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An Exploration of Teaching Model Reform for General Education Courses on Ceramic Culture under the OBE Framework: A Case Study of Jingdezhen Ceramic University

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Keywords: Outcome-Based Education (OBE); Ceramic culture; General education courses; Teaching model reform

Abstract: Ceramic culture integrates historical memory, technical knowledge, and aesthetic experience, making it an important resource for cultural education within university general education. Although considerable progress has been made in the development of general education courses on ceramic culture, these courses continue to face practical challenges, including knowledge-centered instruction, insufficient practical engagement, learning objectives, and overly uniform assessment methods, particularly in the context of higher education's increasing emphasis on cultural inheritance and comprehensive competency development. Taking the general education courses on ceramic culture at Jingdezhen Ceramic University as the research focus, this study introduces the concept of Outcome-Based Education (OBE) and reconstructs the course teaching model around student learning outcomes. The reform is carried out in terms of learning outcome dimensions, teaching content, instructional implementation, and assessment mechanisms. The study finds that the OBE framework can effectively promote the coordinated development of knowledge acquisition, competency development, and value cultivation in ceramic culture education. It provides a feasible approach to enhancing the practicality, openness, and educational effectiveness of general education courses, and offers useful reference for the reform and quality assurance of other courses featuring distinctive local cultural characteristics.

1. Introduction

Ceramic culture, as an important component of China's outstanding traditional culture, embodies the historical memory, craftsmanship, and aesthetic aspirations of the Chinese nation throughout its development. It also reflects values such as the pursuit of excellence, adherence to fundamental principles while embracing innovation, and openness and inclusiveness. Integrating ceramic culture into general education at universities can not only help students understand the history of ceramics, its production techniques, and its artistic aesthetics, thereby enhancing their humanistic literacy, but also guide them to strengthen their cultural identity, build cultural confidence, and develop sound values through learning.

Drawing on local ceramic cultural resources and the university's disciplinary strengths in ceramics, Jingdezhen Ceramic University "began incorporating general education courses on Chinese ceramic culture into the talent-training system for non-ceramic-art majors in 2007, and has since comprehensively developed and implemented these courses based on the principle of 'educating through culture and cultivating students through cultural enrichment.' These courses are designed to foster individual development and innovation among the elective general education offerings. They are intended for undergraduate students majoring in fields other than ceramic art, and are characterized by their strong accessibility, breadth, educational content, novelty, and educational value" [1]. At present, Jingdezhen Ceramic University offers more than 30 general education courses related to ceramic culture, including Introduction to Ceramics, Ceramic Technology, Ceramic Appreciation and Production, and Cultural Exchanges in Chinese and Foreign Ceramics. The university has accumulated extensive practical experience in talent cultivation, teaching reform, and the integration of ideological and political education into instruction. At the same time, because ceramic culture encompasses a wide range of fields, these courses also face numerous challenges, which significantly constrain the full realization of their educational value. Taking Jingdezhen Ceramic University as a case study, this research analyzes the problems existing in current course instruction, explains the theoretical basis and practical relevance of integrating the Outcome-Based Education (OBE) philosophy into curriculum reform, and proposes pathways for reforming the teaching model in terms of learning outcomes, teaching content, instructional implementation, and assessment mechanisms. In doing so, it aims to provide a reference for the development of courses featuring distinctive local cultures.

2. An Exploration of Teaching Model Reform for General Education Courses on Ceramic Culture under the OBE Framework—A Case Study of Jingdezhen Ceramic University

2.1. Current Status and Problems of General Education Courses in Ceramic Culture

Jingdezhen Ceramic University is a multidisciplinary university named after ceramics. It places equal emphasis on the arts and engineering and promotes the integration of art, engineering, and business. The university offers a relatively comprehensive system of general education courses in ceramic culture, covering such areas as the history of ceramic development, ceramic production techniques, ceramic art appreciation, and exchanges between Chinese and foreign ceramic cultures. After two decades of continuous practice and improvement, the development of these courses at Jingdezhen Ceramic University has achieved notable results. Drawing on the region's rich cultural resources, including historical remains, traditional craftsmanship, production sites, cultural spaces, and industrial resources, the courses have gradually expanded in content, while their teaching formats have also become increasingly diverse. In addition to traditional classroom and online instruction, the university has introduced on-site teaching at kiln sites, museums, and other locations.

Nevertheless, the development of general education courses in ceramic culture at Jingdezhen Ceramic University still faces a number of practical difficulties and challenges, which are reflected in the following aspects. First, an examination of the syllabi and classroom implementation of some courses indicates that their objectives generally focus primarily on knowledge acquisition, while the objectives related to cultural understanding, aesthetic judgment, practical competence, and value identification are not sufficiently specific. Second, some courses are still organized mainly around textbook chapters, with instructors delivering content in a fixed, sequential manner. Although this teaching model is conducive to achieving broad knowledge coverage, it does not facilitate the development of students' holistic and contextualized understanding of ceramic culture. Third, with regard to classroom participation, although teaching formats have gradually diversified, teacher-led instruction remains the predominant approach. Classroom discussions often remain at the level of

superficial subjective judgments, while practical activities sometimes consist mainly of visits and experiential activities. Following these activities, systematic documentation and presentation of learning outcomes are not always produced. The use of online resources sometimes merely treats them as one component of instruction, rather than establishing a complete learning cycle that integrates self-directed learning before class, in-depth discussion during class, and the application of learning outcomes after class. Fourth, some general education courses in ceramic culture still rely primarily on course papers or final assignments for assessment. The evaluation methods are therefore relatively limited and do not adequately demonstrate students' comprehensive learning outcomes, making it difficult to fully reflect their abilities in aesthetic judgment, cultural interpretation, practical engagement, and innovative expression.

2.2. Theoretical Basis and Relevance of Integrating the OBE Philosophy into General Education Courses in Ceramic Culture

Outcome-Based Education (OBE), proposed by American scholar William G. Spady in 1981, is based on the fundamental principle of "Success for All" [2]. OBE "advocates designing the curriculum system, that is, the talent-development process, in reverse according to the expected final learning outcomes of students, namely, the quality objectives for professional talent development, thereby forming a systematic closed loop for the continuous improvement of teaching quality" [3]. It generally encompasses three fundamental principles: outcome orientation, student-centeredness, and continuous improvement. Outcome orientation requires courses to shift from a teacher-centered approach to a student-centered one, moving the focus from what teachers have taught to what students have learned. Student-centeredness emphasizes organizing teaching activities in accordance with students' learning foundations, developmental needs, and individual differences. Continuous improvement requires the ongoing adjustment of course objectives, content, activities, and assessment based on students' performance and course evaluations. Guided by the OBE philosophy, course instruction should follow the basic approach of "backward design and forward implementation." First, it is necessary to clarify the expected outcomes that students should achieve upon completing the course, and then determine the teaching content, learning activities, and assessment methods based on those outcomes. Teachers should organize instruction according to the established course objectives and guide students toward achieving the expected outcomes through various learning activities.

The OBE philosophy is consistent with the objectives of general education. "In terms of its orientation, the purpose of general education is to address the problems of an overly narrow knowledge structure and inadequate comprehensive competencies resulting from specialized education" [4]. The essence of general education lies in breaking through the limitations of traditional academic disciplines and focusing on the development of the whole person, with an emphasis on improving students' comprehensive competencies in areas such as thinking, aesthetic appreciation, value judgment, and cultural identity. Unlike specialized education, which emphasizes the systematic nature of disciplinary knowledge, general education places greater emphasis on the connections among different types of knowledge and requires students to use multidisciplinary knowledge to make judgments and express themselves when confronted with complex cultural phenomena. The OBE philosophy provides an operational pathway for achieving precisely this kind of comprehensive development. By taking "what students will ultimately be able to do" as the starting point of curriculum design, OBE integrates teaching content, activities, and assessment through learning outcomes. In this sense, OBE itself represents the concrete implementation of the general education philosophy at the course level.

General education courses in ceramic culture are a typical manifestation of this consistency. Such courses focus not only on students' acquisition of knowledge concerning the history of ceramic development, production techniques, and ceramic art appreciation, but also on developing their abilities to interpret cultural phenomena, analyze the value of artifacts, complete creative expression, and participate in public cultural communication. Their learning outcomes encompass interrelated dimensions, including cultural understanding, aesthetic judgment, practical expression, interdisciplinary collaboration, and value identification, and are therefore inherently comprehensive. This is highly consistent with the outcome orientation advocated by OBE. For example, Introduction to Ceramics, a general education course offered by the School of Archaeology and Museology at Jingdezhen Ceramic University, sets course objectives that include "popularizing ceramic knowledge, disseminating culture and art, promoting the spirit of craftsmanship, and enhancing humanistic literacy" [5]. This indicates that the course reflects an outcome-based educational logic that closely corresponds with the OBE philosophy. These multiple correspondences in terms of educational objectives constitute the foundation for integrating OBE into general education courses in ceramic culture, while also providing clear direction for the subsequent reconstruction of teaching content, design of learning activities, and optimization of assessment.

2.3. Pathways for Reforming the Course Teaching Model under the OBE Philosophy

(1) Reconstructing the Course Objective System with Learning Outcomes as the Core

Curriculum reform should first clarify the learning outcomes that students are expected to achieve upon completing the course. "Clearly defined learning outcomes are explicit statements of what learners know and are able to do at the end of a learning program. When accompanied by appropriate assessment methods, they provide a transparent means of understanding student learning and serve as a way to understand, substantiate, and evaluate educational quality" [6]. Learning outcomes can generally be divided into three dimensions: knowledge and understanding, competency development, and value formation.

For the general education course Introduction to Ceramics, the outcomes related to knowledge and understanding should include an understanding of the main categories of Chinese ceramics and the basic trajectory of their development; mastery of ceramic production techniques; familiarity with representative kiln centers, artifact types, and ceramic art phenomena; and an understanding of the relationship between ceramics and traditional cultural practices involving food, wine, tea, and other aspects of life, as well as the influence of Chinese ceramic culture on the world.

In terms of competency development, students should acquire basic abilities in observing and appreciating ceramics and be able to analyze ceramic works from the perspectives of form, decoration, craftsmanship, function, and cultural context. They should also develop abilities in information retrieval, field observation, problem analysis, and oral and written expression. In addition, they should be able to participate in simple ceramic-making activities and develop an intuitive understanding of material properties and production processes. Through teamwork, they should be able to complete comprehensive tasks such as ceramic culture investigations or cultural and creative product design.

In terms of value formation, students should understand the importance of ceramic culture as an important component of China's outstanding traditional culture, thereby strengthening their cultural identity and cultural confidence. They should recognize the cultural significance of craftsmanship, innovation, openness, and inclusiveness, and reflect on pathways for the inheritance and innovation of ceramic culture in contemporary society.

(2) Rationally Reorganizing Course Content around Outcome Requirements

In the implementation of traditional general education courses in ceramic culture, teacher-led instruction often follows disciplinary logic and proceeds sequentially through knowledge-based

chapters. Although this approach ensures the systematic and comprehensive transmission of knowledge, it objectively organizes knowledge into a closed chain of chapters. Students consequently tend to rely primarily on memorization and recitation, while lacking the initiative to explore the internal connections among different areas of knowledge. In addition, assessment methods are often designed to correspond to knowledge transmission, relying mainly on final examinations or knowledge-based course assignments. The focus of assessment is concentrated on factual knowledge, making it difficult to reflect students' actual development in cultural understanding, aesthetic judgment, practical expression, and value identification. To overcome these difficulties, it is necessary to reconstruct the logic of course implementation as a whole on the basis of learning outcomes. In accordance with the OBE approach of "backward design and forward implementation," teachers should first clarify the outcomes students are ultimately expected to achieve and then select appropriate teaching content and learning activities accordingly.

Course content need not continue to be taught according to the sequence of knowledge-based chapters. Instead, it can be reorganized around cultural themes and problem-based tasks. While retaining the fundamental content of ceramic history, ceramic technology, ceramic culture, ceramic appreciation, and ceramic exchange, the course can be structured into several interrelated thematic modules characterized by comprehensiveness, innovation, an outward-looking perspective, and theoretical depth. These modules may include "Ceramics and Chinese Civilization" "Ceramics and Craft Materials" "Ceramics and Chinese Culture" "Ceramics and Civilizational Exchange" and "Ceramics and Contemporary Innovation".

Within each theme, one or more open-ended and exploratory core questions can be proposed, transforming the teaching content into practical learning tasks. For example, under the theme "Ceramics and Craft Materials", a task can be designed around the question "How does clay become an artifact through technology?" Students would be required to analyze how each stage of the process, including clay preparation, glaze preparation, forming, glazing, decoration, and firing, affects the form and aesthetics of an artifact, and finally present the production process in the form of a flowchart. When questions drive learning tasks, the knowledge within each module is no longer an object of isolated memorization. While completing thematic tasks, students can simultaneously achieve the course objectives of knowledge and understanding, competency development, and value formation. Through the rational reorganization of teaching content, the course can preserve the knowledge system required of a general education course in ceramic culture while providing a clear outcome-oriented basis for designing learning activities and assessment methods.

(3) Innovating Teaching Implementation through Authentic Tasks

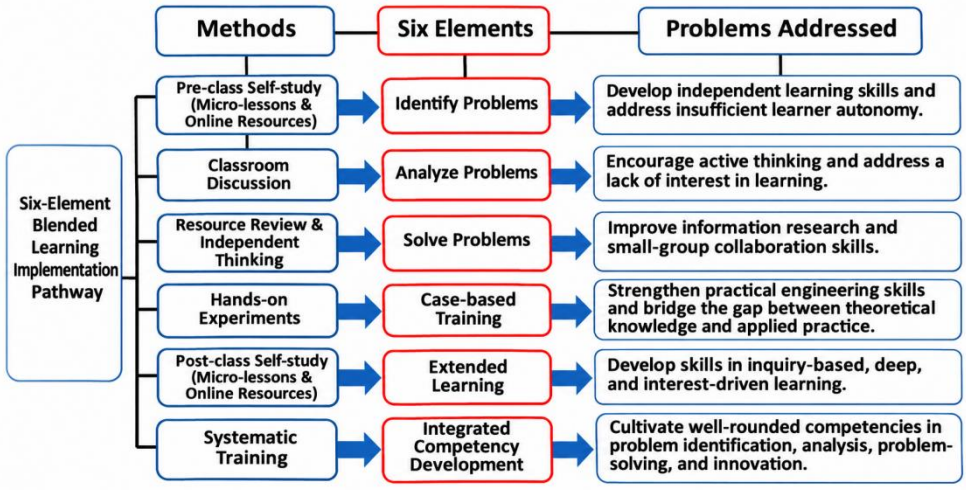

Figure 1 Implementation Pathway for the "Six-Element" Teaching Approach.

Under the OBE philosophy, teaching implementation should take the full development of students' initiative as its guiding principle. In accordance with the characteristics of ceramic culture courses, it is possible to construct a "six-element" blended implementation pathway consisting of "problem discovery, problem analysis, problem solving, case-based practical training, extended learning, and competency development" (see Figure 1). This pathway is intended to improve students' abilities in self-directed learning, exploratory learning, innovation, and practical application.

Through the blended implementation of the "six-element" approach, students experience a complete learning process that moves from raising questions to active inquiry, from understanding concepts to applying them in practice, and from classroom learning to the internalization of broader competencies. Learning thus becomes an iterative process of growth guided by questions, driven by tasks, supported by practice, and directed toward competency development. Throughout this process, students not only develop a systematic understanding of ceramic culture but also acquire transferable self-directed learning skills and comprehensive competencies through active exploration, collaboration, communication, and the presentation of outcomes. They thereby move from being passive recipients to active learners, and from memorizing knowledge to understanding culture and participating in practice.

2.4. Establishing a Diverse Assessment System to Promote the Achievement of Learning Outcomes

Assessment reform is a requirement for the high-quality development of higher education and an important component of OBE-based curriculum reform. General education courses in ceramic culture should establish a diverse assessment system aligned with course objectives. Such a system should combine summative and formative assessment, teacher and student assessment, and assessment of knowledge and abilities, thereby using assessment to improve both teaching and learning.

In the relationship between summative and formative assessment, greater emphasis should be placed on formative assessment than in traditional assessment approaches, which tend to focus on final outcomes. In 2018, China's Ministry of Education issued the Opinions on Accelerating the Development of High-Level Undergraduate Education and Comprehensively Improving Talent Development Capacity, which stated: "Strengthen examination management, implement rigorous assessment throughout the learning process, and increase the proportion of the overall course grade allocated to such assessment" [7]. Formative assessment attends to the entire learning process and mainly includes pre-class learning and classroom participation, practical activities and process records, group projects, and individual assignments completed at different stages. Summative assessment may take the form of comprehensive projects, course papers, thematic presentations, or final examinations, focusing on students' ability to apply ceramic culture knowledge to investigate problems and communicate their findings. The two forms of assessment are not isolated from each other. Their respective weightings should be determined according to the nature of the course, and the assessment content must correspond to the expected learning outcomes.

With regard to teacher and student assessment, the traditional model in which teachers are the sole assessors should be changed by introducing student self-assessment and peer assessment. Teacher assessment should focus on the academic quality, adherence to academic standards, and cultural depth of learning outcomes. Student self-assessment should emphasize reflection on the learning process, achievements, and areas for improvement. Peer assessment should focus on observing classmates' contributions to teamwork, expression of ideas, and task completion. The participation of multiple assessors can help improve the objectivity of assessment.

In the assessment of knowledge and abilities, knowledge assessment primarily examines students' grasp of foundational knowledge concerning ceramic history, craftsmanship, appreciation, and

cultural dissemination and exchange. This can be assessed through classroom participation and individual assignments completed at different stages. Assessment of abilities, by contrast, primarily examines whether students can apply their knowledge to cultural interpretation, artifact appreciation, practical work, and creative expression. These abilities can be evaluated mainly through reports, presentations, and records of practical activities. The two types of assessment should maintain a reasonable balance in the overall evaluation, ensuring that abilities are assessed alongside knowledge while also preventing insufficient attention to foundational knowledge from limiting students' development of abilities.

An outcome-oriented, diverse assessment system not only responds to course objectives but also gives students opportunities to demonstrate a range of learning outcomes. It can therefore provide a more comprehensive evaluation of student learning and strong support for the continuous improvement of the teaching model, helping to raise the overall standard of teaching and educational quality.

3. Conclusions

The OBE philosophy provides a feasible pathway for reforming general education courses in ceramic culture, shifting their focus from knowledge transmission to the achievement of learning outcomes. This requires course objectives to be incorporated into teaching content, learning activities, and assessment mechanisms. When setting course objectives, greater attention should be paid to what students can gain in knowledge and understanding, competency development, and value formation upon completing a course. Course content should move away from the sequential presentation of knowledge by chapter toward thematic, problem-based, and task-based design. Teaching should shift from a primarily lecture-based approach to one that combines active student participation, practical experience, and the presentation of learning outcomes. Assessment should move from a single form of summative evaluation toward a diverse mechanism that combines summative and formative assessment, teacher and student assessment, and assessment of knowledge and abilities. Only in this way can ceramic culture truly become an important educational resource through which students understand Chinese civilization and develop comprehensive competencies.

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References

[1] Ning Chen, Siqi Hu, Jing Li, Zhou Long and Peng Xing. Application and Exploration of Curriculum-Based Ideological and Political Education in General Education Courses on Chinese Ceramic Culture: A Discussion Centered on the "Taoda Practice." China Light Industry Education, (2024) 27(3), 54-62.

[2] Spady, W G. and Marshall, K G. Beyond Traditional Outcome-Based Education. Educational Leadership, (1991) 2, 65-74.

[3] Weidong Liu, Lei Huang and Ruowen Feng. Reconstructing the Undergraduate Teaching Quality Management System Based on the OBE Talent-Cultivation Model. Journal of the National Academy of Education Administration, (2021) 10, 19-30.

[4] Hongmei Lü. Reflection and Reconstruction: An Exploration of Chinese-Style General Education in the New Era. Jiangsu Higher Education, (2023) 12, 69-75.
[5] Xinming Sun. Exploring the Teaching Reform of General Education Courses in Ceramic Culture through the Integration of General Education and Professional Characteristics: A Case Study of the Introduction to Ceramics Course at Jingdezhen Ceramic University. Modern Education and Practice, (2025) 18, 142-144.
[6] ADAM S. An Introduction to Learning Outcomes: A Consideration of the Nature, Function and Position of Learning Outcomes in the Creation of the European Higher Education Area. EUA Bologna Handbook, (2006), 68.
[7] Ministry of Education of the People's Republic of China. Opinions on Accelerating the Development of High-Level Undergraduate Education and Comprehensively Improving Talent-Cultivation Capacity. Gazette of the Ministry of Education of the People's Republic of China, (2018) 9, 18-24.