Optimization and Practical Exploration of the Teaching Quality Evaluation System in Applied Universities under the OBE Orientation

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Abstract: Against the backdrop of high-quality development in higher education in the new era, traditional teaching quality evaluation systems face an urgent need to shift from process-oriented to outcome-oriented models. As a major trend in global education reform, the Outcome-Based Education (OBE) concept offers new theoretical guidance and practical pathways for reconstructing the teaching quality evaluation system in universities. This study focuses on the fundamental conflict between traditional evaluation systems and the OBE concept, analyzing the limitations of the current evaluation system at Guangzhou Huashang College in terms of outcome orientation, dynamic feedback mechanisms, and continuous improvement capabilities. Based on literature review and empirical research, a theoretical framework for teaching quality evaluation in universities integrating OBE principles is constructed. A restructured evaluation model is proposed, characterized by backward design as the logical starting point, learning outcomes as the core standard, and continuous improvement as the driving mechanism. On this basis, and in light of the practical context of Guangzhou Huashang College, the study explores optimization paths for the evaluation indicator system, redesign of the evaluation process, and application of data feedback.

Keywords: Outcome-Based Education (OBE); Teaching Quality Evaluation in Higher Education; Evaluation System Reconstruction; Continuous Improvement

1. Introduction

As global higher education quality assurance systems undergo continuous reform, the concept of Outcome-Based Education (OBE) is increasingly recognized as a key theoretical framework for enhancing educational effectiveness and alignment with societal needs.In 2020, the Overall Plan for Deepening Education Evaluation Reform in the New Era explicitly called for breaking the evaluation system that relies solely on exam scores, academic promotions, diplomas, papers, and academic titles. The plan aims to shift higher education from scale expansion to quality enhancement. In 2021, the Ministry of Education released the Implementation Plan for the Audit and Evaluation of Undergraduate Education and Teaching in Regular Colleges and Universities (2021–2025), which emphasizes classroom teaching that is "student-centered and teacher-led" and promotes outcome-based teaching evaluation focused on student learning achievements. These policy directives pose new demands on the evaluation systems of higher education institutions, driving a transition from traditional process control to dynamic improvement mechanisms centered on actual student learning outcomes.

From a theoretical research perspective, current studies on OBE, both domestically and internationally, largely focus on curriculum design, teaching reform, and graduation requirement development [1]. However, there is a relative lack of systematic research on the application of OBE principles to comprehensive teaching quality evaluation systems in universities. In particular, how to integrate OBE into evaluation standards, processes, and continuous improvement mechanisms remains underexplored, with few theoretical models or practical strategies that are systematic and operational. Therefore,

constructing a teaching quality evaluation system that aligns with OBE and enables a closed-loop cycle of "goal–evaluation–feedback–improvement" is not only a theoretical imperative but also a practical necessity for enhancing the quality of higher education.

This study positions itself at the intersection of OBE theory and teaching quality evaluation, drawing on the reform practices of Guangzhou Huashang College. It aims to explore new pathways for reconstructing university teaching quality evaluation systems. On one hand, the study seeks to deepen the theoretical application of OBE in educational evaluation, enriching the theoretical framework that bridges outcome-based education and quality assurance systems. On the other hand, at the practical level, it endeavors to provide feasible reform strategies for teaching quality evaluation, particularly for applied undergraduate institutions, thereby supporting their connotative development and the continuous improvement of educational quality.

2. Comparison Between the OBE Concept and Traditional Evaluation System Paradigms

2.1 Core Connotations of the OBE Concept

Due to differences in historical context and research perspectives, scholars have varying definitions and interpretations of Outcome-Based Education (OBE). In 1981, American scholar Spady conducted an in-depth study of OBE in his book Outcome-Based Education: Critical Issues and Answers, proposing that OBE is “a clearly focused and organized educational system designed to ensure students achieve significant success in their future lives” [2]. With the continuous development of theory and practice, OBE has been widely promoted and applied in countries such as China, the United States, the United Kingdom, and Malaysia. OBE is a structured and systematic approach that centers on learning outcomes, drives all curriculum activities, and assesses students based on their achievement of those outcomes. In this educational model, what students learn and whether they succeed are considered more important than how or when they learn. The Australian Ministry of Education formally defines OBE as “an educational process based on achieving specific student learning outcomes. Student outcomes drive the operation of the educational system, while educational structures and curricula are regarded as means rather than ends. If they do not contribute to the development of specific student competencies, they should be restructured”. Typically, learning outcomes in OBE go beyond academic scores and refer to students’ abilities to perform tasks in specific contexts at the end or after the learning process, as demonstrated through observable behavior [3].

This study aligns with the positioning of applied and innovative universities, clarifying graduation requirements and embedding outcome-oriented teaching methods into the talent cultivation program. Through backward curriculum design, OBE is integrated into various dimensions such as student development, instructional design, curriculum structure, resource allocation, and academic management. At the theoretical framework level, the aim is to build a scientific, operational, and measurable evaluation system to support teaching quality monitoring, evaluation, and feedback. Additionally, an OBE-based evaluation indicator system and feedback mechanism have been established to ensure alignment with the university’s talent training objectives. Ultimately, this system will promote goal-oriented teaching management, curriculum reform, instructional improvement, and innovation in learning processes, ensuring coherence between macro- and micro-level educational design and clearly defined learning outcomes.

2.2 Limitations of the Traditional University Teaching Quality Evaluation System

In long-term practice, traditional university teaching quality evaluation systems have gradually revealed structural deficiencies, notably the three major problems of “goal deviation, stakeholder imbalance, and rigid mechanisms,” which severely hinder the effectiveness of “evaluation-driven development.”

First, the design of evaluation indicators suffers from the dual contradiction of “process

orientation" and "capability absence." Current evaluation systems overemphasize easily quantifiable surface-level indicators [4], such as teaching behaviors and resource investment. For example, in the 2023–2024 academic year undergraduate teaching quality evaluation report of Guangzhou Huashang College, data primarily focused on faculty resources, teaching conditions, teaching construction, and program development capabilities. Although satisfaction rates for majors, courses, teaching methods, and assessment approaches exceeded 90%, there was a noticeable lack of indicators and data reflecting students' achievement in higher-order abilities such as "complex problem-solving," "innovation capability," and "interdisciplinary practice outcomes."

Second, the overly centralized structure of evaluation stakeholders results in "perspective blind spots" and "interest imbalances." Traditional evaluations heavily rely on vertical oversight by administrative departments, while key stakeholders such as students and industry representatives are marginalized [5].This mono-perspective structure not only obscures authentic feedback on teaching quality from diverse viewpoints but also leads to systemic bias in evaluation results due to the imbalance in power and discourse, ultimately weakening the alignment between educational services and societal needs.

Lastly, the feedback mechanism in traditional evaluations faces the dilemma of "data dormancy" and "disconnected improvements." A critical flaw is that the evaluation results are not timely or effectively translated into actionable support for teaching improvement [6]. Evaluation data is dispersed across various platforms such as academic affairs systems, student services systems, and supervisory reports. The absence of a centralized data platform and standardized data-cleaning protocols hinders cross-department integration. Furthermore, due to the lack of dynamic tracking mechanisms and interdepartmental coordination, improvement measures often become formalities. "Problem notification" and "corrective implementation" fall under different departments, with unclear accountability. Most improvement actions lack quantitative assessment criteria and rely solely on submitting reports as a token of closure.

2.3 Paradigm Conflicts and Integration Pathways

University teaching quality evaluation systems are currently undergoing a deep paradigm shift marked by structural conflicts. Traditional evaluation systems are teacher-centered, focusing on instructional behavior, process management, and input resources, with compliance and surface-level standardization serving as the primary assessment criteria. This administration-driven model, while effective in maintaining basic teaching order, often neglects the variability and generative nature of student learning outcomes, thereby hindering the intrinsic enhancement of higher education quality. In contrast, the Outcomes-Based Education (OBE) approach advocates for a student-centered model, emphasizing the knowledge, skills, and competencies ultimately acquired by learners. OBE shifts the logic of educational evaluation from "process compliance" to "outcomes orientation," triggering fundamental tensions between the two paradigms.

Against this backdrop, constructing an integrated evaluation pathway that merges traditional systems with the OBE concept requires a comprehensive understanding of the three core features of the OBE evaluation system:

First, Goal Orientation. The OBE evaluation framework centers on clearly defined learning outcomes. All teaching activities and assessment designs must align backward with predetermined student competency standards. This means that evaluation standards must go beyond procedural inspection and focus on the verifiability of learning outcomes, ensuring a high degree of consistency between educational goals and actual results.

Second, Evidence-Based Assessment. Unlike traditional assessments that rely heavily on subjective impressions or simplified scoring, OBE emphasizes evaluation supported by concrete, observable, and measurable evidence of learning. This includes, but is not limited to, student portfolios, project outcomes, skill assessments, and internship performance. Such a system fosters a multi-source, comprehensive evaluation approach, improving both the reliability and practical applicability of assessment results [7].

Third, Continuous Improvement. The OBE evaluation model values not only the results of a single assessment but also the ongoing cycle

between evaluation and instructional improvement. Through a sustained data feedback mechanism, it establishes a complete cycle of "goal setting — instructional implementation — outcome assessment — strategy adjustment — reassessment," thus enabling self-correction and continual optimization in the teaching process. This approach ensures the dynamic enhancement of educational quality over time [8].

Therefore, paradigm conflict is not inherently irreconcilable. Through conceptual renewal, structural reform, and mechanism innovation, a smooth transition from "teacher-centered" to "learner-centered" evaluation can be achieved. This transformation injects intrinsic momentum into the university teaching quality assurance system, rooted in student development.

3. Constructing the Theoretical Framework for the OBE-Based Teaching Quality Evaluation System in Higher Education Institutions

To construct an OBE-oriented teaching quality evaluation system in universities, it is essential first to clarify the definition of personal development under the OBE (Outcome-Based Education) philosophy. Only by defining personal development can we reverse-engineer the design of talent cultivation goals, curriculum systems, and various aspects of classroom teaching. In today's society, personal development based on the OBE approach emphasizes an outcome-oriented perspective that focuses on the comprehensive cultivation and continuous improvement of individuals' knowledge, competencies, qualities, and social adaptability.

For university students, this means attention not only to professional knowledge and skills but also to the development of essential "soft skills" such as communication and coordination, problem-solving, creative thinking, teamwork, and digital literacy. In the context of rapidly evolving knowledge and technology, the ability to engage in lifelong learning and self-renewal has become a crucial indicator of one's capacity to adapt to social transformation [9].Furthermore, personal development under OBE also concerns growth in areas such as professional competence, social responsibility, and civic awareness. A positive psychological state, a well-balanced life, and a sense of satisfaction with one's personal development have become important dimensions in evaluating the holistic development of modern individuals.

The teaching quality evaluation system model based on the OBE concept is fundamentally student-centered and outcome-oriented. The model emphasizes the organic connection among teaching objectives, instructional processes, and learning outcomes. By adopting diversified assessment mechanisms and dynamic feedback systems, it ensures the continuous improvement of teaching activities, ultimately achieving the intended learning outcomes.

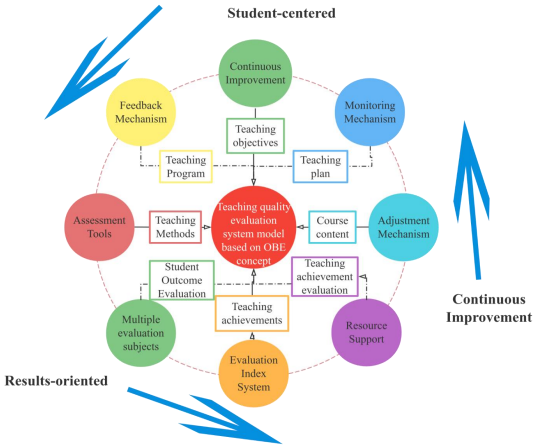

Figure 1.Teaching Quality Evaluation System Model Based on the OBE Concept

As shown in figure 1, the model takes "student-centered, outcome-oriented, and continuous improvement" as its core principles, and constructs a systematic and scientific theoretical framework for the evaluation of college teaching quality. A dynamic closed loop from outside to inside is formed, in which the five core mechanisms are evaluation mechanism, monitoring mechanism, continuous improvement mechanism, feedback mechanism, and resource guarantee mechanism. The evaluation elements mainly focus on the key links of teaching goal setting, teaching process implementation, teaching achievement evaluation, evaluation index system, evaluation subject, and evaluation tool. The main operating logic is: teaching goal setting → teaching plan formulation → course implementation → process monitoring → teaching achievement evaluation → feedback and improvement → continuous optimization. In this way, a complete teaching quality evaluation closed loop is formed. At the same time, combined with data analysis technology,

the objectivity and efficiency of the evaluation are improved. Based on the OBE concept, it is student-centered, continuously improved, pays attention to students' learning outcomes and ability improvement, and continuously optimizes teaching methods and content. It not only helps to accurately evaluate teaching quality, but also promotes teaching reform and improves the quality of talent training.

4. Practical Pathways for Optimizing the Teaching Quality Evaluation System under the OBE Concept

4.1 Alignment between the OBE Concept and Teaching Quality Evaluation System of Guangzhou Huashang College

First, at the level of evaluation agents, the internal institution responsible for teaching quality evaluation at Guangzhou Huashang College is the Teaching Quality Monitoring and Evaluation Center. This center is in charge of the management, supervision, assessment, and improvement of the university's teaching quality. It covers all aspects of undergraduate education, ensuring the effectiveness and quality of teaching activities. The center advances the implementation of teaching quality evaluation by collecting policy-related information and formulating evaluation systems.

At Guangzhou Huashang College, the internal evaluation agents include students, administrators, supervisors, and faculty members. This diverse set of stakeholders constitutes the core of the institution's teaching quality evaluation system.

Second, in terms of evaluation methods, Guangzhou Huashang College adopts a multi-method approach in teaching quality assessment, integrating the 360-degree evaluation method. This includes peer review, student evaluations of teaching, teacher evaluations of learning, supervisor observations, and administrative assessments. In evaluating course learning outcomes, both formative and summative assessments are used. This multidimensional evaluation system allows for a comprehensive assessment of teaching effectiveness from various perspectives, thereby enhancing the accuracy and reliability of the evaluation results.

At the evaluation indicator level, as shown in the table1.

Table 1. Guangzhou Huashang College Teaching Quality Evaluation Index System

evaluation dimensions	evaluation metrics	evaluation stakeholders
school evaluation	basic information of undergraduate education, faculty and teaching conditions, teaching construction and reform, professional training capacity, quality assurance system, student learning outcomes, and characteristic development	teaching quality monitoring and evaluation center
lesson polishing evaluation	teaching document display, course design, teaching objectives, teaching content, teaching organization, teaching attitude, teaching characteristics	lesson polishing group
teacher evaluation	attendance, classroom discipline, etiquette, learning initiative, learning concentration, learning participation, homework completion, extracurricular communication participation, knowledge and skills, analysis and problem-solving ability	teachers
peer review	classroom management and discipline, professional image and teaching style, teaching preparation, teaching objectives, teaching content, teaching ability, teaching methods, teaching results, teaching characteristics	teachers
student evaluation	course difficulty, teaching attitude, teaching content, teaching methods, teaching effect, learning gains	students

Source: collected and collated by the author

In terms of teaching quality evaluation indicators, Guangzhou Huashang College has developed evaluation standards around multiple dimensions, including moral education, professional knowledge and competencies, physical and aesthetic education, internal and external evaluations, and employment outcomes. The evaluation system includes key indicators such as "teaching reform and innovation," "teaching supervision

system," "teacher evaluation," "student evaluation," and "student learning outcomes." Specific examples include student learning satisfaction, physical fitness test results, graduation and degree attainment, postgraduate admission rates, employer evaluations of graduates, mid-term assessments of graduate education quality, and "distinctive development." These indicators align closely with the core principles of OBE (Outcomes-Based Education) outcome orientation, Student-centered and continuous improvement. In micro-teaching evaluations, although there are indicators for teaching documentation, there is no requirement to clearly state course-level learning outcomes in the syllabus or link them with program-level learning outcomes. For teaching content indicators, the focus remains on the richness of content rather than its alignment with intended learning outcomes or the emphasis on competence development. In terms of teaching innovation, there is a disconnect between the evaluation of teaching characteristics and learning outcome-oriented innovation.

In the teacher peer review system, the evaluation encompasses a set of indicators that are aligned with the principles of the OBE concept, including course syllabus development, lesson plan design, teaching material preparation, overall instructional design, student analysis, teaching strategies, and instructional delivery. In the student evaluation system, major indicators include teaching content, methods, effectiveness, and learning outcomes. However, the absence of "teaching objectives" as a core indicator limits the full realization of OBE principles.

In teacher evaluations of students, the indicators primarily cover attendance, discipline, etiquette, initiative, concentration, participation, task completion, knowledge and skills acquisition, and practical ability. These focus on actual student learning outcomes, which aligns with OBE. However, indicators that reflect students' overall competencies are relatively lacking. In the peer evaluation system, although it generally aligns with the outcome-oriented approach emphasized by OBE, the indicators remain vague and have not been fully integrated into a clear, outcome-based, student-centered framework.

In student evaluations of teachers, current indicators include course difficulty, teaching attitude, content, methods, effectiveness, and learning gains. Although these indicators cover multiple aspects of the teaching process and results, they are not sufficiently refined, with an overemphasis on perceived process and insufficient outcome orientation. For example, the indicator of course difficulty reflects student perception, but does not directly measure learning outcome attainment. Similarly, while teacher attitude affects teaching effectiveness and student motivation, OBE emphasizes objective measurement of both processes and results, which is not yet fully realized in the current evaluation system.

4.2 Optimizing the Teaching Quality Evaluation System of Guangzhou Huashang College Based on the OBE Concept

4.2.1 Establishing a diversified stakeholder evaluation system

Based on Guangzhou Huashang College's practical experience, the primary evaluation stakeholders are currently internal, including university leadership, teaching supervision bodies, faculty, and students. However, the evaluation of student learning outcomes tends to be limited, mainly focusing on knowledge mastery, skills training, and partial competency assessments, while lacking systematic observation and feedback on students' comprehensive qualities, long-term development potential, and professional competence. This stakeholder structure somewhat overlooks external stakeholders, making it difficult to fully embody the essential requirements of the OBE concept: "learning outcomes-centered, employer-demand-oriented, and continuous improvement - focused."

OBE emphasizes that student learning outcomes should not only be assessed by internal teachers and administrators but also validated by industry enterprises, alumni, and other real-world application environments. Therefore, it is crucial to establish a six-party collaborative evaluation stakeholder system involving university leaders, teaching supervisors, faculty, students, industry enterprises, and alumni, as shown in figure 2. This system can effectively link the internal teaching process with the external application of results, enhance the objectivity, comprehensiveness and sustainability of

teaching evaluation, and better meet the core spirit and actual needs of the OBE concept.

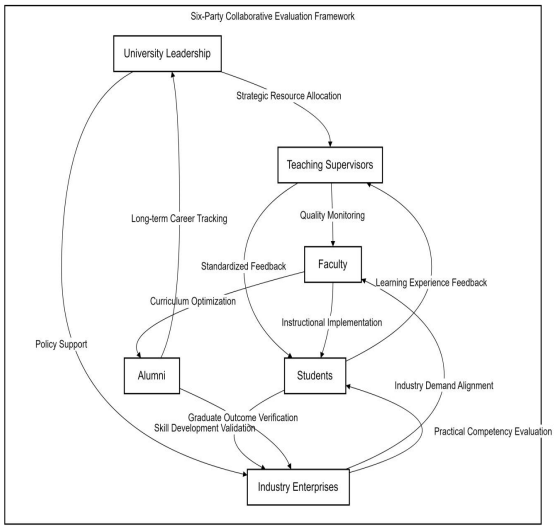

Figure 2. Six-Party Collaborative Evaluation Framework

Source: Drawn by the author

4.2.2 Optimizing teaching quality evaluation methods

In an OBE-oriented teaching quality evaluation system, the scientific rigor and diversity of evaluation methods directly affect the authenticity and comprehensiveness of learning outcome representations. Although Guangzhou Huashang College currently employs multiple evaluation methods, there are issues regarding lack of scientific rigor and systematization. Specifically, the diversity of evaluation tools is accompanied by inconsistent standards; evaluation indicators are insufficiently aligned with learning outcomes (LOs); formative and summative assessments are disconnected, making it difficult to form an effective closed loop throughout the teaching process. Some courses focus on process evaluation but neglect outcome feedback, while others emphasize exam results without reflecting competency development. These shortcomings hinder the teaching quality evaluation results from truly reflecting students' overall competency achievement.

Therefore, it is crucial to establish a scientific, systematic, and closed-loop teaching quality evaluation method. First, evaluation objectives must be clearly defined, precisely aligning course learning outcomes with professional graduation requirements, and designing observable and measurable evaluation indicators. Second, a mixed-methods evaluation model should be established, which is vital for comprehensively reflecting educational outcomes under the OBE framework. To achieve this, Guangzhou Huashang College should adopt a "quantitative + qualitative" approach that combines statistical rigor with contextual understanding. Quantitative data, such as learning outcome achievement rates, exam scores, graduation rates, and employment statistics, provide a macro perspective on educational effectiveness and institutional performance. Qualitative data, collected through student interviews, learning log analyses, and case studies, offer in-depth insights into individual learning trajectories, cognitive development, and emotional engagement. As Alonzo (2022) [10] emphasized, mixed methods are particularly effective in revealing how surface-level changes interact with deep teaching reforms in education. By integrating multiple data sources, this approach supports continuous improvement of teaching strategies, curriculum design, and assessment practices, ultimately fostering more comprehensive and adaptive quality assurance.

Finally, it is essential to build a data-driven evaluation platform leveraging information technology for dynamic monitoring and intelligent analysis of learning outcome attainment, such as learning management system data mining, knowledge graphs, and electronic portfolios (E-Portfolios), thereby promoting evidence-based continuous improvement in teaching quality.

4.2.3 Constructing an OBE-based teaching quality evaluation indicator system

Designing a teaching quality evaluation indicator system is a key component of establishing an OBE-based evaluation framework, where evaluation standards must ensure alignment between graduation requirements and course outcomes. Overall, the system should include the determination of educational objectives, the setting of expected learning outcomes, the selection of teaching activities and evaluation methods, the measurement of the degree of achievement of learning outcomes, feedback and continuous improvement based on evaluation results, and multi-stakeholder collaboration assurance. As shown in table 2, this is a teaching quality

evaluation index system designed based on the OBE concept.

Table 2. Teaching Quality Evaluation Index System Based on the OBE Concept

First-level indicators	Second-level indicators	Third-level indicators
Teaching goal setting	The degree of alignment between training objectives and industry needs	Industry research frequency
		Proportion of enterprises participating in the revision of training programs
	Correspondence between course objectives and graduation requirements	Clarity of mapping of course objectives to competency matrix
		Completeness of OBE elements in the syllabus
Implementation of teaching process	Integration degree of instructional design and OBE	Reverse design courses
		Number of measures to support personalized learning paths
	Compatibility of practical teaching with industry standards	Proportion of school-enterprise cooperation courses
		Matching degree between practical projects and real job tasks
Teaching Achievements	Student ability achievement	Core course goal achievement rate
		Certification pass rate for interdisciplinary skills (such as data analysis)
	Social adaptability outcomes	Graduates' job adaptation period
		Overall employer satisfaction rating
Continuous Improvement	Feedback mechanism timeliness	Average evaluation result feedback cycle
		Improvement measures response rate
	Dynamic optimization effectiveness	Annual training program revision range
		Teacher OBE training coverage

Source: Author's analysis and compilation

Guangzhou Huashang College's existing teaching quality evaluation indicator system, although somewhat aligned with the OBE concept, still exhibits points of conflict. The evaluation indicator system at Guangzhou Huashang College is primarily constructed around four core dimensions. First, the goal-setting dimension focuses on outcome orientation, ensuring that course design is both forward-looking and scientifically reasonable through alignment with industry needs and mapping of course objectives. Second, the process implementation dimension emphasizes a student-centered approach, enhancing teaching effectiveness through backward course design and university-industry collaboration. Third, the outcome dimension serves as the core, quantitatively assessing students' competency achievement—such as course objective attainment rates—and social adaptability, including employer satisfaction, supported by third-party certification and tracking data to ensure objectivity. Fourth, the continuous improvement dimension establishes a dynamic feedback mechanism and curriculum revision plan, forming a closed-loop management system. This realizes a scientific and operable evaluation approach, fully embodying the OBE principles of "continuous improvement" and "outcome orientation."

5. Conclusion

The reconstruction of university teaching quality evaluation systems under the OBE orientation is not merely a technical update but a systemic transformation of educational philosophy, governance logic, and practical mechanisms, carrying significant theoretical and practical value. Under the backdrop of high-quality development in contemporary higher education, traditional teaching process-centered university quality evaluation systems face structural contradictions with the OBE (outcomes-based education) concept. This paper, through paradigm comparison, constructs a theoretical framework for university teaching quality evaluation based on the OBE concept, using "backward design" as the logical starting point and coordinating teaching design and feedback around learning outcome goals. It forms a quality assurance

system characterized by goal focus, evidence-driven assessment, and dynamic closed loops. Using Guangzhou Huashang College as a case study, this paper proposes pathways including reconstructing outcome-oriented evaluation indicators, integrating multi-stakeholder participation with qualitative and quantitative methods, and establishing a closed-loop feedback mechanism, aiming to provide transferable experiences for application-oriented universities.

Acknowledgments

This paper is supported by the Teaching Quality and Education Reform Project for Undergraduate Universities in Guangdong Province, China. (Project No. HS2021ZLGC39), funded in 2023.

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