

Research on Teaching Reform of Financial Big Data Analysis Course Based on OBE Concept

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Abstract: Under the influence of new technologies such as big data, artificial intelligence, mobile Internet, cloud computing and Internet of things, the traditional educational ideas and ideas have been unable to meet the requirements for the training of financial management talents under the new situation. Big data technology has been applied to all walks of life such as manufacturing, commerce, education, medical treatment, transportation and logistics. The society needs big data financial analysis talents who have the knowledge and ability of big data collection, cleaning, analysis and mining, and assist the management in operation and decision-making through the analysis of enterprise financial and operation data. The traditional teaching mode is teacher-centered, the teaching content is old, lack of emerging knowledge content, single teaching methods and methods, mechanical lack of vitality and integrity, and cannot truly evaluate the state of students' ability structure and improvement direction, which is not conducive to the realization of teaching objectives and the achievement of final learning results [1]. OBE is a student-centered educational concept oriented to the cultivation of students' final learning outcomes, which can more effectively achieve the goal of curriculum teaching and talent training. Guided by OBE theory, this paper focuses on the teaching design of the theoretical courses of financial management, changes the traditional linear teaching design ideas, takes social development, business needs and students' demands as the main objects of satisfaction, and takes the pre-set educational achievements in the process of completing higher education as the goal is to carry out the teaching reform and design of the theoretical courses of financial management, integrate the traditional financial analysis model with modern electronic information technology, and cultivate talents with strong financial analysis practical ability.

1. Introduction

Under the trend of policy encouragement and big data development, the digital upgrading and transformation of financial work has become inevitable, and financial analysis data has been transformed from traditional financial statements into massive financial and non-financial data. Finance should assist managers to make accurate and effective decisions for the daily operation and development of enterprises, and the efficiency and quality of the shift of financial personnel's work focus to management accounting will be significantly improved. The application of big data can better play the role and value of management accounting.

Financial analysis work is no longer to analyze and process data closely around financial statements. The data scope of financial analysis is extended to obtain data in massive information, mine and clean data, analyze and explore the commercial value contained in data information [2]. Among them, applied undergraduate colleges are one of the main places for training financial talents. The traditional teaching methods, especially the teaching of theoretical courses, can no longer meet the requirements of the current society for the training of financial and accounting talents. Instead, students should be guided to learn the theoretical knowledge related to big data. Master the basic usage of big data analysis tools, analyze practical business problems in combination with the financial professional theory, serve the strategic planning of enterprises, realize the digital transformation of enterprises, and implement the national digital economy talent strategy.

2. Necessity and Direction of Teaching Reform of Financial Big Data Analysis Course

2.1 Changes in Internal and External Environment

With the rapid development and application of information technologies such as big data, artificial intelligence, mobile Internet, cloud computing and the Internet of things, great changes have taken place in the economy and society. Digitization and intelligence are gradually becoming the core of a new round of global productivity reform. The digital transformation of enterprises is an inevitable trend. Cloud accounting, Financial Sharing Center and management accounting informatization need to use modern information technology means to obtain, process, sort out and deeply analyze big data, fully mine information, and finally form a business intelligent presentation, so as to provide effective data support for enterprises to carry out management accounting activities and enterprise management activities, and make financial management fully consistent with the strategic objectives of enterprises. The era of big data requires accountants to comply with the trend of big data and have the ability to make full use of big data mining, processing and analysis, and this amount of data is not limited to the internal data of enterprises [3]. The traditional corporate financial analysis course content does not have the knowledge to analyze a large number of complex and dynamic economic big data information, and cannot provide a value report for management decision-making. In the current context of continuous deepening of financial technology, big data, artificial intelligence, etc., the talents cultivated by traditional teaching no longer meet the needs of the times. Use the result-oriented OBE concept to guide the construction of big data and accounting majors in colleges and universities, and optimize the curriculum system to meet the needs of today's society for financial management talent training.

2.2 Meaning and Theoretical Criteria of OBE

OBE, also known as outcome based education, is an American educator William William g. Spady put forward an educational concept with educational achievements as the main guidance of teaching evaluation in the 1980s [4]. The OBE concept is a kind of reverse design thinking. It designs the curriculum system based on the talent ability elements required by the social industry, creates a learning environment for teaching design under the guidance of constructivist learning theory, and conducts teaching evaluation based on the curriculum goals. Compared with the traditional education model, the OBE concept is a student-centered practice system, which emphasizes the openness, socialization and application of talent training. What kind of technology, which has great practical significance for the improvement of vocational education teaching results and personnel training level.

The four theoretical principles of OBE are: focusing on achievements, exploring opportunities, raising expectations and reverse design. It requires the teaching reform to be guided by the ultimate

expected goal of learning, reverse design of teaching links and teaching contents, focusing on results as the starting point of teaching design, opening up different teaching methods to create more learning opportunities for students, so that all students can achieve different levels of results, and finally complete teaching implementation and evaluation [5].

3. Teaching Ideas of Financial Big Data Analysis Course under OBE Concept

3.1 Clarify the Expected Objectives of the Course

Based on the concept of OBE focusing on the reverse design of teaching objectives and achievements, the curriculum objectives of finance major should be committed to connecting the abilities that students should acquire after graduation. That is, as a graduate majoring in financial management in Colleges and universities, the graduation requirements must have relevant knowledge and ability reserves.

In the era of data, financial analysts need to have the ability to collect original data, filter and clean data, mine modeling and analysis, etc. Only in this way can they make effective use of big data to do financial analysis, and find data from complicated information that can help us to make financial analysis and decision [6]. Therefore, in addition to the traditional financial analysis methods, the financial analysis course also needs to carry out course expansion, teaching students how to use the Internet and cloud technology to collect raw data, filter and clean data, mine modeling analysis, etc. If the teaching goal of financial management is to enable students to master enterprise cash management, accounts receivable management and inventory management, the expected teaching goal of the school should be to use inventory model, economic order model, reasonable insurance reserve, commercial credit decision-making and other means to help enterprises determine the best reserve of cash, accounts receivable and inventory. Through the analysis and quantification of knowledge goal, skill goal and quality goal, we can set the expected goal of curriculum more reasonably.

3.2 Enrich Teaching Contents and Methods

The financial big data analysis course is a deep integration of big data technology and financial analysis. Through the modern information teaching platform, the online and offline hybrid teaching mode combining theoretical and practical teaching can be used. Relying on the financial big data analysis training platform built by the enterprise digital operation demand scenario, different teaching tasks are set to encourage students to make scientific decisions by using the results of financial big data analysis [7]. Or through typical case teaching, cultivate students' ability to apply enterprise financial big data for analysis and mining, seamlessly connect with enterprise-related work, and meet the needs of enterprises for digital talents.

The employment direction of graduates from higher vocational colleges is widely distributed, and most of them are concentrated in small, medium-sized and micro enterprises. However, most of the existing financial management teaching materials are applicable to large listed companies. Their financial management contents and modes are different from those of small, medium-sized and micro enterprises. There is disconnect between students' actual employment operation and what they have learned. Therefore, the teaching content needs to add the operation theory of small, medium-sized and micro enterprises to meet the employment needs of higher vocational graduates and the renewal requirements of financial management courses.

The teaching design under the OBE teaching concept should highlight the dominant position of students. Therefore, the project-based teaching implementation of each sub-project can stimulate students' autonomous learning ability and learning interest by combining case teaching [8]. For

example, let students collect relevant data in groups according to the task requirements, and carry out data cleaning; then, the basic tools of data analysis are used for data modeling and analysis. Finally, PPT is made in groups, and the results of data analysis are presented visually, so as to give full play to students' subjective initiative and improve their professional judgment and analysis ability.

In addition to enriching teaching methods, schools should also cultivate students' self-cultivation mechanism. For example, in the way of teaching communication, teachers can set up wechat groups to interact with class students, or accounting course teachers can join the wechat groups of class students. Through online interaction, they can not only provide guidance for students' professional learning, but also pay attention to students' thoughts and movements, and publish relevant links and encouraging words, So as to continuously promote the student group to consciously participate in the cultivation of accounting post ability and post ethics [9].

3.3 Optimize Course Assessment Methods

The assessment content of talent training should not only focus on theoretical knowledge examination and practical operation assessment, but also need to make a reasonable and true evaluation of students' learning process and learning situation [10]. The evaluation of learning output under the OBE education mode is the key guarantee for the continuous improvement of talent training quality. According to various and multi-level assessment concepts, a reasonable assessment method can be formulated from different teaching levels and assessment items. For example, set up daily assessment, theoretical assessment and time assessment. The daily assessment includes classroom attendance and interactive performance, focusing on the investigation of learning attitude and professional identity; Theoretical assessment includes in class test and after-school homework, focusing on the mastery and application of theoretical knowledge; Practical assessment includes unit work and teamwork, focusing on the application of practical skills, including the cultivation of interpersonal and leadership skills. At the same time, when the teacher attends class for the first time, the course assessment plan, assessment basis and assessment requirements are clearly explained to the students and sent to them, so that the students have clear goals and expected performance from the beginning of their study, and attach importance to the importance of the classroom and the learning process [11]. The course assessment method is shown in Figure 1:

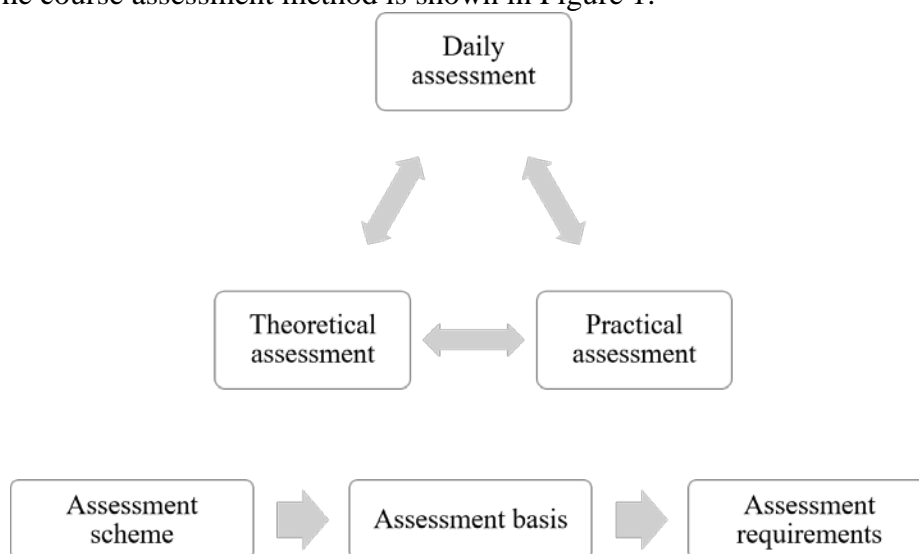


Fig.1 The Course Assessment Method

4. Conclusions

In the era of digital economy, financial talents are changing from accounting type to management type. The teaching reform guided by OBE updates the new demand for accounting talents in the era of big data and the new content of financial management teaching with the concept of reverse design, so as to more effectively realize the teaching objectives and talent training objectives of the course. So that big data financial analysis talents can really give full play to the functions of management accounting, serve the strategic planning of enterprises, realize the digital transformation of enterprises, and implement the national digital economy talent strategy.

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