

# Investigating the Integration of the OBE Concept into Teaching Quality Evaluation in Higher Education: A Teacher Perspective

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**Abstract:** Outcome-Based Education (OBE) has become a key orientation for enhancing teaching quality and accountability in higher education. However, significant differences remain among universities in the extent to which the OBE concept is integrated into teaching quality evaluation systems and in how it relates to factors such as goal attainment, instructional design, assessment feedback, and resource support. From the teachers' perspective, this study explores practical pathways for integrating OBE into teaching quality evaluation, using Guangzhou Huashang College as a case. Based on 300 valid questionnaire responses, the study develops a seven-dimensional framework covering teachers' understanding of OBE (H), perceptions of the teaching quality evaluation system (J), the setting and attainment of teaching objectives (K), instructional design and teaching process (L), evaluation and feedback on teaching outcomes (M), teaching resources and support (N), and overall teaching quality evaluation (P). Drawing on the empirical evidence, the paper proposes targeted improvement strategies: strengthening teachers' capacity building and professional learning communities, improving constructive alignment among outcomes, teaching, and assessment, establishing institutionalized feedback mechanisms for continuous improvement, and optimizing resource allocation to support outcome-oriented instructional design.

**Keywords:** Outcome-Based Education (OBE); Teaching Quality Evaluation; Teacher Perspective; Goal Attainment; Instructional Design; Assessment and Feedback; Resource Support

## 1. Introduction

With the increasing emphasis on accountability,

student-centered learning, and continuous improvement in higher education, traditional teaching quality evaluation approaches that rely heavily on classroom observation, end-of-term satisfaction surveys, or single-point examinations are being challenged. Outcome-Based Education (OBE) has therefore been adopted as a reform orientation that prioritizes explicit learning outcomes, backward curriculum design, evidence-based assessment, and iterative improvement [1].

Despite this compatibility, universities often encounter operational difficulties when integrating OBE into teaching quality evaluation. Inconsistent stakeholder understanding, insufficient alignment between curriculum design and assessment tools, and weak feedback mechanisms can undermine the evaluation-improvement cycle. Teachers are key implementers of OBE; their cognition and practices directly shape how outcomes are defined, taught, assessed, and improved [2].

Accordingly, this study addresses three questions: (1) What are teachers' perceptions of OBE and the institutional teaching quality evaluation system? (2) How is OBE-based practice (goal setting, instructional design, assessment and feedback, and resource support) associated with perceived goal attainment and teaching quality? (3) What challenges and priority areas do teachers identify for improving OBE-based teaching quality evaluation?

## 2. Conceptual Background and Analytical Framework

Outcome-Based Education (OBE) is grounded in the logic that educational quality should be judged by what learners can demonstrably achieve at the end of a learning experience. It emphasizes the explicit specification of measurable learning outcomes, the backward design of curriculum and instruction from those outcomes, and the use of valid assessment

evidence to determine attainment [3]. In an OBE system, teaching activities, learning tasks, and assessment criteria are expected to be coherently aligned so that students have clear performance expectations and teachers can generate credible evidence of learning. Importantly, OBE also highlights continuous improvement: evaluation results should not merely “rate” teaching but should inform revisions to objectives, pedagogy, assessment design, and resource allocation [4].

A modern teaching quality evaluation system in higher education follows a similar rationale. Beyond monitoring teaching processes or student satisfaction, it increasingly seeks to connect instructional inputs and processes to learning outputs and developmental competencies, using data to support quality assurance and enhancement. Therefore, the integration of OBE into teaching quality evaluation requires a systematic structure that captures teachers’ cognition, classroom practices, assessment behaviors, institutional support, and perceived outcomes [5].

To operationalize this linkage, the present study adopts a dimension-based analytical framework consistent with the survey instrument. The framework includes cognition (teachers’ understanding of OBE and perceptions of the evaluation system: H, J), implementation (goal setting/attainment and instructional design/process: K, L), assessment and feedback (M), support (resources, training, and collaboration: N), and outcome evaluation (overall teaching quality evaluation: P). This structure enables a coherent examination of how teachers’ beliefs and institutional conditions shape OBE-oriented practices and, ultimately, teachers’ overall judgments of teaching quality.

### 3. Methodology

#### 3.1 Participants and Data Collection

A questionnaire survey targeting college teachers yielded 300 valid responses. The instrument contains 43 items and uses a five-point Likert scale (1 = strongly disagree to 5 = strongly agree).

#### 3.2 Measurement Dimensions

The questionnaire comprises seven dimensions: teachers’ understanding of the OBE concept (H), perceptions of the teaching quality evaluation system (J), setting and achievement of teaching objectives (K), instructional design and teaching

process (L), evaluation and feedback on teaching outcomes (M), teaching resources and support (N), and overall evaluation of teaching quality (P).

#### 3.3 Reliability and Validity

From the Table 1, reliability analysis indicates excellent internal consistency (Cronbach’s alpha = 0.991; 43 items;  $n = 300$ ). Construct validity is supported (KMO = 0.867; from the Table 2, Bartlett’s test of sphericity: Approx. Chi-square = 17887.162,  $df = 903$ ,  $p = 0.000$ ), suggesting the data are suitable for structure-related analysis.

**Table 1. Cronbach’s Reliability Analysis of Teacher Questionnaires**

Number of items	43
Sample size	300
Cronbach alpha coefficient	0.991

**Table 2. KMO and Bartlett’s Test of Teacher Questionnaires**

KMO value	0.867
Approximate Chi-square	17887.162
df	903
p-value	0.000

#### 3.4 Data Analysis

The study applies descriptive statistics (mean, standard deviation, median, minimum, maximum) and Pearson correlation analysis to examine associations among OBE-based practices and perceived goal attainment and teaching quality. Significance thresholds follow the dataset notation (\*  $p < 0.05$ ; \*\*  $p < 0.01$ ).

### 4. Results

#### 4.1 Teachers’ Understanding of the OBE Concept (H) and Perceptions of the Teaching Quality Evaluation System (J)

From the Table 3, descriptive statistics indicate that teachers hold generally positive attitudes toward OBE. The mean values of H1–H5 range from 4.196 to 4.326, suggesting broad recognition of OBE’s importance and student-centered orientation. Especially in terms of the importance of the OBE concept in higher education and the “student-centered” teaching method, more than 80% of the teachers agreed or strongly agreed. This shows that teachers generally recognize the application value of the OBE concept in education.

Teachers’ evaluations of the institutional teaching quality evaluation system are also

positive. The mean values of J1–J5 range from 4.022 to 4.087, from the Table 4, we can see that teachers at Huashang College have a positive attitude towards the school's teaching quality evaluation system and are more in agreement with the school's teaching quality evaluation mechanism.

**Table 3. Descriptive Analysis of Teachers' Cognition of OBE Concept (H)**

Item	Mean	SD
H1	4.239	0.822
H2	4.326	0.845
H3	4.217	0.917
H4	4.217	0.841
H5	4.196	0.859

According to the survey results, there are inconsistencies in the level of understanding of the OBE (Outcome-Based Education) concept among administrators, teachers, and students at Huashang college. Teaching quality administrators possess a clear understanding of the OBE philosophy and actively promote its comprehensive application. Teachers demonstrate a higher level of understanding compared to students; however, limitations in practical application still exist. As the core participants under the OBE framework, students' understanding directly affects the effectiveness of educational reform. Nevertheless, previous survey findings indicate that students generally have an insufficient understanding of the OBE concept and find it difficult to accurately grasp its core elements and evaluation criteria.

**Table 4. Descriptive Analysis of Teachers' Evaluation of Teaching Quality System (J)**

Item	Mean	SD
J1	4.065	0.929
J2	4.022	0.856
J3	4.087	0.915
J4	4.087	0.890
J5	4.043	0.842

#### 4.2 Setting and Achievement of Teaching Objectives (K)

From the Table 5, it can be observed that the correlation coefficients between K1, K2, K3, K4, K5, and K6 are 0.768, 0.665, 0.845, 0.906, and 0.805, respectively, all of which are statistically significant at the 0.01 level. Similarly, the correlation coefficients between K1, K2, K3, K4, K5, and K7 are 0.831, 0.829, 0.842, 0.822, and 0.766, also demonstrating statistical significance at the 0.01 level. These findings indicate a significant positive

correlation between teachers' OBE-based instructional goal setting and the achievement of both course learning objectives and students' learning outcomes. The application of OBE principles by teachers, particularly through backward design and outcome-oriented approaches, ensures clear and structured instructional goal-setting. By aligning instructional objectives with students' graduation requirements and professional training frameworks, teachers can effectively facilitate the achievement of overall course learning objectives and enhance the quality of teaching and learning.

**Table 5. Pearson Correlation Analysis of Teachers' Teaching Goal Setting and Goal Achievement based on OBE Concept**

Goal-setting item	K6	K7
K1	0.768**	0.831**
K2	0.665**	0.829**
K3	0.845**	0.842**
K4	0.906**	0.822**
K5	0.805**	0.766**

(\*  $p < 0.05$ ; \*\*  $p < 0.01$ )

#### 4.3 Evaluation and Feedback on Teaching Outcomes (M)

From the Table 6, the descriptive statistics for the "Evaluation and Feedback of Teaching Outcomes" dimension (M1 – M9) indicate an overall high level of teacher recognition of OBE-oriented practices, with all item means exceeding 4.0. Teachers report that evaluation criteria are communicated clearly at the beginning of courses (M1, Mean = 4.261), suggesting relatively strong transparency. Among all items, the use of diversified assessment methods receives the highest endorsement (M2, Mean = 4.304), reflecting teachers' preference for comprehensive assessment strategies such as homework, group projects, and examinations. Although still positive, slightly lower mean scores for comprehensiveness and validity (M3 = 4.174; M4 = 4.130) imply that teachers perceive room for improvement in ensuring that assessment methods and indicators fully capture learning outcomes and competency development. Teachers also emphasize holistic student growth, including knowledge, skills, and overall quality (M5, Mean = 4.239), and they value the use of evaluation results to identify improvement areas and adjust subsequent teaching (M7 = 4.283; M8 = 4.239). Notably, providing detailed feedback shows the lowest mean (M6, Mean = 4.109), indicating that actionable, individualized feedback remains a relatively weaker aspect of

practice. Finally, teachers’ attention to students’ long-term professional development and social responsibility (M9, Mean = 4.239) suggests that evaluation is oriented not only toward immediate academic performance but also toward longer-term outcomes. Standard deviations are generally moderate (mostly 0.8–1.0), indicating some variability across teachers while maintaining an overall positive response tendency.

**Table 6. Descriptive Statistical Analysis of Evaluation and Feedback of Teaching Outcomes (M)**

Item	Mean	SD
M1	4.261	0.801
M2	4.304	0.813
M3	4.174	0.902
M4	4.130	0.859
M5	4.239	0.874
M6	4.109	1.016
M7	4.283	0.834
M8	4.239	0.874
M9	4.239	0.848

**4.4 Teaching Resources and Support (N)**

As shown in the Table 7, N1 is significantly and positively correlated with the other resource-support indicators (N2 – N4), with correlation coefficients ranging from 0.811 to 0.871, indicating that stronger resource conditions tend to co-occur with stronger institutional support, training, and collaboration. Substantively, these relationships suggest that the richness and alignment of teaching resources are fundamental to implementing the OBE teaching model effectively, while high-quality instructional support strengthens the credibility and accuracy of evaluation and helps students improve through sustained feedback. In addition, institution-provided OBE training is positively associated with teaching quality improvement, as it equips teachers with outcome-based instructional design skills, appropriate assessment methods, and adaptable teaching strategies, thereby enhancing implementation effectiveness. Peer exchange and collaboration further reinforce this process by enabling faculty to share experiences, refine practices, and align instructional approaches more closely with OBE requirements. Overall, the positive inter-correlations among these indicators imply that successful OBE implementation is not driven by any single factor; rather, it depends on an integrated support ecosystem in which resources,

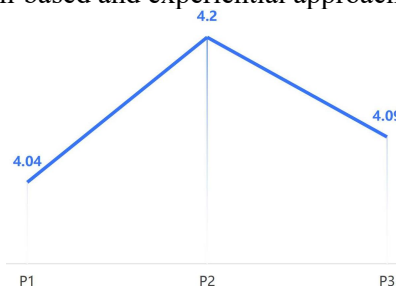
instructional support, continuous professional development, and collegial collaboration interact synergistically to promote sustainable improvements in higher education teaching quality [6].

**Table 7. Pearson Correlation Analysis of Teachers’ Views on School Teaching Resource Support under the OBE Concept (N)**

	N1	N2	N3	N4	N5
N1	1	0.871**	0.811**	0.863**	0.847**
N2	0.871**	1	0.876**	0.801**	0.835**
N3	0.811**	0.876**	1	0.861**	0.793**
N4	0.863**	0.801**	0.861**	1	0.869**
N5	0.847**	0.835**	0.793**	0.869**	1

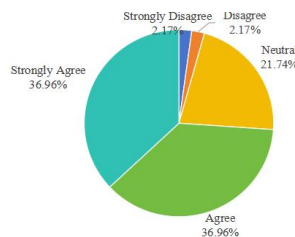
**4.5 Overall Evaluation of Teaching Quality (P) and Implementation Challenges**

From the Figure 1, teachers’ overall evaluations of teaching quality show a positive trend (average scores approximately 4.04 to 4.20). Regarding students’ flexible application of knowledge and skills after course completion, 39% strongly agree and 33% agree, while about 26% are neutral and 2% disagree, indicating room to strengthen learning transfer through problem-based and experiential approaches.



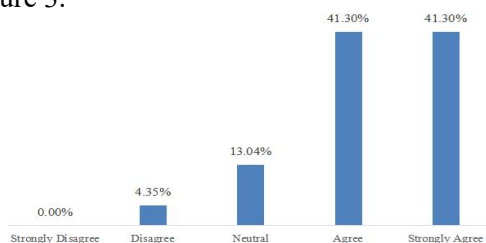
**Figure 1. Average of teachers’ overall evaluation of teaching quality**

In response to the statement, "I believe the current teaching model achieves the goals of being student-centered, outcome-oriented, and continuously improving," 36.96% of respondents strongly agreed, while another 36.96% agreed. However, 21.74% of respondents remained neutral, and a small proportion expressed disagreement. As shown in Figure 2.



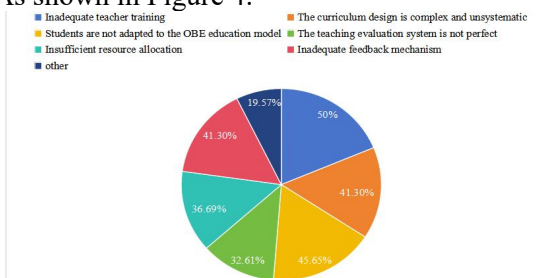
**Figure 2. Teachers’ Recognition of the Current Teaching Model in Achieving OBE Education Goals**

“ I have a good self-evaluation of the overall teaching quality of the courses I teach.” Most respondents agreed with this question, indicating that the teaching quality has been greatly improved under the OBE concept. As shown in Figure 3.



**Figure 3. Teachers' Evaluation of the Teaching Quality of the Courses They Teach**

Teachers identify major barriers to implementing OBE as inadequate teacher training (50%), students' limited adaptation to OBE (45.65%), and complex and unsystematic curriculum design (41.3%). Teachers prioritize curriculum design and resource support (60.87%), innovation in teaching process (58.7%), and optimization of evaluation indicators (45.65%) as core improvement areas. As shown in Figure 4.



**Figure 4. Teachers' Views on the Challenges of Applying the OBE Concept to Higher Education Institutions**

## 5. Discussion

The findings indicate that teachers generally possess a solid cognitive foundation for implementing OBE, as they show high recognition of outcome orientation and the institutional evaluation mechanism. However, reform effectiveness may be diluted by stakeholder inconsistency—most notably, students' limited understanding of OBE. Within the OBE logic, students are not passive recipients but active agents who need to interpret learning outcomes, assessment criteria, and performance standards. When students lack clarity about “what counts as evidence” of achievement, they may adopt surface learning strategies, which in turn reduces the validity of attainment data and weakens the evaluation–

improvement cycle. This suggests that OBE implementation should include systematic student induction, transparent rubrics, and exemplars that make performance expectations explicit.

Moreover, the significant positive relationships between OBE-based goal setting and goal achievement provide empirical support for constructive alignment. When course objectives are clearly mapped to program outcomes and assessments are designed to capture those outcomes, teachers perceive higher attainment of both course goals and student learning results. At the same time, the strong interdependence among resource support indicators highlights that OBE is an ecosystem reform: adequate resources, instructional support, continuous professional development, and peer collaboration reinforce one another. Isolated interventions (e.g., training alone) are unlikely to be sufficient without aligned tools, time, and institutional arrangements [7].

Although assessment and feedback are rated positively overall, the comparatively lower score for detailed feedback indicates a practical bottleneck. Without timely, specific, and actionable feedback, students cannot effectively self-regulate learning and teachers lack diagnostic evidence for improvement. Therefore, institutionalizing feedback routines—supported by rubrics, feedback templates, and course-level evidence reviews—may be a high-leverage strategy to strengthen continuous improvement [8].

## 6. Implications and Recommendations

(1) Strengthen faculty capacity-building through differentiated professional development. Universities should provide staged training aligned with teachers' experience levels and disciplinary characteristics, focusing on outcome mapping, backward design, rubric construction, and the collection and interpretation of learning evidence. Beyond one-off workshops, mentoring, peer coaching, and teaching-development communities can help teachers translate OBE principles into course design and assessment practices.

(2) Enhance students' adaptation to OBE through systematic learning support. Since students' understanding of outcomes and criteria directly influences learning strategies and attainment evidence, institutions should make outcomes and evaluation standards transparent at the start of

courses, provide exemplars of high-quality work, and integrate formative assessment to guide students' self-regulated learning. Orientation sessions and learning guides can further strengthen students' outcome awareness.

(3) Optimize curriculum design via constructive alignment and program-level mapping. Colleges should adopt shared templates for aligning learning outcomes, teaching activities, and assessment tasks, and implement program-level outcome maps that connect course objectives to graduation requirements. Regular curriculum reviews can identify misalignment and reduce duplication or gaps across courses [9].

(4) Institutionalize feedback loops for continuous improvement. To strengthen the evaluation–improvement cycle, institutions can require course-level improvement reports based on attainment data, promote timely and actionable feedback routines, and deploy supportive tools (e.g., rubric platforms, learning analytics dashboards) [10]. These mechanisms help ensure that evaluation results lead to concrete instructional and curriculum improvements.

## 7. Conclusion

This study examined how Outcome-Based Education (OBE) is integrated into teaching quality evaluation from the teachers' perspective, drawing on 300 valid survey responses. The questionnaire demonstrated excellent internal consistency and acceptable construct validity, providing a reliable basis for interpretation. Overall, teachers reported high recognition of both the OBE concept and the college's teaching quality evaluation mechanism, suggesting a relatively strong cognitive foundation for implementation. Correlational evidence further indicates significant positive relationships between OBE-oriented goal setting and perceived attainment of course objectives and learning outcomes, supporting the value of constructive alignment in improving teaching quality. At the same time, teachers identified several practical barriers that may constrain OBE effectiveness, including insufficient faculty training, students' limited adaptation to outcome-based learning, and the complexity of curriculum design and implementation. These findings imply that building an OBE-based evaluation system requires coordinated and systemic efforts, including sustained faculty development, structured student learning support, coherent curriculum mapping and design, robust

assessment and actionable feedback practices, and integrated resource allocation that collectively enable continuous improvement.

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