

The Combined Engineering Assessment Methods for Business Courses under the Background of Artificial Intelligence

—Take the Course "Commercial Bank Operation Simulation Training" as an Example

Cuiying Pan^{1*}

¹ College of Digital Economics, Nanning University, Longting Road, Nanning, China

ABSTRACT: In the era of artificial intelligence, it is difficult for traditional business courses to adapt to the development of new technologies. The combination of work and study in business courses has become one of the main directions of business course reform in the new era. Taking the course "Commercial Banking Business and Management" as an example, the paper divides the course assessment into four modules by using artificial intelligence platform and big data processing technology, and uses Python language to carry out procedural evaluation and feedback on the four modules in an all-round management evaluation system. Relying on artificial intelligence technology, the program combines online and offline teaching, assessment and evaluation to effectively improve the teaching effect of business courses.

1. INTRODUCTION

The course "Commercial Bank Operation Simulation Training" is a professional course for undergraduates majoring in economics. Through the study of banking professional knowledge, students can comprehensively study the basic operating principles and methods of commercial banks, and have an in-depth understanding of the rules and regulations of banks; master the business related to financial institutions, such as: capital and creditor's rights business, lending business, investment and financing, intermediary The technical operation management of various businesses such as business, and at the same time know how to distinguish different positions and business situations, and make correct professional judgments. The characteristics of this course are that the teaching content is not only strong in professional theory, but also has great technical requirements for practical operation. Therefore, in order to better improve students' theoretical and practical ability, teachers should change the traditional single test-taking method and adopt. Diversified and intelligent assessment method of "combining work and study" to cultivate intelligent financial talents who can meet the needs of market economy development and have strong commercial banking skills^[1-2].

2. REFORM GOALS

There are three goals for the research and reform of the

* Corresponding author. Email: tonxzyx2020@163.com

course assessment method: one is to focus on improving students' creative awareness and the cultivation of hands-on skills; the other is to set the curriculum from the intelligent technology required by the business post group, emphasizing the combination of business content and engineering; The third is to highlight the assessment of practical links and strengthen the application of modern information technology, especially the application of cutting-edge technologies such as big data, block-chain, and artificial intelligence in banking business. Therefore, in order to test the teaching results in an all-round, objective and scientific way, it is necessary to make an overall layout in the knowledge point test, test method, scientific test system and other parts, and formulate a systematic, comprehensive, scientific and highly feasible assessment method, an assessment system that maximizes the role of assessment and gives full play to the purpose of applied education and teaching^[3].

3. COPYRIGHT FORM

The assessment of the course "Commercial Bank Operation Simulation Training" should always focus on the ability of financial situation, pay equal attention to theory and practice, and focus on the assessment of theoretical knowledge and practical ability, instead of only examining students' test-taking ability. Regular quizzes have demonstration, function, and coaching functions during the teaching process. Based on this, this course should construct a work-study assessment scheme that combines assessment form with theoretical content

and practical skills training. Teaching design should not only improve students' application ability through the connection before class, during class and after class, but also improve students' practical ability through teaching links such as setting scenarios, skill drills and classroom discussions^[4]. The general idea is as follows:

3.1. Pay attention to the teaching and application of artificial intelligence technology

In the course teaching, Python data mining technology, SPSS software training, blockchain financial application practice, big data financial application, artificial intelligence and machine learning, etc. are used as comprehensive business operations when operating time for various banking businesses. Practical auxiliary skills. Only by using these skills can the corresponding business operations be completed. Using this method forces students to master various technologies of artificial intelligence independently^[5]. In the course assessment, the school's existing artificial intelligence laboratory equipment is used to set up a complete evaluation + feedback system for this course in the background, as shown in the figure 1.

First of all, the evaluation indicators of this course are set in the background of the artificial intelligence laboratory, and student attendance, student classroom performance, course sub-items, and final assessment can be used as the four major modules of classroom assessment^[6]. Secondly, use the Python language to set feedback and reminders in each module, send the quantified data of students' performance in this module to the student account, and remind students in real time and request corrections. Third, the big data platform is used to collect and store the quantitative data generated by the students' performance in various modules in the teaching process. Finally, the data is converted and a visual chart is generated to provide feedback to the students. The feedback mechanism will comprehensively track and evaluate each module in the whole process of the course, and finally summarize the score ratio of each module to obtain the final assessment basis of the course.

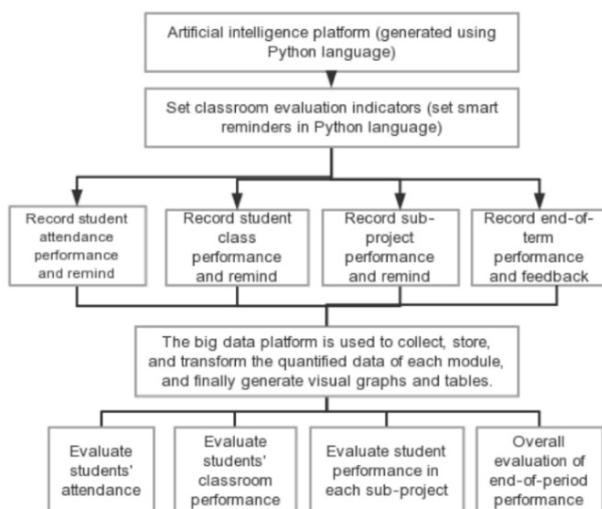


Figure 1 Artificial intelligence assessment system

3.2. Focus on process performance

In order to improve the effect of theoretical mastery and reduce the pressure of students' final assessment, a process assessment plan is implemented, that is, to increase the proportion of each student's teaching performance, such as increasing to 40%, this link can include classroom tests, course performance, and positive answers. questions. post-class tests, response effects, etc.). This kind of reform has changed the shortcomings that academic performance was mainly composed of final exams in the past, and stimulated students to work hard in the course of the class instead of winning by surprise at the end of the semester, which will create a better study atmosphere^[7-8].

3.3. Different and diversified assessment forms

The method of the final exam should be changed at any time according to the focus of the theoretical knowledge of the course. It mainly monitors the practical skills and solving ability of students in applying theoretical knowledge, implements artificial intelligence projects, and combines theory and practice for testing. The theoretical module is mainly based on examinations, and the practical module should fully consider the various performances of students in the process of learning when testing and grading, and the assessment structure should be differentiated and varied. Make the evaluation of students' learning effect as comprehensive as possible.

3.4 Focus on feedback mechanisms

It is very necessary to provide timely feedback in the teaching process: on the one hand, the artificial intelligence evaluation system can push reminders to students in time. Students can receive feedback on their academic performance in a timely manner and make timely corrections based on the feedback. On the other hand, the artificial intelligence assessment system can push reminders to teachers in time. Teachers can also use the feedback of AI evaluation data to discover various deficiencies in the teaching process and make teaching adjustments in time. This kind of course feedback can help students and teachers perform better.

4. TEACHING EFFECT

Since the "Commercial Bank Operation Simulation Training" has broken through the original model and adopted a diversified assessment mode, including a combination of classroom questioning, homework, classroom written test, and final written test, some results have been achieved:

Table 1: Distribution map of students' exam results

Number of candidates	184	
100-90 points	101	54.89%
89-80 points	65	36.11%
79-70 points	10	5.55%
69-60 points	2	1.11%
59 points and below	2	1.11%
Average score	90	

From Table 1, it can be seen that the number of participants in this course is 184. Among them, the number of participants in the final evaluation score in the 100-90 division is at most 101, accounting for the highest proportion, reaching 54.89%; secondly, in the 89-80 points range, There are 65 people, accounting for 36.11%, and only 4 people fail, and the total proportion is only 2.22%. The average score for the course is 90.

After using the process assessment method, the students' classroom questions and homework scores were significantly higher than those of the previous ones, indicating that the process assessment method has indeed played a role in promoting students' usual learning. In the teaching process, not only use the "Commercial Bank Simulated Operation" platform + "Learning Pass" platform to publish assignments online, interact with the classroom, etc., to achieve a teaching mode that combines online and offline, in addition to answering classroom questions , but also to complete the corresponding extracurricular homework, using the "commercial bank simulation business" platform + "learning" platform to publish homework instead of the original simple paper homework, so students study with special attention. In addition, the "Learning Pass" platform can link the series of feedback questions raised by students' WeChat, and students can correct them in time and ask their instructors for advice, which improves students' enthusiasm and learning efficiency

5. CONCLUSIONS

The new assessment method divides the total academic performance into several assessment items, and the process assessment method of assessment is always interspersed in the learning process, which obviously improves the students' attention to the course learning, prompts students to pay attention to every detail of the course learning, and contributes to the improvement of students. The self-directed learning ability is of great help, and significantly improves the utilization of classroom time, enabling students to achieve high-efficiency learning. In addition, the decrease in the proportion of theoretical assessment in the total score and the increase

in the proportion of ordinary assessment and practical assessment in the total score also clarifies the importance of learning attitude and practical skills. Therefore, the diversified assessment method is a better assessment mode suitable for higher vocational education teaching[6].

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