Classroom Teaching Reform of Famous Teachers of Computerized Accounting Specialty in Higher Vocational Colleges

Ming ZENG
Hunan Modern Logistics College, Changsha, Hunan, China
251242038@qq.com

Keywords: Space for Famous Teachers, Computerized Accounting, Teaching Reform

Abstract. Starting from the teaching concept and curriculum design in the new era, taking the course of computerized accounting in higher vocational colleges as the research object, this paper discusses the basic connotation, key steps, implementation methods and processes of teaching resources, discusses the construction of famous teachers' classes and its practical effect. The research of this paper shows that the establishment of famous teachers' classrooms is helpful to the construction and sharing of teaching resources. Through the construction of high-quality teaching golden courses, the quality of classroom teaching can be significantly improved, while promoting students' learning and growth, a group of excellent young teachers can be trained. The paper also proves the necessity of adhering to the application orientation, promoting the deep integration of information technology with curriculum teaching and personnel training, and giving full play to the exemplary leading role of the space of famous teachers.

Introduction

With the rapid development of the Internet, the use of cyberspace is becoming popular, and various curriculum models and resource construction emerge in endlessly [1]. Behind this flourishing phenomenon, we can see that a large number of low-quality and inefficient resources are full of the network, the original excellent courses and the existing course construction lack effective communication and interaction, and the number of high-quality classes with good community model is insufficient [2].

Under such a background, how to build a high-quality ubiquitous learning environment in the new era and present the best educational resources in front of each student's intelligent equipment is a problem that all vocational educators need to think deeply, and is also an important basis for the talent training and the quality of education and teaching in China [3].

The construction of "Famous Teachers' Space Classroom" project is to enable teachers in Higher Vocational Colleges to organize digital teaching resources according to specific teaching objectives and teaching strategies [4], to record teaching and learning activities and online interactive exchanges through network space and network course platform, in order to promote the co-construction and sharing of high-quality curriculum resources, to promote the continuous innovation and improvement of new teaching organization forms and to continuously improve the teaching efficiency [5].

Curriculum Status and Construction Requirements

Basic Situation of the Course

"Computerized Accounting" course is the core curriculum of accounting, financial management and other specialties, and also one of the compulsory courses to improve the level of computerized accounting [6]. It refers to the application of information technology with computer as the main body in accounting work, aiming at realizing the automation of data processing and making the traditional manual accounting information system evolve into computerized accounting information system [7]. It is the requirement of economy and science and technology to accounting work.

Generally, computerized accounting refers to the process of accounting information analysis, prediction and decision-making by using computer to record, calculate and report accounts
manually, and partly replacing human brain, the purpose of which is to improve the level of accounting management and economic benefits of enterprises [8]. Through learning this course, students can understand the basic theory of computerized accounting and the operation skills of the mainstream financial software, and realize the zero distance connection between theory and practice to solve the problems and faults that may occur in software application.

Computerized Accounting is a compulsory course for students majoring in accounting, directly related to the basic specifications of professional training [9]. It requires graduates to master computer application skills skillfully, cultivate and improve students' computer literacy, and lay a good foundation for students to use computers to learn other courses [10]. Therefore, Computerized Accounting occupies a very important position in the courses offered.

**Basic Information of the Course**

The course "Computerized Accounting" has 16 weeks each semester, with the total class 64 hours. The course running platform is called World University City. The auxiliary platforms include Tencent classroom, Baidu Chuan class, Fangming net and NetEase cloud classroom. The degree of openness is completely open to the public. Students can register freely and study with no charge.

**Courses Offered**

The course of Computerized Accounting has been offered for five semesters so far. The number of elective courses has doubled since the beginning of the course. Among them, the number of elective courses in the third period (September 2017) is the largest, reaching 430, an increase of 628.81% compared with the previous one (March 2017). Detailed information on the opening of the course is shown in Table 1.

<table>
<thead>
<tr>
<th>Term</th>
<th>Start Stop Time</th>
<th>Student Number</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>01 September – 31 December, 2016</td>
<td>52</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>23 March-12 July, 2017</td>
<td>59</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>01 September – 31 December, 2017</td>
<td>430</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>23 March-12 July, 2018</td>
<td>188</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>01 September – 31 December, 2018</td>
<td>165</td>
<td></td>
</tr>
</tbody>
</table>

**Course Resource Data**

A total of 56 video teaching resources were constructed for the space course of "Computerized Accounting". The total length was 632 minutes, 1074 non-video resources, 1450 exercises were set up, and the number of participants was 3285. Details can be found in Table 2.

**Teaching Reform**

**Develop the Reform of Flip Classroom Teaching Mode based on Mobile Internet**

With the help of the curriculum resources of "Computerized Accounting" celebrity teachers' space classes, the reform and practical research of the flip classroom teaching mode based on the mobile internet is carried out, and the mode of "self-learning task list" to give practical guidance to the flip classroom before class is adopted, so as to enable students to flip the classroom according to the requirements [11].
Table 2. Course Resources and Learning Data Statistics.

<table>
<thead>
<tr>
<th>Data</th>
<th>The first semester</th>
<th>The fifth semester</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Teaching video</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Number</td>
<td>12</td>
<td>56</td>
</tr>
<tr>
<td>Total Length of Time (minutes)</td>
<td>205</td>
<td>632</td>
</tr>
<tr>
<td><strong>Non-video resources</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number</td>
<td>362</td>
<td>1074</td>
</tr>
<tr>
<td><strong>Course notice</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number (times)</td>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td><strong>Tests and assignments</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number</td>
<td>5</td>
<td>38</td>
</tr>
<tr>
<td>Total Number of Exercises</td>
<td>312</td>
<td>1450</td>
</tr>
<tr>
<td>Number of participants (persons)</td>
<td>52</td>
<td>1274</td>
</tr>
<tr>
<td><strong>Interactive communication</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total number of Posts</td>
<td>124</td>
<td>536</td>
</tr>
<tr>
<td>Number of Teachers' Posts</td>
<td>52</td>
<td>357</td>
</tr>
<tr>
<td>Interactive Number (Person)</td>
<td>1250</td>
<td>3285</td>
</tr>
<tr>
<td><strong>Examination (trial)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Times</td>
<td>10</td>
<td>32</td>
</tr>
<tr>
<td>Total Number of Questions</td>
<td>300</td>
<td>1532</td>
</tr>
<tr>
<td>Number of Participants (Person)</td>
<td>52</td>
<td>1031</td>
</tr>
<tr>
<td>Number of Passed Courses (Person)</td>
<td>45</td>
<td>894</td>
</tr>
</tbody>
</table>

On this basis, it strengthens the relevant design of classroom teaching mode in class, and does a good job in the design and cohesion of activities in all aspects of the classroom, forming a new teaching method with the basic characteristics of "integration of activities in all aspects of classroom teaching", so as to improve the teaching quality, carry out practical research and effect evaluation, and finally form a series of practical teaching mode, method, and case set [12].

**Develop the Application Practice of Innovative Teaching Mode of Finance and Accounting Specialty under the Information Environment**

Drawing support from the information-based training resources, we carried out the reform of teaching mode of integration of certificate and certificate of "Computerized Accounting" based on work tasks [13]. The learning content was divided into 13 tasks according to the requirements of enterprises' posts. Five-step teaching method was adopted to teach, which has received a great response among students. Everyone has a chance to practice the task by using the method of flipping the classroom, which have really achieved the goal of learning and doing. In the situation of learning by doing, through statistical analysis of the data, the pass rate of the course "Computerized Accounting" in each accounting certificate examination of the students in this class is more than 96%.

**Attempts to Reform the Space Classroom Hybrid Teaching mode based on Self-built Platform**

Through self-built learning flat and online course platform, resources are built fruitfully and applied to students' teaching process. On the basis of maintaining the existing teaching methods, online learning videos, after-school tests, mobile phone homework, online question answering, evaluation tests and other auxiliary means are used to enrich the teaching methods and content, which has played a very good effect. With this method, great changes have been made in teaching methods, and it is easy to set up resources, which has achieved good results. This method has been successfully applied to other teachers in the college.

**Implementing the Reform of Teaching Methods based on Work Tasks and Space for Famous Teachers**

Through enterprise research, considered the situation of enterprises implementing computerized
accounting in their work, we can fully understand the requirements of current accounting posts for
the operation skills of computerized accounting software, reconstruct the teaching system with the
specific tasks of the posts as the carrier, strengthen the flexibility and operability of the teaching
process, combine the typical tasks and requirements of the working skills in the posts, and rebuild
the combination of various links of the curriculum.

According to the comprehensive principle of "from simplicity to difficulty", 13 specific tasks are
carefully constructed, which run through the whole course of teaching. Each task is designed
according to the steps of "teaching, learning and doing", which combines with each other and goes
step by step. The students' learning interest and employment skills are greatly improved by
changing from simplicity to difficulty and deepening.

Teachers break all boundaries of time and space, enterprises and schools, teachers and vocational
education experts, students and their groups by the aid of University City Cloud space platform and
creating professional virtual practice teaching environment and building space courses [14]. The
combination of work and study is the basic starting point to do the following jobs, such as using
task-based teaching guidance to construct open space courses, and setting up task submission,
online exam column, consultation and answer module, learning navigation, etc., to ensure the
submission of students' tasks, build students' online exams, to test students' learning of theoretical
knowledge and deepen their impression, as well as to obtain more practical resources and teaching
cases from the space classroom [15].

In the design of teaching situation, we take the famous teacher's space classroom as the carrier,
and fully use the Internet + teacher's space classroom to accomplish the reform of teaching methods
[16]. For the examination of the theoretical knowledge of single courses and the timely use of
mobile phones to teach, especially for those relatively abstract descriptions, we usually use
courseware to realize the problem. The revision saves time and cost greatly, improves the
proficiency of skill mastery, and effectively transforms mobile phones into learning tools.

Making full use of the learning resources in the space lecture hall of famous teachers and guiding
students to utilize the space classroom, students can learn by themselves in advance, use the
"five-step teaching method", 90 minutes of fine arrangement, and make rational use of the time in
the course.

First, the teacher talks and does 15 minutes while speaking according to the task book;
Second, the students practice for 30 minutes according to the way of drilling, and in the process
of students' exercises, the teacher plays as a coach to help students solve problems one-to-one;
Thirdly, the teacher will explain the difficult points and necessary knowledge for 20 minutes;
Fourth, students do 20 minutes more until they pass the operation task;
Fifth, the time for students to upload task results is 5 minutes.
"Five-step teaching method" has been proved to be able to effectively improve students' information technology ability and learning efficiency, enhance students' autonomous learning
capability, and increase their understanding of new technologies and tools [17].

Exploration of Task-based Teaching Hierarchical Assessment Model for Higher Vocational
College Students

In the process of Higher Vocational education, curriculum assessment is an important content
[18]. Combining with the existing mature mode of hierarchical teaching, adopting the mode of
unified teaching and hierarchical assessment, we can effectively solve the problems under the
circumstances of fewer professionals, uneven quality of students and the impossibility of
hierarchical teaching, and effectively enhance students' learning attitude and enthusiasm. The
hierarchical assessment can fully reflect the process assessment and the final operational assessment
[19].

The specific methods of assessment are as follows: when making assessment papers, students' hierarchical problems are fully taken into account, and assessment papers are formulated according
to the degree of task-oriented difficulty. Students complete assessment papers according to their
learning situation and ability. Students who complete the first level, the result is “pass”; those who
finish the second level is good, and finish the third level is excellent. Taking the course of Computerized Accounting as an example, the score of the first level is 60-74 (task file is 1-8), the score of the second level is 75-84 (task file is 9-11), and the score of the third level is 85-100 (task file is 12-13). Then combined with the usual results and process results, the total scores are calculated. The difficulties of assessment should be fully considered in the design at the beginning of teaching, and should be carried out strictly according to the requirements of the task list.

**Reform of Curriculum Evaluation**

**Assessment Method**

In order to cooperate with the implementation of the teaching mode of "Space Classroom for Famous Teachers Based on Work Tasks", the research group has reformed the traditional assessment methods and implemented a comprehensive and diversified evaluation system. Students' participation in teaching, task accomplishment, working attitude and innovation are taken as the basic elements of assessment.

The completion of each task is regarded as an important aspect of the assessment. Not only that, the evaluation process includes the inspection of students' learning ability and working ability, and also the assessment of students' professional quality and team spirit. The specific assessment methods are the combination of the assessment of ordinary performance, process, hierarchical, online and other contents.

**Result Ascertaining**

The key point of the reform of the assessment method is to increase the process assessment, combine it with the final assessment, connect it with the process teaching organically, and at the same time increase the score of the usual results. The final score assessment consists of the usual score (30%) and the process work score (20%). The main purpose of this is to improve students' active participation. In the final examination results, basic skills accounted for 60%, both improving skills and excellent skills accounted for 20% relatively. By adopting the mode of unified examination paper and hierarchical examination, students can select suitable examination contents according to their own conditions and complete the evaluation process of self-selection.

**Daily Assessment.** In peacetime, the assessment of learning performance is based on the students' performance in the learning process, taking the teaching process as the carrier, recording (1) the students' random classroom attendance rate and (2) classroom interaction performance, and taking these two parts 50% accounting separately, totally being taken as a proportion of 20% in the final assessment results.

**Process Assessment.** Assessment of teaching practice activities refers to the assessment of students' achievements according to their comprehensive performance in teaching practice activities, the true feedback of students' knowledge mastery and practical ability, and the assessment of seven times according to the characteristics of the course of Computerized Accounting. The main purpose of the assessment is to inspect students' task practice.

Students are assessed individually, and the results are achieved through self-made practical tasks prescribed by the instructor. Teachers scored according to the results of the students performance. The assessment part of teaching practice accounted for 30% of the final assessment results.

**Final Examination.** Integrating with the working practice of computerized accounting, considering the rule of mastering enough job skills, the final examination and scoring method are designed in the way of spiral progressive means, which include three layers, i.e. basic skill, upgrading skills and excellent skills, with a total score of 100 points.

According to the specific characteristics of the course Computerized Accounting, three layers are set as: the first is the basic skills, i.e. tasks 1 to 8 in the task list, which accounts for 60% of the final comprehensive examination. Students achieve qualified results by carefully completing the assessment at this stage. The second is to improve their skills, which covers tasks 9 to 11, so that they can achieve good results by completing the assessment at this stage. The third is excellent
skills, which refers to task 12 and 13, the best results of excellent grades can be got by completing the assessment at this top stage.

Effectiveness of Course Application

The Overall Situation and Effect of Course Application

"Computerized Accounting" celebrity teacher space course has the annual visitors up to 1,2903 people, the number of students learning this course is 3285, including 1743 fixed students, 1327 social students, 416 college students (235 students in our school). Statistical data show that college students are mainly for accounting and logistics financial management students, students outside the school mainly are about accounting and computerized accounting students, social learners are for the practitioners of accounting related posts, and social trainees have spread all over 23 provinces and municipalities in China. The results present that the course "Computerized Accounting" has made great contributions to the training of applied talents of accounting computerization for the whole society.

The Use and Effect of this Course by Other Colleges

In addition to its effective application in our school, due to its scientific curriculum system and novelty, practicability and students' subjectivity, especially the animation design and vividness and liveliness of resources, the course of Computerized Accounting has been supported and applied by other universities and enterprises, including Hunan Vocational and Technical College of Water Conservancy and Hydropower, Hunan Vocational and Technical College of Mechatronics, Hunan Vocational College of Foreign Trade, Changsha Vocational College of Business and Tourism, Hunan Yuanda Group, Hunan Chuwei Accounting Training School, etc.

Teachers and students of all colleges and universities applying this course have benefited from the teaching of curriculum resources. Teachers use curriculum resources to carry out online and offline mixed information-based teaching. Students use curriculum resources to carry out credit exchange and exchange for school credits through curriculum learning.

Application Effect and Special Case Description

Through nearly two and a half years of practical reform, some achievements have been gained. The passing rate of students' academic achievement is 100%, the excellent rate is 72.2%, and the satisfaction rate of students has risen from 87% in 2016 to over 99% in 2018.

After more than two years of experiments and comparative teaching, the main experience and achievements are concluded as follows: first, using the "five-step principle" to effectively promote students' learning enthusiasm and efficiency, strengthen interaction between the student and teacher and among the students, encourage the students learn by doing specific tasks, understand in learning, do after understanding, students' enthusiasm is greatly improved, the effect of participating in interaction is increased, teachers are capable to make a perfect use of 90 minutes of teaching hours.

Secondly, the introduction of simulation teaching and examination platform enables each student to complete the training process, each of the students has an independent task, can make the practice individually and get different feelings. This effectively improves the quality of education and teaching of the course, and strongly promotes the reform of education and teaching in the college [20]. The process of our project fully shows that this teaching mode can effectively stimulate students' interest in learning the core skills of vocational posts, improve students' practical operation ability, and enhance the teaching effect.

In order to effectively carry out the informationization teaching of the course of Computerized Accounting, we have tried to undertake the course teaching on different platforms such as University Town Space, Baidu Biography Course, Tencent Classroom, NetEase Cloud Classroom, Fangming Net, which is a self-built platform. We have effectively tried the advanced technology of each platform, and provided effective experience for the later stage of informationization teaching.

Our school tried to set up the elective course of Computerized Accounting in our college (not
only in the majors of accounting, financial management, etc.), which promoted the construction and sharing of high-quality resources of Computerized Accounting and improved the teaching quality. The teaching method has changed from traditional classroom teaching to mixed teaching mode, which improves the teaching level of information technology.

**Suggestions on Reform and Optimization**

**Timing Must be More Scientific**

Combining with the actual situation of the construction of famous teachers' space, from the redesign of curriculum teaching standards to the syllabus of textbooks, sample chapters, linking publication and distribution, undertaking enterprise research and curriculum resources construction occupy a lot of time. Most of the curriculum resources have been built, which conform to the new fiscal and taxation policies, the cognitive law of higher vocational students, and the integration the teaching experience and skills of team members into the course for many years. Because the original plan is to build before application, resulting in the construction period in the application of this aspect of deficiencies, for such space classes, should be applied while building, the effect will be better.

**Resource Application Must be More Effective**

How to integrate more information-based teaching technology in the space platform of World University City and Tencent classroom into classroom teaching, how to fully develop the level of these technologies, how to make better use of these information technology to further improve the quality of classroom teaching, and how to explore the ways and methods for higher vocational students to study independently through the network, so that students can complete their tasks, are all the issues which are difficult and should be considered and solved in the process of information-based teaching promotion.

These topics need to be further constructed and focused to continuously optimize through extensive experiments. It is significant of innovate space classroom teaching and make new contributions to the application and promotion of information-based teaching in Higher Vocational Education in the new era.

**Spatial Promotion Must be More Powerful**

Due to the vigorous development of Higher Vocational schools, the relative shortage of teachers and the heavy teaching tasks, it has not been able to effectively attract more foreign students to choose courses. With the popularity of various teaching software, online learning is also very convenient, which makes it difficult to attract people outside the university to participate in the course selection study in the University City space, and maintain a high number of course visits. It is hoped that more peer teachers can be invited to participate in the construction and application of space resources, and further play the exemplary role of space resources and teaching.

**Conclusion**

Adhering to the application orientation, promoting the deep integration of information technology with curriculum teaching and personnel training, and giving full play to the role of demonstration and guidance are the basic original intention of the space construction of famous teachers.

Through the construction of famous teachers' space classroom, the first benefit is to speed up the pace of teachers' use of information-based teaching methods. In order to renew the concept of using information means for curriculum teachers and improve the level of applying information means for teachers, the curriculum construction team, with the support of the school, organized special training on space construction and micro-class production for teachers, and participated in the training of the whole staff of the provincial information technology application ability promotion project.

The second result is to achieve the integration of teaching and learning through interactive
teaching method. In the course of teaching, we could improve the initiative and interest of higher vocational students through micro-lessons, animation and on-line communication. On the other hand, by trying new online learning methods, teachers can be prepared to grasp students’ learning dynamics, accurately grasp the existing problems in teaching, and timely adjust the teaching progress, so as to truly realize the unity of teaching and learning.

The third achievement is to train young backbone teachers. From the early stage of construction, a team the course is constructed, whose members went to various colleges and enterprises to conduct market research many times. During the winter vacation, they worked together to build resources and constantly improve their teaching methods. All the teachers in the team have rapidly raised the level of information-based teaching, and have become the backbone of the school professional curriculum teaching.

References


