

Research on the Achievement of Course Objectives in Financial Statement Analysis Under the OBE Concept

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Abstract: This article, grounded in the OBE concept, conducts an in-depth study on the achievement of course objectives for the Financial Statement Analysis course. Firstly, it establishes a correspondence between course objectives and graduation requirements. Secondly, it adopts a student-centered teaching design philosophy. Additionally, a course objective achievement evaluation scale is designed to assess the attainment of these teaching goals. By analyzing the results of the evaluation system implementation, targeted continuous improvement measures are proposed to continuously optimize and enhance the course's teaching quality, thereby effectively improving the talent cultivation level of the accounting program, and providing valuable insights and references for the construction and optimization of other course reform systems.

Keywords: OBE Concept; Course Objectives; Achievement Evaluation; Financial Statement Analysis

1. Introduction

The reform of undergraduate education and teaching in the new era is advancing rapidly. The core concept of student-centered, outcome-oriented, and continuous improvement has infused new thinking and action into the deepening of higher education reform. In this context, the Outcome-Based Education (OBE) model, which emphasizes results, has become a focal point in educational reform. This model requires educators to consider individual differences among students and use their actual learning outcomes as the evaluation standard, ensuring the effectiveness and relevance of educational activities. As OBE spreads, scientifically and effectively evaluating the achievement of course objectives has become crucial for enhancing teaching quality and talent development.

The OBE philosophy posits that achieving talent

development goals hinges on the quality of course instruction. Financial Statement Analysis, a required course for accounting majors, is a crucial component of the fundamental theories and knowledge systems in accounting. However, under traditional teaching models, the courses objectives are often confined to the content itself, neglecting the alignment with the specific talent development goals and graduation requirements outlined in the professional training program. This can hinder students all-around development. Additionally, while students learn methods for calculating financial indicators, they struggle to apply this knowledge to real-world problem-solving. This theory-focused teaching approach limits the development of practical skills and problem-solving abilities, falling short of the goals of cultivating applied talents. Furthermore, in Financial Statement Analysis, the quality of student development is primarily assessed through course exam scores, which focus heavily on the mastery of theoretical knowledge. This method fails to comprehensively evaluate students knowledge, skills, and overall qualities, thus failing to fully reflect their actual capabilities and learning outcomes.

Therefore, to address the issues in the quality system of the Financial Statement Analysis course, this study establishes a student-centered teaching design concept by establishing a correspondence between course objectives and graduation requirements. It also designs an evaluation scale for assessing the achievement of course objectives to assess the effectiveness of teaching goals. This aims to enhance both the quality of course instruction and the quality of student talent development, thereby providing valuable insights and references for the construction and optimization of other course reform systems.

2. Build a Matrix of Course Objectives and Graduation Requirements

This study explores the reform of the Financial Statement Analysis course for the 2022 cohort of

Accounting majors at the School of Economics and Finance, Guangdong University of Science and Technology. Considering the professional development direction of the students in the Accounting major, the course has established a Course Objectives-Graduation Requirements support matrix to ensure that the course design

effectively supports the multiple graduation requirements set by the schools applied talent cultivation goals. The following is the support matrix for the Financial Statement Analysis course objectives and graduation requirements (see Table 1).

Table 1. Support Matrix of Course Objectives and Graduation Requirements for Financial Statement Analysis in Accounting Major

Graduation requirements	Graduation requirement indicators	program objective	Contribution
comprehensive quality	Improve the comprehensive quality of students	Teamwork, communication and expression	0.2
professional knowledge	Knowledge of financial analysis	Master the basic principles and methods of financial statement analysis	0.35
specialized skill	Develop career analysis and judgment skills	Develop students financial analysis ability	0.35
information technology	Use information technology software	Master the acquisition and processing of financial data	0.1

The support matrix in Table 1 illustrates the alignment between the course objectives of Financial Statement Analysis and the graduation requirements for accounting majors. The contribution degree column indicates how well each course objective supports the graduation requirement indicators. This matrix helps the teaching team intuitively understand the match between course objectives and graduation requirements, enabling them to design courses and arrange teaching more effectively.

3. Implement the Teaching Design "Centered on Learning"

Based on the "learning-centered" concept of OBE, this course implements a blended teaching mode with students as the main body. Its teaching design is divided into three parts: pre-class + in-class + after-class.

Before class, students engage in self-study and case discussions. The teaching team has established a digital course resource library on platforms such as China University MOOC and Chaoxing Learning Platform. This library includes courseware materials, video resources, and high-quality MOOC URLs related to the course. Students can use these resources to explore knowledge and deepen their theoretical understanding. Additionally, to enhance student engagement and participation in class, learning groups are formed. Teachers prepare case tasks in advance and distribute them to each group, ensuring that case discussions and independent theoretical learning proceed concurrently,

mutually reinforcing each other.

During the class, students present their phased achievements through case competitions and group presentations. Prior to this, teachers systematically explain the fundamental principles and methods of financial statement analysis to students, laying a solid foundation for subsequent case studies. Following this, each group conducts an in-depth analysis and discussion of the designated case tasks. During the group presentations, interactive elements such as you draw, I guess and group scoring are integrated, along with group questioning and defense sessions, as well as peer evaluations. These elements aim to stimulate students interest in learning and foster teamwork, while also enhancing their critical thinking and communication skills. Finally, the teacher provides feedback by evaluating the overall performance of each group, highlighting both strengths and weaknesses.

After class, the method of online and offline is adopted, which consists of special assignments, group stage tasks (case analysis), online discussion (free exploration of problems, guided exploration of hot issues) to strengthen the cultivation of students learning and inquiry ability.

4. Develop a Scale to Evaluate the Achievement of Course Objectives

According to the OBE concept, in order to ensure the effective achievement of course teaching quality and talent training objectives, the course

should develop a special goal achievement evaluation scale to carry out quantitative evaluation on students. The following is the evaluation scale of the achievement of the course

objectives of "Financial Statement Analysis" in accounting major (see Table 2, Table 3 and Table 4).

Table2. Evaluation Index and Weight Distribution of the Achievement Degree of the Course Objectives of Financial Statement Analysis for Accounting Major

Course Objective	Assessment items and proportion (%)						weight 100%
	AS	AT	C	S	D	EX	
1. Teamwork, communication and expression				10	10		20
2. Master the basic principles and methods of financial statement analysis	5	10				20	35
3. Cultivate students financial analysis ability	5	10				20	35
4. Master the acquisition and processing of financial data			10				10
Total	10	20	10	10	10	40	100
Remark: S-Speech; D-Discuss; AS-Assignment; AT-Attendance; EX-Examination; C-Case							

The development of Table 2 is based on the OBE philosophy of blended learning, emphasizing student-centered learning. Therefore, the reform of course goal achievement evaluation aims to reduce the weight of final exams and focus on process-based learning assessments, such as classroom interaction, homework completion, group case analysis, and presentations. This approach aims to comprehensively develop students skills in self-learning, communication, financial analysis, and teamwork through a variety of teaching methods. Specifically,

Learning Hub attendance and homework are scored online by Learning Hub, interactive discussions are graded by teachers based on students classroom performance, and group case analysis and presentations are graded according to the teaching syllabus and evaluation criteria. The assessment system emphasizes both subjective and objective scoring, aiming to minimize the influence of teachers subjective judgments, thereby more accurately and comprehensively reflecting students learning outcomes and ability levels.

Table 3. Evaluation calculation of the achievement degree of students course objectives in Financial Statement Analysis, accounting major

Student ID	Course objective 1		Course objective 2			Course objective 3			Course objective4	Achievement (out of 100)
	S	D	AS	AT	EX	AS	AT	EX	C	
2201X	80	75	93	100	60	91	100	53	76	75
2201X	90	90	94	100	65	90	100	66	90	82
2201X	66	64	92	100	70	94	100	67	65	76
2201X	80	78	90	100	84	88	100	82	76	86
Remark: S-Speech; D-Discuss; AS-Assignment; AT-Attendance; EX-Examination; C-Case										

Table 3 shows the calculation results of students achievement of course objectives. Students achievement of course objectives is the sum of the achievement of individual course objectives, which is calculated by multiplying different assessment contents with corresponding assessment weights and summing them up. The specific calculation formula is as follows:

Achievement degree of single course goal = $\frac{\sum(\text{the actual score of each evaluation index point of the student} \times \text{the weight of the evaluation index point})}{(\text{the total weight of the goal})}$
 Achievement degree of single course goal = $\sum(\text{achievement degree of each single goal of the student} \times \text{weight value of this item})$

Table 4. Evaluation Calculation of Class Course Goal Achievement of "Financial Statement Analysis" in Accounting Major

Classes and grades in school	Course objective 1	Course objective 2	Course objective 3	Course objective 4	Achievement (out of 100)
Class 1	81.35	75.97	78.04	82.48	78.42
Class 2	79.12	86.54	84.5	76.12	83.29
Class 3	79.27	88.61	85.76	79.27	84.80
Overall achievement of course objectives	79.91	83.71	82.77	79.29	82.17

Table 4 shows the calculation results of class curriculum goal achievement and overall curriculum goal achievement. The overall curriculum goal achievement is the mean value of class students curriculum goal achievement. The specific calculation formula is as follows:

Class course goal achievement = $\sum$ single student course goal achievement / total number of students in class

The overall achievement of course objectives = $\sum$ the achievement of class course objectives / the total number of classes

5. Evaluation Results and Analysis of the Achievement of Course Objectives

There is no unified standard for evaluating the achievement of course objectives. Typically, a predetermined standard value is set, and based on existing literature, a score of 70 is often used. However, in this study on the evaluation of the achievement of the Financial Statement Analysis course objectives, to more accurately measure students learning outcomes, this paper draws on past experiences and makes slight adjustments, setting the evaluation standard at 75 points. This adjustment aims to raise expectations for students mastery of knowledge and skills and also provides a goal to motivate them to delve deeper into their studies and practical applications.

To verify the rationality and practical feasibility of the course assessment methods, grade distribution, and evaluation of course objectives, this paper uses the grades of students in the class of the 2022 Accounting major at the School of Economics and Finance, Guangdong University of Science and Technology, for the Financial Statement Analysis course as an example to analyze the evaluation of the achievement of course objectives. By statistically analyzing the scores from attendance, assignments, case studies, presentations, and the final exam, which are related to the four course objectives, and using the pre-set formula for comprehensive calculation, the overall achievement of the course objectives is determined, as shown in Figure 1.

As shown in Figure 1, the achievement levels of Course Objectives 2 and 3 are both above 80 points, with Objective 2 achieving an impressive score of 83.71. This indicates that students have a good grasp of the course content, reflecting a positive learning and teaching outcome. However, the achievement level of Course Objective 4 is slightly lower at 79.29 points, suggesting that students ability to use information technology

software is relatively weak. To address this, encouraging students to actively participate in practical activities such as financial data processing competitions can help improve their skills in using information technology software for financial data processing. Additionally, based on the data from Table 4 and the preset formula, the overall achievement level of the Financial Statement Analysis course is 82.17 points.

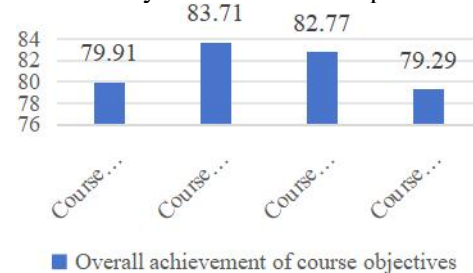


Figure 1. Overall Achievement of the Course Objectives of Financial Statement Analysis in Accounting

In summary, whether evaluated based on the achievement of individual course objectives or the overall achievement of the course goals, the results surpass the 75-point standard set in this paper. This indicates that the course objectives have been effectively achieved and that the high graduation requirements have been met. Therefore, the reform of the evaluation system for the achievement of the Financial Statement Analysis course objectives, based on the OBE philosophy, has demonstrated excellent teaching outcomes in enhancing students professional competence and practical skills, thereby improving the quality of talent cultivation.

6. Continuous Improvement of the Course

In the reform of the Financial Statement Analysis course, while some teaching outcomes have been achieved, several issues and shortcomings have also emerged. Firstly, students skills in acquiring and processing financial data are somewhat lacking, which affects their ability to conduct a thorough analysis of financial statements. Secondly, financial statement analysis not only requires a solid foundation in financial knowledge but also good communication and presentation skills. However, some students struggle with these skills, making it difficult for them to clearly and accurately convey their analysis results. Lastly, due to the tight schedule of the course, some content has not been thoroughly covered, which may hinder students from fully grasping the key points of the course.

To address the aforementioned issues, the

following continuous improvement measures are proposed: Firstly, enhancing practical teaching is crucial. This can be achieved by increasing the proportion of practical teaching and having students simulate real corporate financial statements for actual analysis and interpretation, thereby improving their practical skills. Additionally, teachers should continuously refine their teaching methods and tools. With the advancement of educational technology and evolving industry needs, it is essential to stay updated with new teaching methods, such as online education and big data analysis, and integrate these into the financial statement analysis course to enhance teaching quality and effectiveness. Furthermore, valuing student feedback and course evaluation is also vital. By establishing an effective feedback and evaluation system, teachers can encourage students to actively share their thoughts and suggestions on the course. This allows teachers to promptly adjust the teaching content and methods based on student feedback and evaluations, thus improving student satisfaction and overall learning outcomes.

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