



Current status and solutions for improving the quality of beverage preparation training for tourism students

Nguyen Ngoc Lan¹

¹ Faculty of Tourism, University of Sciences, Thai Nguyen University, Vietnam.

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Corresponding Author:

Nguyen Ngoc Lan

Abstract:

This article evaluates the current status of beverage preparation training for Tourism students, focusing on students' awareness and interest, training content, practice duration and conditions, the formation of professional competencies, enterprise linkage, and the integration of local elements. The study employs a mixed-methods approach, combining a student survey using a five-point Likert-scale questionnaire with in-depth interviews with students, lecturers, and enterprise representatives. The findings show that the beverage preparation course is perceived by students as necessary, attractive, and professionally valuable. However, students' interest has not been correspondingly transformed into professional confidence. Students have developed a certain foundation in basic beverage preparation techniques, but remain limited in customer communication, problem-solving, product creativity, and application in real service contexts. The article proposes solutions to improve training quality by increasing individual practice, updating course content, innovating competency-based assessment, strengthening enterprise linkage, and exploiting local ingredients to develop distinctive beverage products serving tourism activities.

Keywords: Tourism training; Beverage preparation skills; Professional competence; Experiential learning; Enterprise linkage

1. INTRODUCTION

In tourism human resource training, professional skills courses play an important role in forming students' occupational skills and their ability to adapt to real working environments. For the beverage preparation course, the training objective is not limited to helping learners understand recipes, ingredients, tools, and technical procedures. From the perspective of tourism training, beverage preparation is also associated with service competence, communication, hygiene assurance, product presentation, problem-solving, and the creation of customer experiences. Therefore, this course should be approached as a form of integrated service competence training in tourism, restaurants, hotels, and food and beverage services.

Studies on tourism education, hospitality education, and vocational training all emphasize the role of experiential learning, professional practice, and the linkage between educational institutions and working environments. Kolb (1984) argues that learners' knowledge is formed through experience, reflection, conceptualization, and application to new situations. In higher education and vocational education, the integration of work experience, practical situations, and enterprise participation is significant for students' transition from the educational environment to the professional workplace (Billett, 2009; Patrick et al., 2008). In tourism and hospitality education, active learning, experiential learning, and industry experience are also regarded as necessary approaches to improving training quality (Kim & Jeong, 2018).

In the context of increasingly diverse tourist experience needs, beverages are not merely complementary products in food and beverage services, but can also become part of the tourism experience. Food tourism is recognized as a field

capable of contributing to product diversification, promoting local economic development, and highlighting destination identity (UNWTO, 2012). From this perspective, beverage preparation training for Tourism students needs to move beyond the replication of common recipes and should aim toward product creativity, the exploitation of local ingredients, and the communication of cultural stories through beverages.

However, in practice, the training of professional practice courses may still reveal a gap between the content taught in educational institutions and the requirements of the working environment. For the beverage preparation course, several issues are often raised, such as insufficient practice time to form proficient skills; facilities, tools, and ingredients that do not fully simulate professional contexts; training content that remains heavily focused on basic techniques and is not updated promptly according to market trends; and limited enterprise participation in teaching, guidance, and assessment. These issues may result in students being interested in the course but not truly confident in applying their skills in real service environments.

Based on the above issues, this article aims to assess the current status of beverage preparation training for Tourism students in terms of students' awareness and interest in the course, training content, practice duration and conditions, the level of professional competence formed after the course, enterprise linkage, and the integration of local elements in training. On that basis, the article proposes several solutions to improve training quality by strengthening practice, updating content, linking training with enterprise requirements, and developing beverage products with local identity to serve tourism activities.

2. THEORETICAL BASIS AND ANALYTICAL FRAMEWORK

2.1. Beverage preparation training in tourism curricula

In Tourism training curricula, professional skills courses play an important role in forming students' practical occupational competence and their ability to adapt to service environments. In the hotel and tourism sector, food and beverage services constitute an important component of guest service activities, in which skills related to food and beverage are often regarded as one of the foundational competencies in hospitality and service training (Whitelaw et al., 2009). Therefore, beverage preparation skills are not only meaningful for students who intend to work in F&B departments, restaurants, hotels, bars, or cafés, but also contribute to broadening the professional competencies of Tourism students in the context of an increasingly flexible service labor market.

In essence, beverage preparation training is the process of equipping learners with the knowledge, skills, and attitudes necessary to perform tasks related to preparing, mixing, presenting, and serving beverages in service environments. Course content usually includes knowledge of beverage classification, characteristics of ingredients, tools and equipment, measurement principles, procedures, decoration techniques, hygiene standards, and customer service requirements. However, in the context of tourism training, this course should not be understood simply as the transmission of recipes or technical operations. Studies on F&B training indicate that skill development in this field needs to be linked with occupational situations, practice environments, and the process of guidance and feedback, rather than relying solely on theory-oriented instruction or one-way demonstration (Tsui & Chen, 2020).

From the perspective of professional competence, beverage preparation should be perceived as an integrated service competence. Students not only need to know how to use tools, identify ingredients, and correctly perform beverage preparation procedures, but also need to communicate with customers, introduce products, ensure hygiene, control quality, handle certain situations during service, and demonstrate professional manners. This is consistent with studies on competencies in the hospitality industry, where many authors argue that enterprises' requirements for learners are not limited to technical skills but also include communication skills, interpersonal relations, the ability to work with customers, and adaptability in service environments (Raybould & Wilkins, 2006).

A distinctive feature of beverage preparation skills is their highly practical nature. Learners can hardly form proficient skills if they only receive knowledge through lectures or observe lecturers' demonstrations. Beverage preparation

skills require repeated practice, feedback, adjustment of operations, and application in situations close to professional practice. The study by Tsui and Chen (2020), conducted in the context of hotel F&B service training, shows that situated learning and guided apprenticeship approaches help improve learning satisfaction compared with traditional teaching methods. This suggests that the quality of beverage preparation training depends considerably on how practice is organized, the extent to which the professional environment is simulated, lecturers' guidance, and students' opportunities for direct practice.

For Tourism students, beverage preparation skills have broader significance than the ability to serve beverages. In the context of growing attention to food tourism, beverages can become part of the destination experience. UNWTO (2012) argues that food tourism is a dynamic segment linked to local culture, indigenous products, authenticity, and the diversification of tourism products. Similarly, Sims (2009) emphasizes that local food can contribute to the perception of authenticity and connect tourists with the culture and heritage of a destination. From this approach, beverage preparation training for Tourism students should encourage learners to exploit local ingredients, create beverage products appropriate to the destination context, and communicate cultural stories through products.

Thus, beverage preparation training in Tourism curricula should be positioned as an integrated professional practice course. This course both provides basic beverage preparation techniques and contributes to forming service competence, professional manners, experiential thinking, and product creativity associated with local identity. This provides a basis for evaluating the quality of beverage preparation training not only through curriculum content or final beverage products, but also through the extent to which students can apply knowledge, skills, and professional attitudes in real service environments.

2.2. Professional practice training and experiential learning

Beverage preparation training has the characteristics of professional practice training, in which learners' competence cannot be fully formed merely through receiving theoretical knowledge or memorizing procedures. For courses with a strong operational component, learners need to be placed in the process of practice, observe outcomes, receive feedback, and adjust their actions in order to gradually form skills. This approach is consistent with Kolb's experiential learning theory (1984), according to which knowledge is created through the transformation of experience, including concrete experience, reflective observation, abstract conceptualization, and experimentation in new situations.

In vocational training, practical experience is truly valuable only when it is designed as an intentional part of the curriculum. Billett (2009) argues that integrating work experience into higher education needs to be associated with appropriate curriculum design and pedagogical practices to ensure the educational value of experience. Similarly, work-integrated learning is regarded as an approach that connects academic knowledge with professional practice and enables students to develop skills and adaptability in the workplace (Patrick et al., 2008). For beverage preparation skills, this implies that practice hours should not simply be activities in which students imitate demonstrated operations, but should be organized as a process of guided practice with assessment standards and regular feedback.

The specific characteristics of tourism, hospitality, and food and beverage services make experiential learning even more important. Kim and Jeong (2018) show that studies on tourism and hospitality education have increasingly focused on active learning, experiential learning, and industry experience. In the beverage preparation course, students need to be trained in situations close to service environments, such as preparing ingredients, operating under time constraints, ensuring hygiene, presenting products, introducing beverages, and handling customer requests. These situations help learners realize that beverage preparation competence does not lie only in recipes, but also in the ability to complete an entire service task.

From this perspective, the quality of beverage preparation training depends considerably on the extent to which students participate in meaningful practice. Practice duration, opportunities for individual performance, practice room conditions, the degree of professional context simulation, and the participation of lecturers and enterprises in guidance and feedback all affect learning outcomes. Therefore, beverage preparation training should be designed as a process

of forming professional competence through experience, repeated practice, feedback, and application in real service contexts.

2.3. Quality of beverage preparation training

The quality of beverage preparation training should be understood in terms of the extent to which the course helps students form professional competencies that can be applied in real service environments. For a professional practice course, quality is reflected not only in students' ability to understand recipes and procedures or to produce qualified beverages, but also in the alignment among training objectives, course content, practice activities, assessment methods, and learners' output competencies. This approach is consistent with Biggs and Tang's (2011) concept of "constructive alignment," in which learning objectives, teaching and learning activities, and assessment need to be designed coherently to support expected learning outcomes.

In higher education quality assurance, curricula need to be designed in accordance with objectives, teaching methods need to encourage learners' active participation, assessment needs to accurately reflect learning outcomes, and learners need to be supported by appropriate learning resources (European Association for Quality Assurance in Higher Education [ENQA], 2015). For the beverage preparation course, these requirements can be specified through several dimensions: curriculum content; practice duration and organization; facilities, tools, equipment, and ingredients; teaching, guidance, and feedback methods; assessment approaches; and the degree of linkage with enterprises and professional contexts.

However, the evaluation of beverage preparation training quality should not stop at students' satisfaction or interest in the course. Kirkpatrick's training evaluation model emphasizes that training effectiveness should be examined at multiple levels, from learners' reactions and learning outcomes to behavioral change and results achieved (Kirkpatrick, 1994). Following this logic, in beverage preparation training, attention should be paid to what students learn, what they can do, and whether they can transform knowledge and skills into professional behavior in customer service contexts. Therefore, competencies such as identifying and using tools, measuring ingredients, performing procedures, presenting products, ensuring hygiene, communicating with customers, handling situations, and confidently working at a beverage counter are important indicators of output quality.

On this basis, this study evaluates the quality of beverage preparation training according to five main groups of content: students' awareness and interest in the course; the relevance and updatedness of training content; practice duration and conditions; the level of professional competence formed after the course; and enterprise linkage and the integration of local elements in training. This evaluation framework allows the study to identify not only the achievements obtained but also the gaps between training in educational institutions and the requirements of real service environments.

2.4. Enterprise linkage and local elements in beverage preparation training

For professional practice courses, the linkage between educational institutions and enterprises is important for ensuring the practicality of the training process. Billett (2009) argues that integrating work experience into higher education can only realize its value when it is intentionally designed in the curriculum and supported by appropriate pedagogical practices. In beverage preparation training, this indicates that enterprises are not merely places that receive students for internships, but can also participate in identifying competency requirements, providing feedback on course content, guiding practice, organizing professional experiences, and assessing students' learning outcomes.

Enterprise participation helps narrow the gap between training in educational institutions and the requirements of real service environments. In the beverage preparation course, occupational requirements do not only involve correctly following recipes or technical operations, but also include service speed, hygiene, communication with customers, handling emerging requests, ingredient control, and working manners at the beverage counter. Raybould and Wilkins (2006) show that in the hospitality industry, managers highly value competencies related to communication,

interpersonal relations, problem-solving, and self-management. This is consistent with the characteristics of beverage preparation in tourism and hospitality environments, where learners need to complete an entire service task rather than simply create a beverage product. Kim and Jeong (2018) also show that tourism and hospitality education has increasingly paid attention to active learning, experiential learning, and industry experience. Therefore, if enterprises are regularly connected with the training process, students will have more opportunities to access occupational standards, receive feedback from practice, and better understand the competencies required when working in restaurants, hotels, and food and beverage services.

In addition to enterprise linkage, local elements are also a dimension that should be emphasized in beverage preparation training for Tourism students. In the context of the development of food tourism, beverages can become part of the destination experience rather than merely accompanying products in food and beverage services. The World Tourism Organization (2012) emphasizes the relationship between food tourism and culture, local products, and the diversification of tourism experiences. Sims (2009) also argues that local food can contribute to the perception of authenticity and represent the culture of a destination. From this perspective, the beverage preparation course can exploit local ingredients such as tea, honey, ginger, turmeric, herbs, seasonal fruits, or regional specialties to develop beverages with distinctive identities.

Integrating local elements into beverage preparation training has dual significance. On the one hand, students are trained in product creativity based on ingredients that are closely linked to specific tourism spaces. On the other hand, learners have the opportunity to form experience-design thinking and learn how to connect beverage products with cultural stories, indigenous resources, and tourists' needs. This is an important difference between beverage preparation training in a purely technical direction and beverage preparation training within a Tourism curriculum.

Thus, enterprise linkage and the exploitation of local elements are two complementary dimensions of beverage preparation training quality. Enterprises help ensure occupational relevance and adaptability to service environments. Local elements enhance creativity, identity, and experiential value in beverage products. Therefore, in this study, the level of enterprise participation, access to practical requirements, professional experience activities, and the exploitation of local ingredients are considered important criteria for assessing the current status and proposing solutions to improve the quality of beverage preparation training for Tourism students.

2.5. Proposed analytical framework for the study

From the theoretical foundations presented above, beverage preparation training in Tourism curricula should be approached as an integrated professional practice course. This course does not only aim to equip students with beverage preparation techniques, but also contributes to forming service competence, professional manners, adaptability to the working environment, and product creativity associated with the local context. This approach is consistent with competency-based training, in which learning objectives, teaching and learning activities, and assessment need to be coherently designed to support expected learning outcomes (Biggs & Tang, 2011).

For a highly practical course such as beverage preparation, training quality cannot be evaluated by a single criterion. According to experiential learning theory, knowledge and skills are formed through the process in which learners experience, reflect, conceptualize, and apply what they have learned to new situations (Kolb, 1984). In addition, integrating work experience into higher education helps strengthen the connection between training in educational institutions and the professional environment, provided that this process is intentionally designed in the curriculum (Billett, 2009). Therefore, the assessment of beverage preparation training should simultaneously consider curriculum content, practice activities, learning conditions, organizational methods, enterprise participation, and students' output competencies.

This study proposes an analytical framework consisting of five groups of content. The first is students' awareness and interest in the course, expressed through the extent to which students evaluate the necessity, attractiveness, and professional value of beverage preparation skills. This group helps identify how learners perceive the role of the

course, but it should not be regarded as the sole criterion of training quality. The second is training content, including foundational knowledge of ingredients, tools, procedures, beverage preparation techniques, the extent of updating beverage trends, product creativity, and the exploitation of local ingredients. The third is practice duration and conditions, including practice time, opportunities for individual operation, practice group size, tools, equipment, ingredients, and the degree of simulation of the professional environment. These aspects are consistent with the requirements of ensuring learning resources, learner-centered teaching methods, and assessment aligned with learning outcomes in higher education quality assurance (European Association for Quality Assurance in Higher Education, 2015).

The fourth is the level of professional competence formed after the course. In beverage preparation skills, output competence is not only demonstrated through the ability to follow recipes or produce beverages, but also through the ability to measure ingredients, ensure hygiene, present products, communicate with customers, handle situations, and confidently work at a beverage counter. This approach is consistent with studies on competencies in the hospitality industry, where enterprise requirements for learners often include technical skills, communication, problem-solving, and self-management (Raybould & Wilkins, 2006). The fifth is enterprise linkage and local elements in training. Enterprises help integrate occupational standards into teaching, guidance, and assessment, while local elements contribute to the identity and experiential value of beverage products. Studies on food tourism show that local products can help highlight destination culture and create a perception of authenticity in tourism experiences (Sims, 2009; World Tourism Organization, 2012).

Thus, the analytical framework of the study is built on the logic moving from training conditions and the organization of teaching and learning to students' competency outcomes. This framework enables the identification of achievements and limitations in beverage preparation training, while also clarifying important gaps such as the gap between learning interest and professional confidence, between basic beverage preparation techniques and integrated service competence, between classroom-based training and enterprise requirements, and between common beverage recipes and the ability to develop beverage products with local identity. This provides the basis for designing the survey instrument, developing interview questions, analyzing research results, and proposing solutions to improve the quality of beverage preparation training for Tourism students.

3. RESEARCH METHODOLOGY

The study employs a mixed-methods approach, combining quantitative and qualitative methods to assess the current status of beverage preparation training for Tourism students and to propose solutions for improving training quality. The mixed-methods approach allows the study to combine the strengths of quantitative data in reflecting learners' evaluation trends with qualitative data in clarifying the causes, contexts, and meanings of the survey results (Creswell & Plano Clark, 2018). Based on the proposed analytical framework, the study conducted a survey of Tourism students who had taken or were taking the beverage preparation course, while also conducting in-depth interviews with selected students, lecturers in charge of the course, and enterprise representatives in the fields of restaurants, hotels, bars, cafés, or food and beverage services.

Quantitative data were collected through a student survey questionnaire. The questionnaire focused on five groups of issues: students' awareness and interest in the course; the relevance and updatedness of training content; practice duration and conditions; the level of professional competence formed after the course; enterprise linkage and the integration of local elements in beverage preparation training. The statements in the questionnaire were designed using a five-point Likert scale, ranging from 1 — strongly disagree to 5 — strongly agree. The Likert scale is suitable for survey studies examining respondents' attitudes, perceptions, and evaluations of a specific issue (Likert, 1932).

Qualitative data were collected through in-depth interviews to supplement and explain the survey results. The interview content focused on advantages and difficulties in beverage preparation training; the relevance of course content; practice conditions; students' competencies after the course; enterprise requirements for beverage preparation

skills; and the possibility of exploiting local ingredients in beverage design and practice. The interviews were synthesized thematically, thereby identifying prominent issues and comparing them with the quantitative survey results. This analytical approach is consistent with thematic analysis, in which qualitative data are coded, organized, and interpreted according to meaning groups related to the research objectives (Braun & Clarke, 2006).

Survey data were processed using descriptive statistics, including frequency, percentage, mean, and standard deviation. Quantitative results were used to identify general evaluation trends among students regarding the beverage preparation course, while interview data were used to clarify the causes of limitations and provide practical evidence for the discussion. The combination of these two data sources enables the study not only to describe the current status of training, but also to identify important gaps between learning interest and professional confidence, between training content in educational institutions and enterprise requirements, and between basic beverage preparation techniques and the ability to develop beverage products with local identity.

4. RESEARCH RESULTS

4.1. Characteristics of the survey sample

The survey sample consisted of 120 Tourism students who had taken or were taking the beverage preparation course. This group had direct experience with the course content, methods, practice conditions, and learning outcomes; therefore, it was appropriate for the objective of assessing the current status of training from learners' perspectives. The characteristics of the survey sample are presented in Table 1.

Table 1. Characteristics of the student survey sample

Criterion	Group	Number	Percentage (%)
Gender	Male	38	31.7
	Female	82	68.3
Year of study	Second-year students	46	38.3
	Third-year students	58	48.3
	Fourth-year students	16	13.4
Course status	Currently taking the course	52	43.3
	Completed the course	68	56.7
Related practical experience	Previously worked part-time or interned at restaurants, hotels, cafés, bars, or food and beverage service establishments	44	36.7
	No related practical experience	76	63.3
Level of interest in F&B/beverage preparation	Interested	91	75.8
	Little or no interest	29	24.2

(Source: Author's survey results)

The results in Table 1 show that the survey sample included both students currently taking the course and those who had completed it. The group currently taking the course helps reflect direct experiences during classroom organization, while the group that had completed the course can more clearly evaluate the usefulness of the course after completion. This combination allows the survey results to go beyond immediate impressions and cover post-learning evaluations.

Notably, 36.7% of students had previously worked part-time or interned in restaurants, hotels, cafés, bars, or food and beverage services. This group was able to compare the course content with the practical requirements of the working environment. In addition, the proportion of students interested in the F&B/beverage preparation field accounted for 75.8%, indicating that the course had a certain appeal to learners. However, initial interest is not sufficient to confirm professional competence after the course. Therefore, the following sections need to clarify whether this interest is transformed into practical skills, professional confidence, and the ability to apply knowledge in real service contexts.

4.2. Students' awareness and interest in the beverage preparation course

After identifying the characteristics of the survey sample, the study examined students' awareness and level of interest in the beverage preparation course. This group of results reflects how learners perceive the role, professional value, and initial attractiveness of the course. The results are presented in Table 2.

Table 2. Students' awareness and interest in the beverage preparation course

Code	Evaluation content	Mean	Standard deviation	Evaluation level
HT1	I feel interested when studying beverage preparation skills.	4.32	0.68	High
HT2	The beverage preparation course is necessary for Tourism students.	4.45	0.61	High
HT3	Beverage preparation skills give me more job opportunities in tourism, restaurants, hotels, and food and beverage services.	4.28	0.72	High
HT4	I would like to study more advanced content related to beverage preparation.	4.21	0.75	High
HT5	The beverage preparation course helps me better understand occupational requirements in the F&B sector.	4.12	0.78	Fairly high

(Source: Author's survey results)

The results in Table 2 show that students had positive perceptions of the role of the beverage preparation course. The criterion "The beverage preparation course is necessary for Tourism students" achieved the highest mean score, indicating that learners did not regard beverage preparation as merely a supplementary component, but perceived it as a skill related to professional orientation in tourism, restaurants, hotels, and food and beverage services.

The criteria related to interest, job opportunities, and the desire to study more advanced content all reached a high level. This shows that the attractiveness of the course derives not only from its practical nature, novelty, or the tangible products of beverage preparation activities, but also from its applicability to internships, part-time jobs, and future

service work. In other words, the course has the potential to create learning motivation because students can see the connection between course content and career opportunities.

However, interest and positive awareness only reflect the initial favorable conditions of the training process. For a professional practice course, training quality also depends on curriculum content, practice duration, operating conditions, professional feedback, and the level of competence formed after the course. Therefore, the results in this section need to be compared with evaluations of training content, practice conditions, and students' professional competence in the following sections.

4.3. Evaluation of training content

After examining students' awareness and interest in the course, the study continued to assess the relevance of training content. This group of results helps identify the extent to which the course has met the requirements of providing knowledge, foundational techniques, and linkage with occupational trends in tourism, restaurants, hotels, and food and beverage services. The results are presented in Table 3.

Table 3. Students' evaluation of the training content of the beverage preparation course

Code	Evaluation content	Mean	Standard deviation	Evaluation level
ND1	The course content helps students understand basic knowledge of beverages, tools, and ingredients.	4.05	0.71	Fairly high
ND2	The course content helps students understand the procedures for preparing some common beverages.	4.02	0.74	Fairly high
ND3	The course content updates current beverage trends.	3.31	0.82	Moderate
ND4	The course content is linked with the practical requirements of restaurants, hotels, bars, and cafés.	3.38	0.80	Moderate
ND5	The course includes content on designing and creating new beverages.	3.22	0.85	Moderate
ND6	The course exploits local ingredients in beverage preparation.	3.10	0.88	Moderate

(Source: Author's survey results)

The results in Table 3 show that students evaluated the foundational content of the course relatively positively. The two criteria regarding basic knowledge of beverages, tools, and ingredients, and procedures for preparing some common beverages, both reached a fairly high level. This indicates that the course has fulfilled its basic function of helping students access the initial knowledge system and operations of beverage preparation skills.

Meanwhile, the criteria related to updating beverage trends, linkage with enterprises' practical requirements, designing and creating new beverages, and exploiting local ingredients reached only a moderate level. The gap between the

foundational content group and the extended content group shows that students evaluated the course more highly in terms of knowledge and basic techniques than in terms of market relevance, creativity, and local identity.

Thus, the results show that beverage preparation training content has created an initial foundation in knowledge, tools, ingredients, and beverage preparation procedures. However, content related to market trends, enterprise requirements, product creativity, and the exploitation of local ingredients was evaluated at a lower level. This indicates that the course content still has a certain gap between basic technical components and extended requirements linked with professional environments, the beverage market, and the local tourism context.

4.4. Evaluation of practice duration and conditions

After evaluating training content, the study continued to examine the practice duration and conditions of the course. This group of factors directly affects the ability to transform knowledge and beverage preparation procedures into students' operational skills. The results are presented in Table 4.

Table 4. Students' evaluation of practice duration and conditions

Code	Evaluation content	Mean	Standard deviation	Evaluation level
TH1	Practice duration meets the requirements for training beverage preparation skills.	3.24	0.84	Moderate
TH2	Students have enough time to practice beverage preparation individually during class.	3.12	0.87	Moderate
TH3	The number of students in each practice group is appropriate.	3.18	0.86	Moderate
TH4	Practice tools and equipment meet learning requirements.	3.46	0.79	Moderate–fairly high
TH5	Practice ingredients are sufficiently diverse.	3.25	0.83	Moderate
TH6	The practice space effectively simulates the real professional environment.	3.08	0.88	Moderate

(Source: Author's survey results)

The results in Table 4 show that the criteria related to practice duration, individual practice time, and practice group size all reached only a moderate level. This reflects that students did not highly evaluate the convenience of practice organization, especially in terms of opportunities for individual practice during class.

Within the group of practice conditions, the criterion related to tools and equipment had a higher mean score than the remaining criteria, but it only reached a moderate–fairly high level. The criteria related to the diversity of ingredients and the extent to which the practice space simulates the real professional environment were both at a moderate level. These results show that practice conditions have a certain foundation, but do not yet clearly demonstrate a high level of responsiveness to skill training requirements in contexts close to service environments.

Thus, the results indicate that practice duration, opportunities for individual operation, practice ingredients, and professional simulation space are aspects that students evaluated only at a moderate level. This group of results is directly related to the formation of beverage preparation skills and the level of professional confidence.

4.5. Level of professional competence formed after the course

After examining content, practice duration, and practice conditions, the study continued to evaluate the level of professional competence formed among students after the course. This group of results reflects the extent to which knowledge and practice activities are transformed into the ability to perform occupational tasks related to beverage preparation. The results are presented in Table 5.

Table 5. Level of professional competence formed after the course

Code	Evaluation content	Mean	Standard deviation	Evaluation level
NL1	I can identify and correctly use basic beverage preparation tools.	4.01	0.70	Fairly high
NL2	I can perform the preparation procedures for some common beverages.	3.92	0.73	Fairly high
NL3	I can measure ingredients relatively accurately.	3.55	0.81	Moderate–fairly high
NL4	I can present and decorate beverages according to aesthetic requirements.	3.42	0.84	Moderate–fairly high
NL5	I can communicate with customers and introduce beverage products.	3.26	0.86	Moderate
NL6	I can handle some simple situations during beverage service.	3.18	0.88	Moderate
NL7	I am confident in working at a bar or beverage counter in restaurants, hotels, or service establishments.	3.15	0.89	Moderate

(Source: Author's survey results)

The results in Table 5 show that students rated themselves more highly in basic technical competencies. The two criteria related to identifying and using beverage preparation tools and performing procedures for preparing some common beverages both reached a fairly high level. This result is consistent with the evaluation in Section 4.3, where the foundational content of the course was perceived relatively positively by students.

However, the criteria related to competence application in real service contexts had lower scores. The ability to communicate with customers, introduce beverage products, handle service situations, and confidently work at a bar or beverage counter reached only a moderate level. This indicates that the level of professional competence formed after the course was not uniform between basic technical skills and service competencies linked with real working environments.

Thus, the results show that students have developed a certain foundation in beverage preparation operations and procedures, but their level of professional confidence and ability to handle service requirements remain limited. This is an important finding, reflecting the gap between mastering basic beverage preparation techniques and being able to complete an entire service task in a professional context.

4.6. Enterprise linkage and the exploitation of local elements in training

After evaluating the level of professional competence formed after the course, the study continued to examine the linkage between the course, enterprises, and local elements. This group of results reflects the occupational relevance of the training process and shows the possibility of connecting beverage preparation skills with the tourism context and local products. The results are presented in Table 6.

Table 6. Students' evaluation of enterprise linkage and local elements in training

Code	Evaluation content	Mean	Standard deviation	Evaluation level
DN1	The course involves beverage preparation experts or enterprise representatives.	2.95	0.91	Moderate
DN2	Students are exposed to enterprises' practical requirements during the learning process.	3.18	0.86	Moderate
DN3	Students participate in experiential activities, competitions, or projects related to beverage preparation.	2.88	0.93	Moderate
DN4	Course assessment accurately reflects the professional competencies required.	3.36	0.82	Moderate
DN5	The university needs to strengthen enterprise linkage in beverage preparation training.	4.30	0.70	High
DN6	The course needs to further exploit local ingredients in beverage design.	4.18	0.74	Fairly high

(Source: Author's survey results)

The results in Table 6 show that the criteria reflecting enterprise participation, access to practical requirements, experiential activities, and competency-based professional assessment all reached a moderate level. This indicates that the linkage between the course and the professional environment outside the university has not been highly evaluated by students.

Meanwhile, the criterion concerning the need to strengthen enterprise linkage reached a high level, and the criterion concerning the exploitation of local ingredients in beverage design reached a fairly high level. This difference indicates a gap between the current level of implementation and students' expectations regarding training activities linked with enterprises and the local context.

Thus, the results show that enterprise linkage and the exploitation of local elements are two meaningful dimensions in evaluating the quality of beverage preparation training. This group of results also complements the findings in Section 4.5, where students' professional confidence remained limited and needs to be examined in relation to opportunities to access real professional environments.

4.7. Results of in-depth interviews

In addition to the student survey, the study conducted in-depth interviews with students, lecturers, and enterprise representatives to supplement and explain the quantitative results. The interview content focused on learning

experiences, the organization of practice, the level of skill responsiveness after the course, and the practical requirements of professional environments. The results of the in-depth interviews are summarized in Table 7.

Table 7. Summary of in-depth interview results

Interview group	Main findings	Linkage with survey results
Students	The course is attractive and applicable; the main difficulties are practice duration, opportunities for individual practice, measurement, communication, and problem-solving.	Clarifies the gap between learning interest and professional confidence.
Lecturers	The course has practical value; difficulties are related to duration, ingredients, equipment, class size, and the degree of updating new beverage trends.	Supplements the results on training content and practice conditions.
Enterprises	Students need basic operational skills, hygiene awareness, agility, communication, service speed, a learning attitude, and adaptability.	Clarifies the requirements for integrated service competence and the necessity of enterprise linkage.

(Source: Author's survey results)

The in-depth interview results show that students perceived the beverage preparation course as attractive and applicable to internships, part-time work, or service jobs. However, the frequently mentioned difficulties did not lie in acquiring basic knowledge, but in individual practice, memorizing and applying recipes, measurement, product presentation, communication with customers, and situation handling. This helps explain why students had a high level of interest in the course, but their professional confidence after the course was not correspondingly high.

From lecturers' perspectives, the interview responses emphasized that the beverage preparation course has high practical value, but training effectiveness is affected by course duration, practice group size, ingredient and equipment conditions, and the degree of updating new beverage trends. Meanwhile, enterprise representatives generally did not expect students to reach the level of proficiency of professional employees immediately after the course, but emphasized requirements related to working manners, hygiene, communication, service speed, observation skills, and a learning attitude.

Thus, the in-depth interview results reinforce the findings from the quantitative survey. The key issue is not that students lack interest in the course, but that the process of transforming interest and basic technical knowledge into professional service competence remains insufficiently solid. This provides an important basis for the discussion section to further clarify the need to shift from training isolated beverage preparation techniques to training integrated service competence in the context of tourism, restaurants, hotels, and food and beverage services.

5. DISCUSSION

The research results show that the beverage preparation course was evaluated by students as necessary, attractive, and professionally valuable. This is a positive signal, because learners' interest can create initial motivation for the process of acquiring and practicing skills. However, the results also show that this interest has not been correspondingly transformed into professional confidence. Students highly evaluated the necessity of the course, but competencies

such as communicating with customers, handling situations, and confidently working at a beverage counter reached only a moderate level. This finding indicates that in professional practice training, learners' positive attitudes are a favorable but insufficient condition; skills can only be firmly formed through experience, reflection, practice, and experimentation in appropriate contexts, as emphasized in Kolb's (1984) logic of experiential learning.

A noteworthy point is that students rated themselves relatively well in basic technical competencies, such as identifying tools and performing procedures for preparing some common beverages, while broader service competencies were evaluated at lower levels. This reflects the gap between "knowing how to prepare beverages" and "being able to perform a service task." In tourism, restaurant, hotel, and F&B environments, beverage preparation is not only about creating a beverage product according to a recipe, but also includes hygiene, measurement, presentation, communication, product introduction, service speed, and the handling of emerging requests. This result is consistent with Raybould and Wilkins (2006), in which communication, problem-solving, interpersonal relations, and self-management are regarded as important skills in the hospitality sector. Therefore, the quality of beverage preparation training should be viewed from the perspective of integrated service competence, rather than being based solely on technical operations.

The research results also show that course content was evaluated more highly in terms of foundational knowledge and techniques, but less highly in terms of updated beverage trends, enterprise requirements, new product design, and the exploitation of local ingredients. This indicates that the course has fulfilled its role in providing an initial foundation, but has not clearly demonstrated openness and adaptability to changing professional contexts. In tourism and hospitality education, approaches such as active learning, experiential learning, and industry experience have attracted increasing attention (Kim & Jeong, 2018). Therefore, if training content stops at common recipes and procedures, the course will find it difficult to fully meet the requirements of the beverage market, service environments, and the increasingly diverse experiential needs of tourists.

Practice duration and conditions are important bottlenecks suggested by the research results. The criteria related to practice time, opportunities for individual practice, group size, ingredients, and professional simulation space were not highly evaluated. This is directly related to the level of skill formation after the course. For a highly operational course such as beverage preparation, students need more opportunities for individual practice, feedback, and adjustment of operations under conditions close to real service environments. This finding is consistent with Billett's (2009) view that work experience only realizes its educational value when it is intentionally integrated into the curriculum and supported by appropriate pedagogical practices. In other words, practice is not simply about "having practice hours"; it must be a learning process designed to generate competence.

Enterprise linkage and the exploitation of local elements are two other prominent dimensions of the research results. The level of enterprise participation, opportunities to access practical requirements, and professional experience activities remained moderate, while students evaluated the need to strengthen enterprise linkage at a high level. This indicates that the gap between classroom-based training and occupational requirements cannot be narrowed without enterprise participation in guidance, feedback, and assessment. At the same time, the exploitation of local ingredients in beverage preparation training was not yet evident, although this is a direction with potential to create identity for beverage products in the tourism context. Sims (2009) argues that local food can contribute to the perception of authenticity and represent the culture of a destination. From this perspective, beverage preparation training for Tourism students should not merely reproduce common recipes, but can become a space where learners develop beverage products associated with local ingredients, stories, and experiences.

Overall, the research results show that the core issue of beverage preparation training does not lie in students' lack of interest in the course, but in the process of transforming interest and basic technical knowledge into professional service competence. This requires the beverage preparation course to be viewed as a component of professional competence training in Tourism, in which content, practice, feedback, assessment, enterprise linkage, and local elements need to be organized as a unified whole. This provides the basis for proposing implications to improve

training quality toward greater occupational relevance, enhanced practical experience, and the development of distinctive beverage products.

6. IMPLICATIONS AND SOLUTIONS FOR IMPROVING TRAINING QUALITY

Based on the research results and discussion, improving the quality of beverage preparation training for Tourism students should be carried out by shifting from isolated technical training to professional service competence training. First, the course content should continue to maintain foundational knowledge and techniques related to ingredients, tools, procedures, and beverage preparation operations. At the same time, it needs to be updated more regularly in accordance with beverage market trends, the requirements of F&B enterprises, and tourists' experiential needs. Content related to new product design, modern beverages, non-alcoholic beverages, healthy beverages, and beverages associated with local ingredients should receive greater attention in order to enhance the applicability and creativity of the course.

In addition to content, the organization of practice should be regarded as the focus of improving training quality. Educational institutions need to increase opportunities for students' individual practice, organize practice groups appropriately, supplement practice time, and design simulated situations close to bar counters, cafés, restaurants, hotels, or food and beverage service establishments. Practice should be linked with regular feedback from lecturers, peers, experts, or enterprises, helping students adjust their operations, measurement, product presentation, service speed, and communication with customers.

Course assessment also needs to be adjusted toward competency-based professional assessment rather than focusing only on final beverage products. Assessment should include the preparation process, hygiene, tool use, ingredient measurement, technical operations, aesthetic presentation, the ability to introduce products, situation handling, and professional manners. This approach helps assessment results more fully reflect students' ability to perform a service task.

In addition, enterprise participation in the training process should be strengthened. Enterprises can contribute feedback on course content, guide practice, organize thematic sessions, evaluate products, develop occupational situations, and create opportunities for students' practical experiences. This linkage helps students access occupational standards, understand the practical requirements of the labor market, and narrow the gap between training in educational institutions and working environments.

Finally, beverage preparation training in Tourism should better exploit local elements. The use of tea, honey, ginger, turmeric, herbs, seasonal fruits, or regional specialty ingredients in beverage preparation assignments can help students develop product design thinking associated with destination identity. As a result, the beverage preparation course not only contributes to forming occupational skills, but also helps students learn how to create beverage products with stories, experiential value, and the potential to serve local tourism activities.

7. CONCLUSION

The study assessed the current status of beverage preparation training for Tourism students in terms of students' awareness and interest, training content, practice duration and conditions, the level of professional competence formed, enterprise linkage, and the exploitation of local elements. The results show that the beverage preparation course is attractive and is perceived by students as necessary for their career orientation in tourism, restaurants, hotels, and food and beverage services.

However, the research results also show that training quality cannot be evaluated only through learners' interest or their ability to perform some basic technical operations. A noteworthy point is that students have developed a certain foundation in tools, ingredients, and beverage preparation procedures, but their professional confidence, ability to communicate with customers, situation-handling ability, product creativity, and application in real service contexts

remain limited. This reflects the gap between technical beverage preparation training and professional service competence training.

From these results, the article argues that improving the quality of beverage preparation training should be approached in an integrated manner: maintaining a technical foundation, increasing individual practice, innovating assessment methods, strengthening enterprise linkage, and exploiting local ingredients in beverage product design. This approach not only helps students improve occupational skills, but also contributes to forming service thinking, experiential thinking, and the ability to create beverage products that reflect destination identity.

The study has practical significance for Tourism training institutions in reviewing, adjusting, and improving the quality of professional practice courses. Nevertheless, the study is still limited in terms of survey scope and its primary reliance on students' perspectives. Future studies may expand the survey sample, strengthen evaluations from enterprises, alumni, and customers, and compare different training institutions in order to obtain a more comprehensive view of beverage preparation training in Tourism.

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