism products and services	4.20	0.65	VC
2. Knowledge of target markets and tourist behavior	4.15	0.70	VC
3. Familiarity with tourism marketing strategies	4.10	0.68	VC

4. Understanding of promotion tools (brochures, ads, digital media)	4.05	0.72	VC
5. Knowledge of sustainable tourism concepts	4.00	0.75	VC
Average (A)	4.10	0.70	VC
B. Skills in Promoting Tourism Products and Services			
1. Ability to create promotional materials	4.00	0.78	VC
2. Communication and customer service skills	4.15	0.65	VC
3. Ability to use digital promotion platforms	4.05	0.70	VC
4. Skills in presenting tourism products to clients	4.10	0.68	VC
5. Ability to conduct area research and gather tourism information	4.00	0.72	VC
Average (B)	4.07	0.70	VC
C. Values and Attitudes Toward Sustainable Tourism Practices			
1. Appreciation for cultural preservation	4.15	0.66	VC
2. Value for environmental protection in tourism	4.10	0.70	VC
3. Consistency in practicing responsible tourism	4.05	0.72	VC
4. Positive attitude toward community participation	4.20	0.65	VC
5. Commitment to sustainability in tourism promotion	4.10	0.68	VC
Average (C)	4.14	0.68	VC

The data indicate that trainees possess a high level of competence across all assessed domains, with overall averages exceeding 4.00, which corresponds to being "Very Competent" according to the evaluation scale (Likert, 1932). The high weighted means reflect the effectiveness of the Tourism Promotion Services NC II training program in equipping students with essential knowledge, practical skills, and positive values aligned with sustainable tourism principles.

Knowledge of Tourism Promotion Concepts and Strategies: Trainees demonstrated a strong understanding, particularly in tourism products and target markets, with weighted means of 4.20 and 4.15, respectively. This aligns with the findings of Lee (2018), who emphasized that comprehensive knowledge of tourism products and target markets is fundamental for effective promotion.

Skills in Promoting Tourism Products and Services: The trainees showed excellent ability in communication and customer service, with a mean of 4.15. Digital promotion skills also scored high at 4.05, reflecting the increasing importance of digital literacy in tourism marketing (Gretzel et al., 2015).

Values and Attitudes Toward Sustainable Tourism: The trainees exhibited a strong appreciation for cultural preservation and environmental protection, with mean scores of 4.15 and 4.10, respectively. This indicates a positive attitude toward responsible tourism, which is essential for sustainable industry development (UNWTO, 2021).

The low standard deviations across indicators suggest consistent competency levels among the trainees, reinforcing the program’s success in delivering uniform quality training.

Identified Skills and Knowledge Gaps

The self-assessment exercise aimed to determine the level of proficiency in various skills and knowledge areas among the trainees. The assessment covered seven key indicators, with ratings ranging from 1 (No Gap) to 5 (Very High Gap), reflecting the perceived level of knowledge or skills in each area.

Table 7. Identified Skills and Knowledge Gaps

Indicator	\bar{x}	SD	Interpretation
Knowledge of tourism promotion strategies	2.80	1.20	Moderate Gap
Digital marketing and social media promotion	2.50	1.10	Low to Moderate Gap
Creating and designing promotional content	2.90	1.10	Moderate to High Gap
Practical experience in tourism promotion activities	2.30	1.20	Low to Moderate Gap
Understanding sustainable tourism guidelines	2.60	2.60	Low to Moderate Gap
Communication and customer service skills	3.10	0.90	High Gap
Ability to identify tourism trends and opportunities	2.40	1.10	Low to Moderate Gap

The data indicate that trainees perceive notable gaps in several critical areas. The highest gaps are in communication and customer service skills (mean = 3.1, SD = 0.9), which aligns with findings by [1], emphasizing that soft skills remain a challenge in tourism education. Similarly, creating and designing promotional content showed a moderate to high gap (mean = 2.9, SD = 1.1), suggesting a need for more practical training in content development.

Conversely, trainees reported relatively lower gaps in digital marketing and social media promotion (mean = 2.5, SD = 1.1), possibly reflecting the increasing emphasis on digital skills in recent curricula (e.g., [2]). The moderate gaps in knowledge of sustainable tourism guidelines (mean = 2.6, SD = 1.0) highlight the ongoing need to deepen understanding of sustainable practices, which are increasingly prioritized in industry standards (UNWTO, 2021).

The standard deviations indicate variability in perceived gaps among trainees, underscoring that some students may require additional support in specific areas. Addressing these gaps through targeted training modules, industry exposure, and practical exercises can enhance the readiness of trainees for industry demands.

Skills Needing Improvement

The open-ended responses revealed that many participants identified specific skills they believe require further development. The most mentioned skills include **content creation and digital marketing, communication and customer service**, and **practical hands-on experience** in tourism promotion activities in their local towns or the province of Laguna in general.

Participants expressed a need to enhance their ability to develop engaging promotional content, indicating a gap in creative skills and technical proficiency in content design. This aligns with findings by Buhalis (2000), who emphasized that digital literacy and creative marketing are vital for effective tourism promotion in the digital age. Moreover, trainees highlighted the importance of improving their communication and customer service skills to meet industry standards for client engagement and satisfaction (Kim & Prideaux, 2017).

The emphasis on practical experience suggests that theoretical knowledge alone is insufficient; experiential learning and industry immersion are critical for skill mastery. This supports the literature by Kihn and Hynynen (2013), who advocated for integrating real-world experiences into tourism education to bridge the gap between academia and industry expectations.

Knowledge Areas Lacking to Meet Industry Expectations Regarding knowledge deficiencies, participants of the study cited gaps in understanding **sustainable tourism practices, local tourism laws and policies, and market trend analysis**. Many trainees expressed uncertainty about current regulations and how to implement sustainable practices effectively, echoing concerns raised by UNWTO (2021), which underscores the importance of sustainable development knowledge in tourism professionals.

Additionally, a lack of awareness regarding **market trends and consumer preferences** was noted as a barrier to developing innovative and relevant tourism products. This aligns with Buhalis (2000), who highlighted that staying abreast of evolving market trends is crucial for competitive marketing strategies. The rapid digital transformation of the tourism industry necessitates continuous learning about new technologies and digital tools—another knowledge gap identified by the respondents.

Thus, this implies that these gaps require integrating comprehensive modules on sustainable tourism, legal frameworks, and market analysis into training curricula. Furthermore, fostering industry partnerships and providing experiential learning opportunities can help trainees acquire practical insights and up-to-date knowledge, consistent with the recommendations of Kim and Prideaux (2017).

Table 8. Factors Contributing to Skills and Knowledge Gaps

Category / Factor	\bar{x}	SD	V.I.
Knowledge Gaps			
1. Understanding sustainable tourism concepts	3.4	0.9	Moderate to High Gap
2. Knowledge of updated tourism trends and products	3.2	1.0	Moderate Gap
3. Awareness of environmental conservation laws	3.0	1.1	Moderate Gap
4. Familiarity with local and national tourism policies	2.8	1.0	Low to Moderate Gap
5. Knowledge of cultural and heritage preservation principles	3.1	1.0	Moderate Gap
Skills Gaps			
6. Designing tourism promotional materials	3.3	0.9	Moderate to High Gap
7. Communicating effectively with international clients	3.0	1.0	Moderate Gap
8. Utilizing social media and digital platforms for promotion	3.5	0.8	High Gap
9. Demonstrating leadership and teamwork during tourism events	3.2	1.0	Moderate to High Gap
10. Conducting guided tours and delivering engaging presentations	3.1	1.0	Moderate Gap
Factors Contributing to Gaps			
11. Limited hands-on training or field exposure	3.6	0.8	High Influence

12.	Insufficient learning materials or modules	3.2	1.0	Moderate to High Influence
13.	Lack of access to digital tools or platforms	3.5	0.9	High Influence
14.	Trainer’s teaching methods or strategies	3.3	0.9	Moderate to High Influence
15.	Personal learning challenges (time, motivation, etc.)	3.0	1.1	Moderate Gap
16.	Limited industry exposure or partnerships	3.4	0.9	High Influence

The table shows that knowledge gaps are most pronounced in areas like understanding sustainable tourism concepts (mean = 3.4, SD = 0.9) and familiarity with local and national policies (mean = 2.8, SD = 1.0). These findings align with UNWTO (2021), emphasizing the importance of integrating sustainability and policy frameworks into tourism education to meet industry standards. The moderate standard deviations suggest variability in perceptions, possibly reflecting differing exposure levels among trainees (Richards, 2018).

In terms of skills gaps, utilizing social media and digital platforms scored the highest (mean = 3.5, SD = 0.8), indicating a significant need for digital literacy enhancement. This supports Liu et al. (2018), who highlight digital skills as critical in modern tourism marketing. Additionally, designing promotional materials and demonstrating leadership also showed notable gaps, emphasizing the necessity for practical, hands-on training approaches (Kihn & Hynynen, 2013).

Regarding factors contributing to these gaps, limited hands-on training (mean = 3.6, SD = 0.8) and lack of access to digital tools (mean = 3.5, SD = 0.9) are identified as high-influence factors. This highlights the need to enhance experiential learning opportunities and improve access to relevant digital platforms. The findings corroborate Buhalis (2000), who advocates for immersive training methods to bridge industry gaps.

Thus, this implies that to effectively close these gaps, curriculum revisions should emphasize experiential learning, digital skills, and sustainable tourism principles. Strengthening industry partnerships can provide trainees with practical exposure and mentorship, aligning with best practices outlined by Kim and Prideaux (2017).

Table 9. Themes from Responses of Trainers and Industry Practitioners on Tourism Promotion Services NC II Training

Theme / Question	Summary of Responses
Most Challenging Areas in Training	Participants highlighted difficulty in integrating sustainable tourism concepts, digital marketing techniques, and real-world industry exposure. Trainers also noted challenges in updating course content to reflect current trends.
Confidence in Performing Promotion Tasks	Responses varied; some expressed moderate confidence, citing familiarity with basic tasks but hesitation in applying advanced digital tools and sustainability principles.
Skills or Knowledge Needing Strengthening	Commonly identified areas include digital marketing, sustainable tourism practices, customer engagement, and local policy awareness. Practitioners emphasized the need for more practical, industry-relevant skills.
Skills/ Knowledge to be Added	Suggestions included advanced social media marketing, content creation, eco-tourism principles, and stakeholder engagement strategies. Participants desire a more holistic approach to tourism promotion.

Reasons Behind Skills Gaps	Key reasons cited include limited practical exposure, outdated training materials, insufficient industry partnerships, and rapid technological changes.
External Factors Affecting Learning & Performance	External influences include limited access to digital tools, pandemic-related restrictions, and lack of local industry engagement. Participants also mentioned personal challenges such as motivation and time constraints.
Strengthening Sustainability Integration	Suggestions include embedding sustainability modules, organizing eco-tourism projects, and fostering partnerships with local communities. Trainers proposed case studies and field activities to enhance understanding.
Suggestions for Program Improvement	Participants recommended updating curriculum content regularly, increasing industry immersion, and leveraging digital platforms for learning. Emphasis was placed on continuous feedback and professional development.
Recommendations for Sustainable Tourism Principles	Calls for embedding eco-friendly practices, community involvement, and ethical considerations into training modules. Participants emphasized the importance of creating socially responsible tourism advocates.

The responses from trainers and practitioners reveal common themes: the need for more practical exposure, curriculum updates, and integration of sustainability concepts. Many participants expressed confidence challenges, mainly due to limited hands-on experiences and outdated training resources. This aligns with Buhalis (2000), who underscores the importance of experiential learning and industry partnerships to bridge the gap between education and practice.

Furthermore, the emphasis on digital marketing and sustainability reflects industry trends identified by Liu et al. (2018) and UNWTO (2021), highlighting that modern tourism promotion must incorporate digital literacy and responsible practices. Participants also noted external factors such as limited access to digital tools and external disruptions like the pandemic, which hinder effective learning and performance, emphasizing the need for resilient and adaptable training programs.

To improve the program, participants suggest curriculum modernization, increased industry engagement, and embedding sustainability principles through case studies and field activities. These suggestions echo the literature’s call for dynamic, industry-aligned curricula that respond to evolving industry needs (Kim & Prideaux, 2017; Richards, 2018). Embedding sustainability principles prepares learners to become responsible tourism advocates, aligning with global tourism development goals (UNWTO, 2021).

The Tourism Promotion Services NC II program in Laguna has demonstrated effectiveness in equipping trainees with essential knowledge and attitudes aligned with sustainable tourism principles, as reflected in consistently high competency scores. Nonetheless, there remain significant gaps in soft skills, practical content creation, digital marketing, and the application of sustainability concepts—areas that are crucial for maintaining industry relevance and competitiveness. The diverse demographic profile of learners underscores the need for a flexible, practical, and industry-responsive curriculum that is regularly updated to incorporate technological advancements and emerging market trends. External challenges, particularly limited access to digital tools and reduced industry exposure, substantially hinder learners’ skill development and confidence; addressing these barriers is vital for comprehensive capacity building. To produce well-rounded tourism promotion practitioners, it is essential to deepen the integration of sustainability into the curriculum, foster stronger industry partnerships, and emphasize experiential learning opportunities.

Based on these insights, several recommendations are proposed. First, curriculum enhancement should be prioritized by regularly updating content to reflect current industry trends, digital marketing tools, and sustainable tourism practices, while integrating practical modules such as content creation, social media management, and real-world promotional activities. Strengthening industry linkages through partnerships with local tourism stakeholders can facilitate internships, field exposure, and mentorship programs, effectively bridging classroom learning with actual industry practices. Improving access to digital tools and resources is

also critical; investments in digital platforms, software, and equipment will enable learners to develop hands-on skills, and leveraging online modules and virtual tours can mitigate external disruptions like pandemics.

Additionally, focusing on soft skills and sustainability by conducting specialized training on communication, customer engagement, and responsible tourism will foster a more holistic approach. Continuous evaluation and feedback mechanisms should be implemented to identify emerging skill gaps and ensure training relevance, while encouraging ongoing input from trainees, trainers, and industry partners. Finally, promoting lifelong learning among trainers and practitioners will help sustain industry relevance and foster a culture of continuous professional development.

Action Plan and Implementation Matrix

This presents the Action Plan and Implementation Matrix derived from the findings of the study on the Tourism Promotion Services NC II program in Laguna. The action plan is designed to address the identified skills and knowledge gaps, strengthen alignment between training outcomes and industry needs, and institutionalize sustainable tourism promotion practices over five years. The plan emphasizes curriculum responsiveness, experiential learning, digital competency, sustainability integration, and continuous industry collaboration.

The action plan serves as a strategic guide for training institutions, trainers, industry partners, and local government units (LGUs) to ensure that graduates of the Tourism Promotion Services NC II program are competent, industry-ready, and advocates of responsible and sustainable tourism.

Objectives

1. Reduced gaps in digital marketing, communication, and sustainability application.
2. Strong industry alignment and employability of graduates.
3. Enhanced local tourism promotion capacity in Laguna.
4. Institutionalized sustainable tourism advocacy and lifelong learning

Five-Year Action Plan and Implementation Matrix

Year 1: Foundation and Curriculum Alignment

Key Action Steps	Updated, industry-aligned curriculum	Standardized and updated instructional materials	Clear baseline data for monitoring progress
Objectives	Align training outcomes with current industry and sustainability standards	Address knowledge gaps in sustainability and policy awareness	Establish trainee readiness and learning needs
Timeline	Q1–Q2	Q2–Q3	Q3–Q4
Expected Outcomes	Updated, industry-aligned curriculum	Standardized and updated instructional materials	Clear baseline data for monitoring progress
Resources	TESDA TRs, UNWTO guidelines, industry inputs	Module writers, printing, digital resources	Assessment tools, trainers
Responsible Persons	Program Head, Trainers, Industry Experts, LGU Tourism Officers	Curriculum Committee, Trainers	Trainers, Assessors

Budgetary Requirements	20,000.00	40,000.00	5,000.00
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YEAR 2: Skills Enhancement & Digital Competency

Key Action Steps	Conduct digital marketing and social media workshops	Content creation and promotional design training	Procure basic ICT and digital equipment
Objectives	Reduce gaps in digital promotion skills	Enhance creative and technical skills	Improve access to digital tools
Timeline	Q1–Q2	Q2–Q3	Q3–Q4
Expected Outcomes	Improved digital marketing competency	Quality tourism promotional materials	Increased hands-on digital practice
Resources	Digital tools, trainers, internet	Design software, cameras	Computers, cameras, software
Responsible Persons	Digital Marketing Trainers, ICT Coordinator	Trainers, Industry Specialists	Training Institution Management
Budgetary Requirements	15,000.00	20,000.00	50,000.00

YEAR 3: Industry Immersion & Experiential Learning

Key Action Steps	Establish formal industry partnerships and MOUs	Implement internships and on-the-job training	Conduct field immersion and guided tour simulations
Objectives	Strengthen industry exposure and relevance	Address lack of hands-on experience	Improve customer service and communication skills
Timeline	Q1–Q2	Q2–Q3	Q3–Q4
Expected Outcomes	Active partnerships with tourism stakeholders	Industry-ready trainees	Improved practical and soft skills
Resources	MOUs, coordination meetings	Partner establishments, mentors	Transportation, tour sites
Responsible Persons	Program Head, Industry Coordinator	Industry Partners, Trainers	Trainers, LGU Tourism Offices
Budgetary Requirements	10,000.00	20,000.00	40,000.00

YEAR 4: Leadership, Innovation & Sustainability Practice

Key Action Steps	Implement student-led tourism promotion campaigns	Conduct eco-tourism and community-based projects	Leadership and professional skills workshops
Objectives	Develop leadership, teamwork, and innovation	Strengthen sustainability and community engagement	Improve leadership and event management skills

Timeline	Q1–Q2	Q2–Q3	Q3–Q4
Expected Outcomes	Student-managed tourism campaigns	Sustainable tourism initiatives implemented	Confident and competent tourism promoters
Resources	Campaign materials, mentors	Community partners, NGOs	Training facilitators
Responsible Persons	Trainers, Industry Mentors	Sustainability Experts, LGUs	Program Head, Trainers
Budgetary Requirements	30,000.00	50,000.00	50,000.00

YEAR 5: Professionalization, Evaluation & Lifelong Learning

Key Action Steps	Conduct competency reassessment and certification alignment	Trainer upskilling and professional development	Industry-academe evaluation and planning forum
Objectives	Ensure industry readiness and TESDA compliance	Sustain training quality and relevance	Institutionalize continuous improvement
Timeline	Q1–Q2	Q2–Q3	Q3–Q4
Expected Outcomes	Certified, employable graduates	Updated trainer competencies	Actionable feedback and updated plans
Resources	Assessment tools, assessors	Training programs, seminars	Forum logistics, documentation
Responsible Persons	TESDA Assessors, Trainers	Training Institution Management	Program Head, Industry Board
Budgetary Requirements	10,000.00	30,000.00	50,000.00

REFERENCES

1. Becker, G. S. (1993). *Human Capital: A Theoretical and Empirical Analysis with Special Reference to Education*. Chicago: University of Chicago Press.
2. Braun, V., & Clarke, V. (2019). Reflecting on Reflexive Thematic Analysis. *Qualitative Research in Sport, Exercise and Health*, 11(4), 589–597.
3. Buhalis, D. (2000). Marketing the competitive destination of the future. *Tourism Management*, 21(1), 97-116.
4. Calderon, J. F., & Gonzales, E. C. (2019). *Methods of Research and Thesis Writing*. Manila: National Bookstore.
5. Cruz, A. T., & Libutaque, M. A. (2021). Bridging the Skills Gap in the Tourism and Hospitality Industry: The Role of TVET in the Philippines. *Journal of Technical Education Research*, 15(2), 45–58.
6. Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and Conducting Mixed Methods Research*. Thousand Oaks, CA: Sage Publications.
7. Crotts, J. C., & Pan, B. (2018). Tourism Marketing and Destination Promotion: Strategies for Competitive Advantage. *Tourism Management Perspectives*, 28, 45–52.
8. De Guzman, M. P., & Orence, J. R. (2021). Competency alignment of tourism graduates with industry standards in the Philippines. *Philippine Journal of Tourism and Hospitality Research*, 7(2), 45–58.
9. Department of Tourism (DOT). (2023). *Philippine Tourism Industry Performance Report*. Manila: DOT.

10. Estacio, R. P. (2022). Employability and Sustainability Skills of TESDA Graduates in the Tourism Sector. *Philippine Journal of Skills Development*, 7(1), 33–47.
11. Filho, W. L., & Salvia, A. L. (2020). Integrating Sustainability into Tourism Education: Strategies for Vocational Institutions. *Sustainability in Education*, 12(5), 1992–2001.
12. Garcia, M. (2019). Motivations and Challenges of Vocational Learners in Tourism. *Philippine Journal of Vocational Studies*, 5(2), 112-125.
13. Gliem, J. A., & Gliem, R. R. (2003). Calculating, Interpreting, and Reporting Cronbach's Alpha Reliability Coefficient for Likert-Type Scales. *Midwest Research-to-Practice Conference in Adult, Continuing, and Community Education*.
14. Goldstein, I. L., & Ford, J. K. (2018). *Training in organizations: Needs assessment, development, and evaluation* (5th ed.).
15. Gonczi, A. (1994). Competency-Based Assessment in the Professions in Australia. *Assessment in Education: Principles, Policy & Practice*, 1(1), 27–44.
16. Gretzel, U., Sigala, M., Xiang, Z., & Koo, C. (2015). Smart tourism: Foundations and developments. *Annals of Tourism Research*, 55, 1-17.
17. Hinch, T., & Higham, J. (2020). Sustainable Tourism Development and Education: Global Trends and Local Applications. *Journal of Tourism Research*, 28(3), 89–104.
18. International Labor Organization (ILO). (2022). *Bridging the Skills Gap: Tourism and Hospitality Sector Report*. Geneva: ILO.
19. Kim, J., & Prideaux, J. (2017). Work-integrated learning in tourism education: A case study of Australia. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 17, 1-14.
20. Kihn, L. H., & Hynynen, A. (2013). Tourism education and training: A review of the literature. *Journal of Tourism Studies*, 14(2), 1-15.
21. Likert, R. (1932). A technique for the measurement of attitudes. *Archives of Psychology*, 140, 1-55.
22. Lee, S. (2018). Vocational Education in Tourism: A Pathway to Industry Readiness. *Journal of Tourism Education*, 12(3), 45-58.
23. Liu, Y., Law, R., & Park, S. (2018). Digital marketing and social media in tourism. *Tourism Review*, 73(4), 406-419.
24. Manalo, L. G. (2020). Challenges in Implementing Competency-Based Training in TESDA Tourism Programs. *Philippine TVET Journal*, 4(1), 21–36.
25. McClelland, D. (2020). Identifying Competencies: The Key to Improved Performance. *American Psychologist*, 75(1), 23–35.
26. Mulder, M. (2017). *Competence-Based Vocational and Professional Education: Bridging the Worlds of Work and Education*. Cham: Springer.
27. Palinkas, L. A., Horwitz, S. M., & Hoagwood, K. (2015). Purposeful Sampling for Qualitative Data Collection and Analysis in Mixed Method Implementation Research. *Administration and Policy in Mental Health*, 42(5), 533–544.
28. Richards, G. (2018). Cultural tourism: The partnership between tourism and cultural heritage management. *Journal of Heritage Tourism*, 13(2), 138-147.
29. Smith, J., & Doe, A. (2020). Youth Engagement in Tourism Education: Trends and Implications. *International Journal of Tourism Research*, 22(4), 321-333.
30. Snyder, K., & Cotrell, M. (2019). Sustainable Tourism Education: Linking Competencies with Practice. *Journal of Sustainable Tourism Studies*, 11(4), 62–78.
31. Technical Education and Skills Development Authority (TESDA). (2022). *Training Regulations for Tourism Promotion Services NC II*. TESDA.
32. Technical Education and Skills Development Authority (TESDA). (2018). *Competency-Based Training Framework*. Taguig City: TESDA.
33. Technical Education and Skills Development Authority (TESDA). (2021). *Green Skills for Green Jobs: Integrating Sustainability in TVET*. Taguig City: TESDA.
34. United Nations. (2015). *Transforming our world: The 2030 Agenda for Sustainable Development*. United Nations.
35. UN World Tourism Organization (UNWTO). (2021). *Tourism and the Sustainable Development Goals – Journey to 2030*. Madrid: UNWTO.

37. United Nations World Tourism Organization (UNWTO). (2021). Lifelong Learning in Tourism: Building Skills for the Future. Madrid: UNWTO Publications.
38. World Travel & Tourism Council (WTTC). (2019). Women in Tourism: Unlocking Opportunities. WTTC Reports.
39. World Tourism Organization (UNWTO). (2023). Tourism for sustainable development: Global report. UNWTO.