Original Research Article

Teaching Reform of Government Accounting Based on Superstar Online Learning Platform

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Abstract: Big data and Internet technology of higher education have promoted the continuous innovation of university teaching models. In this article, the course designed based on the expected teaching effect. It analyzes the teaching reform and implementation effect of the Government Accounting course through indicator design, chart display, data analysis and other teaching methods with the help of the Superstar Online Learning platform, and finds that students' low score on classroom interaction and practice questions. This teaching reform will provide a basis for teachers' future teaching design, and the teaching experience of this course will provide a reference for the interactive quantitative teaching of other courses.
Keywords: Superstar Online Learning Platform; Government Accounting; Teaching Reform; Implementation Process

1. Introduction

The Ten-Year Development Plan for Educational Informatization (2011–2020) emphasizes the application of information technology in the reform of teaching models. By 2020, the country will basically establish the educational informatization system that "everyone learns, can learn everywhere, and can learn all the time", and adapt to the development goals of educational modernization, promoting the informatization teaching the normal state of teaching activities (Fang and Huang 2018). The reform of the teaching model that integrates in-depth information technology and teaching activities needs to keep pace with the times (Zhang, Ding, and Gu 2015). At present, Superstar Online Learning platform, produced by Chaoxing Inc., is a professional and comprehensive online learning platform for smart phones, tablet computers and other mobile terminals that can carry out knowledge dissemination, sharing and management. The mobile teaching model based on Superstar Online Learning platform provides a teacher-oriented and student-centered mobile teaching and learning space.

This article is relying on the Superstar Online Learning platform, aims to discuss the classroom teaching reform of Government Accounting, and is committed to creating a new type of classroom teaching model, featuring the "real-time online, two-way interaction" (the offline classroom teaching is assisted by online informational education) that helps to achieve the greatest integration of teachers, students and teaching resources, to promote the improvement of the current teaching model and enrichment of teaching content, to improve students' learning interest in and learning efficiency of accounting courses. The teaching reform effects of Government Accounting course may also be applied to the teaching reform of other courses.

2. Teaching status and problem analysis

The Government Accounting course is an important course for the accounting major. At present, the teaching of this course is mainly based on multimedia teaching and analysis, combined with classroom exercises, group discussion and other teaching methods, combining the theoretical knowledge of the course with practical business training. The assessment of this course includes two major aspects: usual academic performance (attendance and assignment), and the final examination grades.

However, the classroom-based teaching reform of Government Accounting has little effect, and there are still some problems existed:

2.1 Teacher-controlled off-line classroom teaching mode

The Government Accounting course covers a wide range of contents, including the basic theory of government accounting that explains the basic concepts and accounting methods of government accounting from a theoretical perspective, the government fiscal accounting that introduces the specific business accounting of government financial departments, and the introduction of specific business accounting of government units. The content of the three major modules of Government Accounting includes 21 chapters. The knowledge chain of this course is very extensive, and the number of credit hours per semester is 48. In order to

complete the teaching plan, teachers mainly focus on the explanation of government finance and government accounting. The teaching content depends largely on the teaching materials; even though the multimedia teaching is used, it is just the summary and refinement of the teaching materials. Although it is also accompanied by classroom practice sessions, due to time constraints, these have not been applied into each class session, thus students can only complete the practice session by themselves off-class. Taking the heavy task and tight schedule into consideration, teachers and students often lack continuous and timely communication and interaction, which impedes teachers' fully understanding of students' learning situations.

The entire teaching process is controlled by the teacher. Students are passively "waiting" to instill knowledge and passively accept tasks, and students have accepted this teaching routine many times in other courses, plus their diverse knowledge and learning initiatives, which made this kind of large-class teaching mode not work effectively any longer. Teachers find it difficult to take care of each student's learning progress in real time; and students passively follow the teacher's progress. This teacher-controlled teaching mode that relies on offline multimedia can easily frustrate students learning enthusiasm that prevents students from truly participating in the learning process, which is not conducive to understanding of the academic situation, and even less conducive to the efficient management of courses.

2.2 Traditional teaching information feedback and assessment methods

At present, the assessment of Government Accounting course includes two major aspects: usual academic performance assessment and final exam assessment, and the method is relatively traditional. The details are shown in **Table 1**:

Table 1. Evaluation indicators for government accounting courses

Assessment index	Weight (%)
Attendance	15
Class performance	10
Assignments	5
Final exam	70
Total	100

As shown in the table above, the usual performance assessment includes attendance (15%), classroom performance (10%) and assignments (5%); the final assessment method is closed-book examination, accounting for 70%. Attendance is measured by the sign-in name list of students in the classroom or random roll-call by the teacher. The assignments are measured by the quality of the homework and the timeliness of handing in. The classroom performance is measured by the number of questions answered and whether violation of classroom disciplines. These assessment methods are traditional, time-consuming, and due to time constraints, assessment methods such as attendance are not covered in every lesson. The above calculations are based on the teacher's records and manual calculations, which are subjective, and the results may not be accurate enough. Therefore, it is not conducive for teachers to scientifically control the overall curriculum teaching. For students, these traditional assessment methods will make them develop the habit of passively and mechanically attending class, plagiarizing homework and review or muddle through books in order to pass the exam, which is not conducive to the application of knowledge and the cultivation of practical processing ability.

3. Implementation of government accounting teaching reform

3.1 Teaching design

Firstly, design course objectives and assessment indicators, the expected learning outcomes of this course are as follows:

Outcome 1: Students can describe the concepts, principles and methods of government accounting;

Outcome 2: Students can understand and be familiar with the basic theories of the operation of government administrative institutions and the basic principles of government accounting;

Outcome 3: Students can proficiently apply government accounting methods for practical operations and prepare government accounting statements; be able to grasp the differences between various types of accounting and further grasp the laws of accounting treatment;

Outcome 4: Students can develop a serious and positive learning attitude and increase their interest in learning;

Outcome 5: Students can cultivate a rigorous and serious work attitude and enhance teamwork ability.

The course assessment pays more attention to learning process assessments, including five aspects: attendance, course videos, chapter tests, discussions, and classroom interactions. These assessments are completed through the online learning platform; and the final assessment is carried out by means of online examinations, which focuses on the learning effect assessment. The specific assessment indicators are shown in the following table:

Table 2. Expected learning outcomes and assessment indicators of Government Accounting course

Assessment method	Score weight %	Expected learning outcomes to be assessed ("√") Outcome 1–5				
		Outcome 1	Outcome 2	Outcome 3	Outcome 4	Outcome 5

Usual academic performance	Attendance	20				√	√
	Class interactions	20				√	√
	Test for each chapter	20	√	√	√		√
	Class discussions	20	√	√		√	√
	Course videos	20			√	√	√
Final exam	Single-choice Multiple-choices Short-answers Practice-questions Statement	100	√	√	√		√

Secondly, course learning resources and database mainly include course descriptions, syllabus, teaching calendar, relevant PPT slides, teaching videos and question banks. Among them, the production of PPT slides can contain graphic teaching methods, for instance, in the explanation of the three financial allocation methods (direct financial payment, financial authorization payment, and actual allocation of funds), due to the large number of capital flow links and complex procedures, in order to facilitate students' understanding and grasp, teachers can add business flowcharts to the PPT to visually display relevant knowledge. The production of instructional videos needs teachers to sort out the chapter knowledge points according to the characteristics of the course content and online courses and expand around the key knowledge points. The content explanation duration is about 20 minutes. This will largely improve the interest of the course and motivate the learning enthusiasm of students. The purpose of constructing curriculum learning resources is to help students have a clear understanding of the learning objectives, learning content, learning progress and key knowledge points of the entire curriculum.

3.2 Implementation process

The key to the implementation of teaching reform is the implementation process of online teaching. Teachers should make full use of the online teaching platform to complete the online management and organic connection of various teaching links such as editing of course content, score weight setting, online Q&A, arrangement of assignments, and release of notice.

In 2020, we have already implemented online teaching or the first time in the Government Accounting course for seniors majored in accounting, applying the Superstar online learning platform and the Tencent Conference (a kind of online office platform) to carry out online teaching. To use the online teaching platform to teach effectively, it is necessary for teachers to make an integrated arrangement of the three stages of work before class, during class, and after class. Since part of the course content needs to be discussed by students in groups, the class has been divided into 10 groups. Group projects have been carried out according to the course schedule. The basic teaching procedure is shown below:
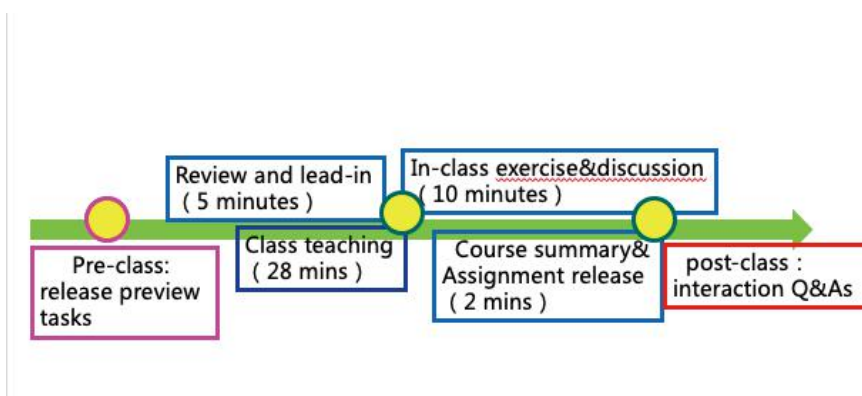

Figure 1. Basic teaching program diagram of Government Accounting course.

4. Results

Based on the online learning platform, the teaching mode has highlighted the students' dominant positions, which has changed students' passive learning to active learning. Students' self-learning awareness has been raised to some extent. Students are more willing and receptive to new knowledge. The learning effect is significantly improved, and the evaluation of the effect of teaching and learning is more processed and more precise. So far it can be concluded from the learning portal interface that this course page has been viewed 416,356 times with the course' highest evaluation satisfaction at 5 stars (the perfect score in evaluation satisfaction is 5 stars). This shows that this teaching mode has been largely recognized by most students. There are total 19 chapters in this course. The number of chapters' content learning is 27260, and most students are able to do full attendance. There are 138 task points published; and all the students can finish the task point. The final statistics of the class's comprehensive results are shown in the following table:

Table 3. Statistics of the final learning results of Government Accounting course

Usual academic performance: 30%; final exam: 70%		
Grades	Numbers of people	Percentage
Above 90 (excellent)	18	19.15%
80–89 (good)	38	40.43%
70–79 (medium)	30	31.91%
60–69 (pass)	7	7.45%
under 60 (fail)	1	1.06%
Total	94	100%

As can be seen from the table above, among the 94 students in this class, the excellent proportion of 90 points or more is 19.15%, the good ratio of 80-89 points is 40.43%, the medium proportion of 70-79 points is 31.91%. Only one student failed for the course, which proves that the overall learning situation has greatly improved. Through in-depth analysis, it can be found that the relatively lower score in the group discussions and classroom interactions; and the final assessment scores was lower in the multi-choice questions and business questions sections. This research findings could be a targeted goal for teachers to fulfill in the future teaching process.

In summary, the interactive teaching method of the Superstar online learning platform quantified the assessment indicators, promoted student-student discussion, teacher-student exchanges, and promoted students' learning effects. The online learning platform helps to record students' learning and activity participation in real time, thereby preventing students from assignment plagiarism, strengthening the scientific nature of process assessment, and subtly fostering students' learning integrity and initiatives. The analysis reports and data provided by the Superstar online learning platform can provide teachers with targeted teaching evaluation indicators, promote teachers' continuous learning and research, and provide materials and reference basis for teachers' further theoretical research, as well as the teaching references to other courses. The online teaching materials can provide abundant resources for students' independent learning.

References

1 Fang, Z. P, & Huang, W. Discussion on the Reform of the Teaching Mode Relying on the Superstar Online Learning Platform [J]. Modern Vocational Education, 2018; (06): 159.

2 Gong, L. Accounting Education and Teaching Reform and Practice in the Internet and Big Data Era [J]. Knowledge Economy, 2016; (02): 116–118.

3 Tang, Y. S, Ma, W., & Yao, L.S. Viewing the Teaching Reform of Accounting from a System Perspective [J]. Finance and Accounting Monthly, 2019; (14): 104–108.

4 Wu, X.M. Exploration of Life Science Classroom Teaching Based on Mobile Internet + platform [J]. Journal of Biology, 2018; (05): 120–123.

5 Zhang, L., Ding, X., & Gu, F. Accounting Reform and Development in the "Internet +" Era—A Summary of the Viewpoints of the 2015 Academic Annual Meeting of the Chinese Accounting Association [J]. Accounting Research, 2015; (8): 93.

6 Zhang, L., & Cui, Y.L. Review of Domestic Research on Accounting Reform and Development Under the "Internet+" Environment [J]. Friends of Accounting, 2017; (04): 116–118.

7 Zhang, X.W. The Application of Mobile Learning Platform Based on Chaoxing in the Experimental Teaching of Botany [J]. Journal of Weifang Normal University (Natural Science Edition), 2018; (01): 112–115.