
Original Paper

Designing Outcome-based Assessment for an Experiential EMI Wine Course: A Design-based Study

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Abstract

This study aimed to explore how outcome-based assessment (OBA) was adopted in an English-medium instruction (EMI) wine course at a university through design-based research (DBR). Qualitative data were collected, and analyses of the original course syllabus, two expert reviews, interviews with four students, and 14 reflection reports by the instructor were conducted. The original 15 content-oriented objectives were consolidated into six assessable intended learning outcomes integrating wine knowledge, practical skills, professional judgment, and English communication. Experiential activities, including wine tasting, label interpretation, food-and-wine pairing, and wine service, were then aligned with formative and summative assessment tasks. The findings suggest that the use of OBA helped to generate clear learning directions and ensured that experiential activities provided more meaningful assessment of professional skills. However, difficulties in implementing OBA were associated with variations in students' English proficiency and prior wine knowledge, and the increased burden of assessment work. Staged practice and scaffolding in terms of language and content were used to solve these problems. Five design principles were derived: transforming fragmented objectives into assessable outcomes; sequencing assessment from foundational learning to integrated professional performance; reducing repetitive tasks and using integrated assessments; providing differentiated scaffolding while maintaining standards; and matching the assessment criteria to each outcome. The study demonstrates that constructive alignment is not a fixed product completed before teaching but a dynamic process refined through expert reviews, classroom implementation, student feedback, assessment evidence, and instructor reflection. The findings offer practical guidance for hospitality, service-related EMI courses seeking context-sensitive assessment.

Keywords: outcome-based assessment (OBA), English-medium instruction (EMI), design-based research (OBD), experiential learning, wine education

1. Introduction

The rise of globalization has led to the rapid expansion of English-medium instruction (EMI) in disciplines in higher education institutions in Asia and other non-English-speaking settings (Bradford, 2016; Macaro et al., 2018). Because EMI courses require students to learn disciplinary knowledge through English, their understanding may be influenced by their English proficiency, prior disciplinary knowledge, communication skills, and the scaffolding provided by instructors (Aizawa et al., 2024; Guo et al., 2024; Yüksel et al., 2023). This complexity is particularly important in assessment, as students' performance may reflect both their disciplinary knowledge and their ability to demonstrate professional competence through English (Aizawa, 2025; Dimova, 2025). Vocational hospitality education requires students to develop both disciplinary knowledge and competencies in service delivery, communication, and problem solving in authentic workplace contexts (Lou et al., 2019; Singh & Jaykumar, 2019). Although traditional paper-and-pencil tests are convenient to administer and objectively score, their decontextualized format may inadequately capture students' ability to apply these competencies in professional practice (Noyes & Garland, 2008). This limitation is particularly salient in hospitality EMI courses, where a heavy reliance on English-language written examinations

may cause assessment results to reflect students' disciplinary competence and their English proficiency, as well as the constraints of the assessment format itself.

The EMI wine course investigated in this study incorporated several experiential activities, including the identification of wine aromas and flavors, wine tasting, winery visits, wine marketing, and service tasks. These activities reflected the experiential and competency-based approach adopted in vocational hospitality education (Brailas et al., 2017; Morris, 2020). Nevertheless, traditional paper-and-pencil midterm and final exams constituted 60% of the overall term grade, highlighting a disconnect between the contextualized learning activities and assessments that predominantly evaluated students' written understanding of subject matter and English vocabulary. Additionally, feedback from students indicated that exams conducted in English were a significant source of anxiety. Inquiries such as "Professor, will I fail the course?" revealed that students did not have a clear grasp of the learning objectives, assessment standards, and their advancement toward the desired competencies. Consequently, the primary issue was not the absence of innovative learning activities but the misalignment between learning tasks, intended competencies, and the assessments used to gauge student learning progress.

To address this misalignment, outcome-based assessment (OBA) was introduced to redesign the EMI wine course by specifying the knowledge, skills, and performance that students should demonstrate and aligning these outcomes with instructional activities and assessment tasks. This approach reflects the principles of backward design, integrated course design, and constructive alignment (Biggs, 2014; Fink, 2013; Rao, 2020). However, although hospitality education emphasizes experiential learning and practical competencies, few studies have examined how industry competencies can be translated into course learning outcomes and aligned with authentic tasks and formative and summative assessments. This gap is particularly evident in hospitality EMI courses, where assessment must address both professional competence and English-language expression. Therefore, this study examines how OBA can be developed into an implementable assessment system for a hospitality EMI course.

This study employed design-based research (DBR) to investigate the iterative redesign of assessment in an experiential EMI wine course at a hospitality-focused university in Taiwan, particularly its transition from an examination-dominated system to OBA. It examined how hospitality-related competencies were translated into measurable learning outcomes and aligned with experiential learning activities, assessment tasks, and rubrics. This study also identified implementation challenges and derived transferable design principles for other practice-oriented EMI courses. To address these goals, this study was guided by three research questions. Using a DBR approach, this study examined how the original EMI wine course was redesigned through OBA, what challenges emerged during OBA development and implementation, and what design principles could be derived from the implementation evidence.

2. Literature Review

This section starts by exploring the theory behind OBA and curriculum alignment, explaining how competencies in the hospitality sector may be operationalized into measurable learning outcomes and assessment tasks for hospitality EMI classes. It then explores how DBR can refine the OBA system through iterative cycles of design, implementation, evaluation, and revision while deriving design principles applicable to other hospitality EMI courses.

2.1 OBA and Curriculum Alignment

OBA shifts the perspective of the curriculum and assessment to view the knowledge, skills, and performance that students can exhibit when they complete a course instead of just the knowledge that instructors impart (Macayan, 2017; Rao, 2020). With this new perspective, the quality of a course should be judged not primarily by the content covered or the number of instructional hours delivered but by the extent to which students can provide measurable evidence that they have achieved the intended learning outcomes (Rao, 2020). Thus, OBA requires changes in both assessment procedures and curriculum development, wherein instructors identify the intended learning outcomes and methods of evidence collection before they plan instructional activities to help students achieve these outcomes (Macayan, 2017; Rao, 2020).

In the OBA framework, learning outcomes connect with the curriculum, instruction, and assessment.

Effective learning outcomes must explicitly state what learners should achieve and how this can be observed and measured (Gil-Jaurena & Kucina Softic, 2016). It is easy to translate verbs such as “analyze”, “compare”, “perform”, “evaluate”, “design”, and “recommend” rather than “understand” and “be familiar with” into assessments (Rao, 2020). Additionally, learning outcomes should go beyond recall and include learners’ ability to apply knowledge and skills. It is especially relevant for hospitality studies, as professional competencies require students to use techniques, make decisions, communicate, and possess professional performance, which are difficult to test using conventional paper-and-pencil tests (Choe & Kim, 2024).

It is essential to align the intended learning outcomes, learning activities, and assessments to transform OBA into an operationalizable assessment approach. Constructive alignment, backward design, and integrated course design offer this solution from three different perspectives (Biggs & Tang, 2011; Fink, 2013; Loughlin et al., 2021). Constructive alignment provides an umbrella concept: students construct knowledge through learning activities, and the intended learning outcomes and assessments are focused on the same skills (Biggs & Tang, 2011; Biggs, 2014). Under this concept, students need to practice the skills that will be evaluated during the assessment process, and the assessment needs to measure their accomplishment of the learning outcomes. However, some obstacles, such as insufficient cooperation among faculty members, established assessment approaches, and a lack of resources, may result in gaps between the intended and practiced curricula (Wijngaards-de Meij & Merx, 2018; Loughlin et al., 2021). In backward design, alignment is achieved through a process wherein learning outcomes are set, evidence for assessment is identified, and then teaching and learning activities are planned (Wiggins & McTighe, 2011; McTighe & Wiggins, 2012). In this way, courses are prevented from becoming focused on merely covering content or activities that have no clear relation to the intended learning outcomes. Integrated course design claims that the concept of alignment should be expanded to include feedback, learner factors, learning context, and available resources (Whitehouse, 2014). Learning objectives, assessments and feedback, and learning activities should form an interdependent system (Fink, 2013). Hence, one learning outcome may actually require several activities, feedback, and types of assessment evidence.

OBA aligns professional competencies into measurable learning outcomes, and it guarantees that learning activities, assessment measures, and feedback address the same competencies. In the EMI wine course, wine knowledge, tasting and serving skills, and communication competence in professional English were aligned with experiential learning activities and formative and summative assessments. Because alignment extends beyond a formal syllabus matrix, it must be continuously examined and refined through classroom implementation, providing the rationale for adopting DBR (Loughlin et al., 2021; Romanowski, 2024).

2.2 Developing a Course Assessment System through DBR

Although OBA offers a model for aligning the intended learning outcomes, learning activities, and assessment tasks, this alignment cannot be constructed through theory or course design alone. A course assessment system involves interconnected elements, such as learning outcomes, assessment tasks, scaffolding, and feedback processes, which are affected by contextual issues, including students’ abilities, progression in the course, teaching approaches, and available resources (Vlachopoulos & Makri, 2024). Hence, a course design that seems rational on paper might not work as planned when implemented in classroom settings. DBR develops educational interventions in authentic settings and addresses both theoretical propositions and practical complexities, making it particularly suitable for refining emerging course designs (Ford et al., 2017; McKenney & Reeves, 2025).

First, DBR examines educational designs in authentic learning settings, where researchers can establish the discrepancies between the assumed design and its actual application and hence adjust course elements. In relation to OBA, DBR is used both to ascertain whether the assessment system is working and to discover what course elements work, which need adjustment, and the conditions under which this adjustment is needed (McKenney & Reeves, 2021; Scott et al., 2020). Second, in DBR, explanations about the operations of educational designs emerge from diverse sources of evidence by integrating research findings, expertise, and experience (Scott et al., 2020; McKenney & Reeves, 2021; Hoadley & Campos, 2022). With an OBA approach, expert feedback could be used to assess the

relevance of learning outcomes and assessment tasks; teacher discussions could be used to define the criteria and feasibility of assessments; student performance and observation could point out learning problems; and teacher reflection could justify design decisions and changes (Rao, 2020). Combining these different sources would make it possible to continually refine assessment tasks, weighting, rubrics, scaffolding, and feedback strategies based on implementation data rather than on teachers' decisions only. Third, designing an OBA system using DBR requires more than developing an assessment plan for one wine course. DBR aims at both practical improvement and the transfer of the knowledge generated, which means that while developing a refined educational intervention, design principles are created based on design decisions, the conditions of implementation, and implementation evidence (McKenney & Reeves, 2018; Hoadley & Campos, 2022). A recent systematic review of DBR in higher education has also emphasized its importance for creating design knowledge that is theoretically and practically significant (Cela-Ranilla et al., 2025).

DBR enables this study to examine how the OBA system was designed, implemented, and refined and to derive assessment design principles applicable to other hospitality EMI courses. Its adoption is necessary because alignment within an OBA system must be continually examined through classroom implementation and multiple sources of evidence before an initial design can develop into a feasible, coherent, and contextually appropriate course assessment system.

3. Method

DBR was used in this study to design, implement, and further refine the OBA system for an EMI wine course in authentic instructional settings. The research focused on the creation of the OBA system based on the desired learning outcomes, difficulties in implementation, and subsequent changes and principles of assessment design resulting from the research process.

At a national university in Taiwan that focuses on hospitality and tourism education, the researcher conducted the study within an EMI wine course offered across two departments—Applied English and Hotel Management. The participants included enrolled students, the instructor-researcher, and experts who reviewed the course design. As both the course designer and instructor, the researcher was responsible for designing, implementing, refining, and analyzing the assessment system. The research comprised three phases. In the first, the learning outcomes, instructional activities, and assessment methods of the original courses were analyzed to identify misalignments between experiential activities and paper-and-pencil assessments. In the second phase, the assessment system was redesigned according to OBA principles and refined through feedback from two external experts. In the third phase, the OBA system was implemented over one semester in the same EMI wine course offered to students from the two departments and was continuously refined in response to expert recommendations, student feedback, and teacher reflections. Revisions focused on task instructions, activity arrangements, and feedback mechanisms.

Qualitative content analysis was conducted to compare the course documents, tests, and rubrics before and after revisions and to explore the issues that arose in implementing these changes, the reasons behind the revisions, and their results. To enhance the validity of the research, the data were triangulated by comparing student perceptions, teacher insights, and the views of experts. Four students who enrolled in this new OBA-designed course were chosen by random sampling, and semi-structured interviews were conducted at the end of the semester. Written consent was obtained from the participants before the interviews. Two students were first-year students from the Department of Applied English, and two other students were second-year students from the Department of Hotel Management. This interview investigation sought to examine students' experiences related to the implemented OBA design in terms of the understandability of content, assessment task sequence and challenges, English use in professional work, and scaffolding. Follow-up questions were used to encourage participants to elaborate on their experiences and provide examples from specific learning activities and assessments.

4. Results

In this section, the use of the DBR approach to reconstruct the OBA system for an EMI wine course is illustrated, together with the experiences of both students and the instructor after the implementation of

the OBA system. The research process began with a review of the original syllabus and assessment scheme of the course, in which the initial OBA system was designed. Then, the new syllabus was critiqued by two experts, and the assessment system was modified according to their suggestions. Evidence during the implementation phase was obtained from four student interviews and 14 teacher reflection reports to explore the effectiveness of OBA among students from different backgrounds in real class contexts.

4.1 Analysis of the Original Course Syllabus and Assessment Issues

The learning content covered by the initial EMI wine course included professional wine knowledge, wine-tasting skills, food-and-wine pairing, wine service, marketing, and communication in English. First, 15 learning objectives of the course involved wine terminology, main grape varieties and regions, viticulture and winemaking, wine labels, systematic wine tasting, food-and-wine pairing, wine storage, and wine service. Overall, the course offered a comprehensive disciplinary framework and included experiential activities of wine tasting, the identification of aromas and flavors, a field trip to a winery, food-and-wine pairing, wine presentation, and service demonstration. These activities exposed students to wine service situations commonly encountered in the hospitality industry.

Analysis of the syllabus indicated that the 15 objectives primarily represented a list of knowledge topics. Some objectives overlapped, and they did not clearly specify the competencies that students should be able to demonstrate upon completing the course. For example, grape varieties, major wine regions, wine label terminology, and wine styles were presented as separate objectives, although students would normally need to integrate these areas of knowledge when introducing or analyzing a particular wine. That is, the original learning objectives reflected the instructor's expectations about the course content better than they reflected student performance outcomes. This lack of performance-based learning outcomes made it difficult to design appropriate learning activities and assessment tasks.

The original assessment scheme included class participation, reflective worksheets in relation to experiential activities and two written exams—the midterm and final. The latter two exams comprised almost 60% of the term grade, while experiential activities were evaluated in terms of reflective worksheets. Thus, this assessment scheme allowed the instructor to evaluate students' knowledge of professional terminology, wine regions, grape varieties and winemaking concepts. However, it did not help assess students' abilities to use systematic wine-tasting techniques, interpret wine labels, justify food-and-wine pairings, use wine service procedures or communicate their wine-related knowledge in English. Given that the course was delivered in the EMI format, students' wine-related professional English competence was not incorporated into the learning outcomes and assessment scheme.

The central issue of the original wine course design was not the absence of professional content or experiential activities but the misalignment between learning outcomes, learning activities, assessment tasks and assessment evidence. Students could participate in wine tasting, food-and-wine pairing and wine service activities, but these activities did not necessarily produce enough evidence for the instructor to draw conclusions about students' achievement of the intended learning outcomes. Moreover, students' ability to demonstrate their knowledge in written exams did not necessarily mean that they could apply this knowledge to make professional judgments and communicate it in English. These results were used as a basis for reconceptualizing the course assessment in terms of OBA.

4.2 OBA Development and Expert Review

By analyzing the original syllabus, the researcher first modified and synthesized the 15 learning goals into six integrated intended learning outcomes that were observable and measurable. Doing so did not reduce the content of the course; rather, it rearranged the previously fragmented content and shifted the focus of course design from “what the instructor should teach” to “what professional competencies students should be able to demonstrate upon completing the course.” The revised outcomes included wine knowledge, practical skills, and professional English communication and provided the basis for designing learning activities and assessment tasks.

The six intended learning outcomes developed in this study were as follows:

1. Apply professional wine terminology and wine label information to describe principal grape varieties, wine regions, and wine styles.
2. Explain how viticultural practices, winemaking methods, and related factors influence the characteristics of different wines.
3. Apply the WSET Systematic Approach to Tasting to describe the appearance, aroma, palate, and quality of wines using appropriate English.
4. Apply food-and-wine pairing principles to make appropriate recommendations and provide professional justification.
5. Demonstrate appropriate procedures and principles for wine storage, opening, service, and responsible alcohol consumption.
6. Integrate wine knowledge, practical skills, and English communication in hospitality workplace contexts involving purchasing, service, wine presentation, or marketing.

These revised outcomes used active verbs such as “apply,” “explain,” “describe,” and “demonstrate.” They enabled the instructor to determine what types of evidence students were supposed to produce and how their performance should be evaluated. In particular, English was not simply the language of instruction; rather, it was the language that students used to show their professional competencies. For example, it was not enough for students to know the steps of systematic wine tasting; they were also supposed to describe wines using appropriate English terminology. Additionally, they were required to both select suitable food-and-wine pairings and explain the relationships among wine body, acidity, sweetness, flavor intensity, and food characteristics.

In the revised design of the assessment framework, written exams were retained to evaluate students’ understanding of basic concepts and discipline-related knowledge, but their role as the dominant source of assessment evidence was reduced. Other forms of assessment involved interpreting wine labels, recording individual tasting notes, explaining food-and-wine pairings, giving oral presentation of wines, demonstrating wine service, and integrating professional tasks. These tasks were sequenced according to the progressive development of competence. Students first gained basic knowledge about professional vocabulary, grape varieties, wine regions, and wine-making processes before they proceeded to skill-based tasks related to interpreting wine labels, describing taste characteristics, and explaining food-and-wine pairings. Next, they undertook professional tasks based on scenarios, which required integrating knowledge, performance, professional judgment, and English language communication skills. This arrangement ensured that formative assessments served as both assessment evidence and diagnostic information for the instructor’s subsequent teaching decisions.

After completing the initial outcome-based course syllabus design, the researcher invited two experts to review the syllabus. One expert was the general manager of a wine company, while the other was an educational expert specializing in EMI research. The review focused on the following issues: whether the outcomes appropriately covered the course competencies; whether the outcomes were measurable and concrete enough; whether the learning tasks and assessments aligned with the outcomes; whether the activities could generate enough evidence of learning; and whether the whole design was appropriate for the authentic situation of an EMI wine course. The external professional feedback enabled the researcher to identify potential problems in the initial design that might have been overlooked because of the researcher’s familiarity with the course.

After discussions with the two experts, the researcher improved the wording and scope of the six outcomes and ensured coherence between the six outcomes, learning activities, and assessment tasks. Regarding integrated tasks involving professional knowledge, practical application, and English communication, the new framework does not depend on one overall score for measuring the competence of students. Rather, different assessments are used to measure students’ competence in knowledge, professional judgment, practical application, and language proficiency. Professional criteria, such as wine label reading, wine service, and systematic wine tasting, are assessed using higher levels of accuracy and completeness. Open tasks, such as food-and-wine pairings and flavor description, are evaluated based on students’ ability to offer reasonable justification based on their professional

knowledge. Table 1 presents the key dimensions of the revised OBA design for this course.

Table 1. Comparison of the Original Course Design and Revised OBA Design

Dimension	Original Course Design	Revised OBA Design
Learning objectives	15 objectives, with some overlapping content	Consolidated into 6 observable and assessable intended learning outcomes
Role of English	Primarily used as the language of instruction and learning materials	Incorporated into professional wine performance and assessment
Assessment evidence	Emphasized written examinations and quizzes	Combined knowledge tests, tasting records, wine label interpretation, oral explanations, operational performance, and integrative tasks
Task sequence	The cumulative connections among activities were not clearly defined	Progressed from foundational knowledge and discrete skills to integrative tasks
Function of assessment	Primarily used for grading	Used for diagnosis, feedback, and instructional adjustment

4.3 Students' Experiences and Perceptions of the OBA System

At the end of the semester, four students who had completed the course were randomly selected and interviewed after providing written informed consent. The interviewees included two first-year students from the Department of Applied English and two second-year students from the Department of Hotel Management. The purpose of the interviews was to explore their perceptions of the OBA scheme implemented throughout the semester and their learning experience. The interviews were audio-recorded verbatim and analyzed through thematic analysis. Firstly, the researcher and the teaching assistant reviewed the interview transcripts multiple times until achieving an understanding of the data. Codes were then assigned based on students' perceptions regarding their learning experience, challenges faced during course implementation, and support needs. These codes were subsequently clustered into themes. Findings from the interviews were then combined with data from instructor reflections and experts' advice to examine opportunities to enhance the OBA design.

Overall, the students found that the explicit identification of learning outcomes and task criteria helped them better understand what they were trying to learn. Instead of knowing what was being taught during each week and what would be covered on the midterm and final exams, they gained a better idea of what wine-related knowledge and skills they were supposed to develop progressively and how these competencies could be applied to wine tasting, food-and-wine pairings, wine presentation and service. Some students indicated that the outcome-oriented tasks made the learning process more structured and enabled them to identify areas in which they remained insufficiently proficient. Instead of passively memorizing grape varieties, wine regions, or professional terminology, they were required to apply what they had learned through wine label interpretation, tasting records, and explanations of food-and-wine pairings. This process enabled them to recognize the interconnections among different areas of wine knowledge. For example, when analyzing a wine label, students had to consider its grape variety, region of origin, winemaking method, flavor characteristics, and pairing principles simultaneously rather than treating these as separate topics to be memorized for examinations. However, some students also mentioned that OBA could cause extra stress if the process is divided into many disjointed tasks. Although the tasting sessions, label reading, explanation and group work provided ample opportunity to practice, when treated individually as discrete assignments, the process would become stressful.

Differences were also found in the needs of students from different academic backgrounds. While

first-year Applied English students were better prepared to learn English because they had more experience, they lacked disciplinary knowledge of wine. In contrast, second-year students in Hotel Management had better comprehension of hospitality services and context but sometimes needed more vocabulary or confidence in expressing themselves in English. This means that poor performance on the integrated task does not always mean that the learning outcome was not achieved. Poor performance can be affected by just one component—for example, by wine knowledge, English proficiency or communication skills.

4.4 Instructor Reflections on OBA Implementation

During the course implementation phase, the researcher and teaching assistant conducted a collaborative analysis of the instruction process following each class, which yielded 14 reflective reports by the instructor for the entire semester. Reflected in these reports were students' reactions, their participation in the learning process, task performance, assessment results, implementation problems, and changes in instruction. The instructor's reflections demonstrated that the assessment based on outcomes provided clarity about the direction of instruction and the criteria of assessment. Once students knew what the expected learning outcomes were at the beginning of the semester and were frequently reminded about them, it became easier for the instructor to structure activities according to the learning outcomes and to link each practice activity with the assessment task. The greatest challenges arising in an authentic classroom situation were related to the differences in students' English proficiency level and knowledge of wines. Some students were able to understand the procedures of wine tasting but had problems with using English vocabulary to describe the wines. Other students had good English but insufficient wine knowledge to discuss the wine styles, the factors influencing winemaking, or the reasons for food-and-wine pairings. It turned out to be difficult to differentiate the source of students' problems—a lack of professional knowledge, practical skills or English communication.

In response to this challenge, the instructor introduced more practice and scaffolding activities during later lessons. While some students needed more help with basic concepts, others received core vocabulary terms about wines, sentence structures, and guided practice. Meanwhile, students with experience in the field of hospitality and wines received assignments that required analysis and application of their knowledge. This method did not lower the standards established by the learning objectives. On the contrary, it allowed students to proceed to a different level of learning, beginning with basic knowledge and skills and moving to task completion.

Furthermore, the instructor's reflections revealed that assessment acted as a diagnosis in the process of instruction. For example, in the case of students' repeated misuse of professional vocabulary in their tasting records, the instructor used additional vocabulary classification activities, taste description demonstrations, and correction exercises. When students knew how to find information on wine labels but could not explain why they were saying so, the instructor used additional oral exercises to make them justify their reasoning. The reflections of the instructor were considered an important part of OBA since they enabled the assessment and improvement of the instruction methods. Through the 14 reflection reports, everyday teaching experiences were transformed into analyzable research data and were used as a basis for revising the assessment system in the subsequent design iteration.

5. Conclusion

In accordance with DBR, this study explored the use of OBA in a university-level EMI wine course. Based on the original syllabus, expert reviews, interviews with students, and instructor reflections, this study continuously examined the alignment among the intended learning outcomes, instructional activities, assessment tasks, and evidence of student learning. The results show that the introduction of OBA is not simply about adjusting the weight of the assessment components. On the contrary, it requires beginning with the professional competencies that students are expected to demonstrate upon completing the course and reconsidering the learning experiences that should be provided, the evidence of learning that should be collected, and the criteria by which students' achievement of the intended outcomes should be judged. This design process is consistent with the backward design approach proposed by Wiggins and McTighe (2011) and Fink's (2013) principles of integrated course design, both of which emphasize the need to establish mutually reinforcing relationships among learning

outcomes, instructional activities, feedback, and assessment.

Regarding the first research question, the results reveal that 15 instructional objectives primarily represented a list of content areas. There was overlap among some objectives, and the syllabus failed to sufficiently explain how students should link their professional knowledge, practical skills, and English communicative skills. Written midterm and final exams formed 60% of the course grade. Although these assessments could measure students' memorization and understanding of wine knowledge, they did not necessarily provide evidence that they could read wine labels, describe wines, or suggest food-and-wine pairings in a hospitality context. These results corroborate the arguments of Noyes and Garland (2008) in relation to the contextual limitations of traditional written exams. The original 15 instructional objectives were condensed down to six observable and measurable learning outcomes. They required students to demonstrate combining knowledge, performance, professional decision-making, and English language skills. This is consistent with Carless's (2017) view that assessment in higher education should go beyond memorization of knowledge and allow students to apply their knowledge in analysis, problem solving, and professional decision-making. The results are also consistent with the processes of experiencing, reflecting on, and applying knowledge discussed in the literature on experiential learning (Brailas et al., 2017; Morris, 2020).

Regarding the second research question, the main problems faced when implementing the OBA design in the classroom involved differences in students' level of English proficiency and their background knowledge about wine, as well as the extra workload that both students and the instructor would have to take on because of the comprehensive assessment process. In an EMI professional course, English serves as both the medium through which disciplinary content is taught and an essential means by which students demonstrate professional competence. Some students understood wine-related concepts and operational procedures but were unable to fully demonstrate their learning in integrated tasks because of limited professional vocabulary or a lack of confidence in oral communication. Conversely, students with stronger English proficiency were not always able to provide professionally grounded analyses because of their limited prior knowledge of wine. Students' task performance therefore resulted from the interaction among professional knowledge, practical skills, and English communication abilities. To overcome these difficulties, wine-related vocabulary, sentence structures, examples, practice, and tasks were introduced in learning activities. All the aforementioned tools allowed learners with different levels of linguistic ability and academic backgrounds to develop integrated skills without reducing the quality of existing criteria. According to Massa and Kasimatis (2017), these results demonstrate that the OBA approach aims not to increase the number of evaluations but to gather proper evidence of competence.

Regarding the third research question, five OBA design principles were derived for professional EMI courses. First, instructional objectives should be changed to observable and measurable intended learning outcomes that incorporate professional knowledge, skills, and communication competencies. Second, assessment activities should move from basic knowledge and isolated skills to professional tasks to allow formative assessment to serve diagnostic, practice, and preparation functions. Third, unnecessary assignments whose purpose is duplicated by other assessments or that do not produce valid results should be minimized; integrated assessments should be used to test interrelated outcomes simultaneously. Fourth, differentiating content and language scaffolding should be provided depending on students' English proficiency level and initial readiness for learning. Fifth, the assessment criteria should correspond to the characteristics of the intended outcomes. Tasks related to professional procedures should be assessed in terms of accuracy and completeness; however, open-ended tasks such as food-and-wine pairings and flavor interpretation should be evaluated in terms of professional reasoning and communication.

To address the research questions, this study adopted an iterative DBR process to develop, implement, evaluate, and refine the OBA design for the EMI wine course. As illustrated in Figure 1, evidence from syllabus analysis, expert reviews, classroom implementation, student data collection, and teacher reflections informed subsequent revisions. Beyond evaluating the course design, this cycle provides a practical framework that other EMI instructors may adapt to examine existing course arrangements, align learning outcomes with assessment evidence, and refine disciplinary and language support in response to students' learning needs.

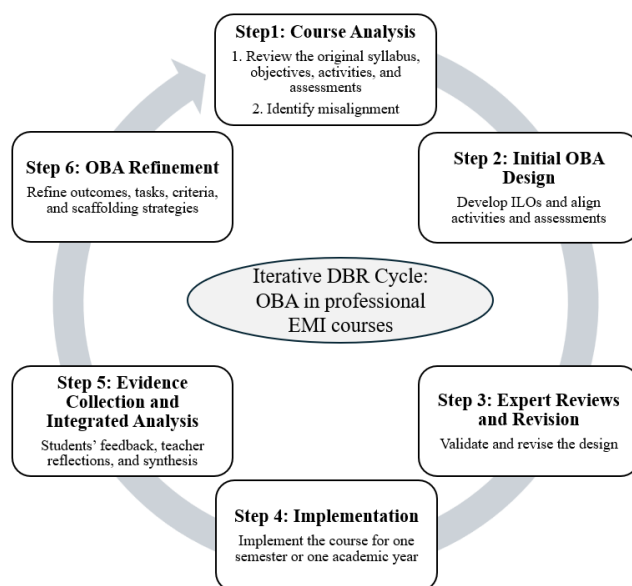


Figure 1. Iterative DBR Cycle for Developing and Refining OBA in Professional EMI Courses

6. Pedagogical Implications

The findings of this study provide practical implications for teaching and assessment in hospitality, service-related, and other EMI courses. First, instructors should transform objective-based course content into measurable professional competencies and ensure alignment between practical activities and outcomes and their assessment. The intended learning outcomes should specify what students should understand, how they should apply that knowledge in professional tasks, and how they should use English to describe, explain, or provide services. Activities such as wine tasting, food-and-wine pairings, service simulations, field visits, and product presentations should generate assessable evidence through tasting records, practical demonstrations, or reflections. This corresponds with the ideas of backward design (Wiggins & McTighe, 2011) and the recognition that only if experience is linked to reflection, application, and assessment can there be any meaningful learning (Brailas et al., 2017; Morris, 2020).

Second, language assistance needs to be incorporated into professional activities depending on students' English proficiency level, their backgrounds, and their prior knowledge. Educators can provide learners with vocabulary in the professional context, sentence models, and practice. This does not lower the expectations of learners; instead, it gives them alternative ways to achieve the same professional results. By integrating language assistance in disciplinary activities, students can also have a chance to showcase their professional knowledge without risking misinterpretation of their English skills.

Third, assessment should distinguish among different dimensions of competence while remaining feasible in actual classroom contexts. Professional knowledge, professional judgment, and English communication can all be assessed separately when necessary, as opposed to just using an overall holistic mark. However, OBA does not require a separate assignment for every outcome or the grading of every classroom activity. A small number of integrated professional tasks may assess several related outcomes simultaneously, supplemented by individual evidence such as tasting records, label interpretation exercises, brief oral responses, or reflections. This makes it easier to assess individual performance without creating repetitive assessments for large classes, which is in line with the approach of Massa and Kasimatis (2017) to meaningful and manageable assessment.

7. Limitations and Future Research

This study has several limitations. First, this research was conducted in one EMI wine course at one

institution in Taiwan. The content of the course, students' background, the instructor's experience, and the specific institutional context could have impacted how the OBA strategy was designed and implemented. Although the five design principles can be useful for other hospitality-oriented EMI courses, they cannot apply to all disciplines and years of study. Additionally, only four students participated in the interviews. These were first-year Applied English and second-year Hotel Management students. The interviews reflected their different English language skills and academic disciplinary backgrounds but did not reflect the diverse experiences of the whole group. Since this study focused on the development of the first iteration of OBA, there is no information about the effect of this approach on students' professional knowledge, skills, or English language communication.

Second, the instructor simultaneously served as the course designer, implementer, and researcher; therefore, the reflections may have been influenced by personal teaching beliefs, research expectations, and subjective interpretations. Although the data collected through analysis of the syllabus, reviews by two experts, student interviews, and 14 instructor reflection reports were triangulated, there is no guarantee that researcher bias could not have affected the study. Further research could adopt the same principles in designing EMI classes in the hospitality or service industries, repeating DBR cycles in multiple contexts and comparing multiple courses. It could also include students with varied abilities and backgrounds and incorporate external classroom observations, focus groups, learning process records, pre- and posttests, assessments of student work, and evidence of rubric reliability. These approaches would provide a stronger basis for evaluating the effectiveness, transferability, and sustainability of OBA in professionally oriented EMI courses. This is an example.

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