

Research on the Construction of Financial Accounting Courses based on SPOC Model

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Abstract: In the current information age, with the continuous advancement of technology, the teaching mode of higher education is also constantly changing. Among them, the SPOC (Small Private Online Course) model has gradually become an important teaching format due to its flexibility and targeted characteristics. This article explores the construction path of the SPOC blended teaching model in the college course of "Financial Accounting", which integrates online teaching platforms and traditional face-to-face teaching to improve students' learning effectiveness and participation, and explores a feasible path for the teaching reform of college accounting and finance courses. This paper will propose specific construction paths and implementation ideas from the perspectives of curriculum design, teaching methods, and evaluation strategies, with a view to effectively achieving the reform goals of the financial accounting curriculum.

Keywords: SPOC; Teaching Mode; Financial Accounting; Course Construction

1. Introduction

SPOC (Small Private Online Course) mode is a type of small-scale private online teaching model whose core concept is to provide high-quality, efficient, personalized, and autonomous learning experiences [1]. It combines online teaching platforms and traditional face-to-face teaching to achieve comprehensive improvement of students' knowledge, abilities, and qualities. In accounting and finance professional courses, the SPOC model can specifically address existing issues and effectively enhance students' learning outcomes.

1.1 Overview of SPOC Model

SPOC (Small Private Online Course) mode is

a type of teaching model originated from MOOC (Massive Open Online Course), whose core concept is to provide high-quality, efficient, personalized, and autonomous learning experiences. The SPOC model emphasizes students' subjective status, fully mobilizes students' enthusiasm and initiative, and improves students' autonomous learning ability and overall quality.

The characteristic of SPOC mode is small-scale private online teaching. Compared with the large-scale openness of MOOC, SPOC mode pays more attention to the individual needs and learning experience of students. In the SPOC mode, students can use online teaching platforms for self-learning and interactive communication, while also combining traditional face-to-face teaching methods for in-depth learning and knowledge construction. This teaching model can better meet the diverse needs of students and improve their learning effectiveness and participation [2].

Compared to traditional face-to-face teaching and large-scale online courses, SPOC mode is more flexible and interactive, with the following characteristics:

Small class teaching. The class size in the SPOC mode is relatively small, usually tens of people or even fewer. This small class teaching facilitates closer interaction and communication between teachers and students, allowing teachers to better understand the learning needs and progress of each student [3].

Personalized learning. The SPOC model emphasizes personalized learning experiences. Through online education platforms that provide diverse learning resources and learning paths, students can learn according to their own interests and learning progress, improving learning effectiveness and participation [4].

Emphasis on interaction and collaboration.

The SPOC model encourages interaction and collaboration among students through online platform tools such as discussion boards, real-time chat, etc. Students can ask questions, share ideas, participate in group discussions, etc. within the course, promoting communication and learning among students. Flexible time and space scheduling. The SPOC model allows students to schedule learning according to their own time and location, without being limited by traditional face-to-face teaching time and location. Students can learn according to their own pace, improving their learning autonomy and flexibility.

1.2 Characteristics and Teaching Status of Financial Accounting Courses

Accounting and finance courses are one of the more popular professional courses in universities, characterized by their professionalism, practicality, timeliness, and comprehensiveness. However, there are some problems in the teaching of accounting and finance courses under the traditional teaching model, such as the single teaching content, outdated teaching methods, and unsatisfactory learning outcomes [5]. To solve these problems, the SPOC model has been introduced into accounting and finance courses, combining online teaching platforms with traditional face-to-face teaching to achieve comprehensive improvement in students' knowledge, abilities, and qualities [6].

In the professional courses of accounting, the application of SPOC mode can effectively solve the problems existing in the traditional teaching mode. Firstly, in terms of teaching content, the SPOC model can provide a diversified curriculum system, introducing real cases and practical teaching, enabling students to apply what they have learned; Secondly, in terms of teaching methods, the SPOC model can adopt diversified teaching methods, such as flipped classroom, group discussion, case analysis, etc., to enhance students' participation and practical ability [7]; Finally, in terms of assessment methods, the SPOC model can focus on process assessment and practical ability assessment to comprehensively evaluate students' learning effectiveness and overall quality.

2. SPOC Model under the Financial

Accounting Course Construction

2.1 Setting Learning Objectives and Course Content

When designing financial accounting courses under the SPOC model, the setting of learning objectives and course content is a key step.

2.1.1 Setting learning objectives

Clearly identify the core concepts of financial accounting that students need to master, such as balance sheet, income statement, and cash flow statement. Specify the skills and abilities that students need to develop, such as financial statement analysis, financial decision-making, and communication skills. Foster students' ability to apply financial accounting knowledge to practical situations, such as preparing and interpreting financial statements.

2.1.2 Setting course content

Provide an introduction to the basic principles and concepts of financial accounting, including accounting cycles, accounting equations, accounting standards, and accounting policies, etc [8]. Teach the preparation methods and analysis techniques of financial statements, including the interpretation and analysis of balance sheets, income statements, and cash flow statements, etc4. Discuss the application of financial information in enterprise decision-making and management, including budgeting, investment evaluation, performance evaluation, etc., and introduce practical cases and simulation exercises to allow students to apply their knowledge to solve real financial accounting problems and improve their practical application ability.

2.1.3 Designing teaching modules

Divide financial accounting courses into multiple modules so that students can gradually study and master knowledge Step by step. Each module should include specific learning objectives, teaching materials, case analyses, exercises, etc. Ensure that there is a clear correlation and progression between each module so that students can gradually build a knowledge framework and integrate different modules' knowledge into it.

2.1.4 Designing interactive and practical links

Use online platforms to provide interactive tools such as discussion boards, real-time chat, online group projects, etc., to promote interaction and cooperation among students,

share views and solve problems. Design practical cases and projects that allow students to apply their knowledge to financial accounting analysis and decision-making through practical scenarios Step by step to strengthen their practical application ability [9].

2.2 Integration and Design of Online Learning Resources

When designing financial accounting courses under the SPOC model, the integration and design of online learning resources is a crucial step [10]. Through rational selection and design of online learning resources, diverse learning content and methods can be provided to enrich students' learning experience and effectively support their learning and practice in the field of financial accounting.

2.2.1 Teaching videos

Provide teaching videos that explain core concepts and knowledge. These videos can be recorded by teachers or professional lecturers, covering basic concepts, principles, and techniques in financial accounting. The content should be logical and clear, incorporating examples and case studies to help students understand and apply the knowledge they have learned⁵.

2.2.2 Digital textbooks

Provide digital textbooks, including e-books, PDF files, etc., so that students can read and download online. The content of the textbooks should comprehensively and systematically cover all aspects of financial accounting, with a clear structure and good organization. The textbooks can include explanations of important concepts, case studies, exercises, and answers to help students consolidate the content they have learned.

2.2.3 Online exercises and quizzes

Design online exercises and quizzes for students to self-study and self-assess. These exercises and quizzes can include multiple choice questions, fill-in-the-blank questions, etc., covering various aspects of financial accounting. Provide immediate feedback and parsing so that students can understand their learning progress and level of understanding, and correct mistakes and shortcomings in a timely manner.

2.2.4 Practical cases and simulation exercises

Provide practical cases and simulation exercises that allow students to apply their

knowledge to solve real financial accounting problems. These cases and exercises can simulate real enterprise scenarios, requiring students to perform financial statement analysis, accounting processing, and decision-making operations. Students can submit their answers and analyses through an online platform, and teachers can provide feedback and evaluations to promote the practical application ability of students⁶.

2.2.5 Discussion board and online interaction

Establish a discussion board or online interaction platform to encourage discussion, questioning, and collaboration among students. Students can pose questions, share viewpoints, and answer doubts on the platform, and teachers can provide timely answers and guidance. Teachers can propose discussion topics to guide students to engage in deep thinking and communication, promoting their academic exploration and cooperative learning.

2.2.6 Multimedia resources

Multimedia resources include charts, images, animations, and simulation software, which present relevant concepts and processes of financial accounting in a graphic and visual manner. These resources can stimulate students' interest and deepen their understanding of knowledge [11].

When integrating and designing online learning resources, it is important to consider the following points: selecting high-quality resources that ensure accurate and authoritative content and meet the course's learning objectives and requirements; ensuring resources are easily accessible and user-friendly; providing appropriate guidance and assistance to help students effectively utilize online learning resources, plan their learning path, and solve problems.

2.3 Planning of Learning Progress and Time Allocation

When designing financial accounting courses under the SPOC model, the planning of learning progress and time allocation is crucial. Reasonable learning progress and time allocation can help students organize their learning effectively and improve learning effectiveness⁷.

2.3.1 Developing a learning plan

Determine the total class hours and learning period of the course. Based on the content of

the course and the learning needs of the students, determine how long it will take to complete the course.

Divide the course content into different units or modules and allocate appropriate learning time for each unit. Take into account the students' learning burden and adaptability, arrange the learning progress reasonably to avoid overly tight or overly loose arrangements.

2.3.2 Setting learning objectives and milestones

Develop learning objectives and milestones based on the course's learning objectives. The learning objectives can include the knowledge, skills, and abilities that students need to achieve for each unit. Milestones can be set as deadlines for completing each unit or important tasks to help students track their progress.

2.3.3 Providing learning resources and learning support

Provide corresponding learning resources for each unit based on the learning objectives and content, such as teaching videos, digital textbooks, exercises, etc. Ensure that the learning resources correspond to the learning objectives and content. Provide learning support, including online Q&A and tutoring from teachers, interactive discussions on the discussion board, peer-to-peer collaboration, etc. Students can obtain help and answers during the learning process.

2.3.4 Flexible time management

In the SPOC model, students can learn at their own pace and schedule. Provide flexible time management options that allow students to arrange their study time based on their learning progress. Take into account other academic and personal commitments of students to ensure that they have enough time to complete their learning tasks.

2.3.5 Regular assessment and feedback

Establish a regular assessment and feedback mechanism to help students understand their learning progress and level of understanding. This can be done through online quizzes, assignment submissions, online discussions, etc., and timely feedback and guidance should be provided⁸.

2.3.6 Considering the continuity of learning

Arrange course content and learning tasks as continuous learning experiences. Ensure that there is logical connection between the

learning content and tasks of each unit or module, building an overall learning framework and context. Finally, adjust and optimize the learning progress and time allocation based on student feedback and evaluation results to improve learning effectiveness and student learning experience.

3. Teaching Methods Based on the SPOC Model

3.1 Introduction to Interactive Teaching Strategies and Practices

In the financial accounting course based on the SPOC model, the introduction of interactive teaching strategies and practices can enhance the teaching effect of the course under the SPOC model [12]. Students can deeper understand and apply the knowledge they have learned in the interaction, and cultivate their cooperation ability and critical thinking ability at the same time. Teachers play an important role in guiding and promoting students' learning in the interaction, providing timely feedback and guidance⁹.

3.1.1 Online discussion and cooperative learning

Establish a discussion board or online interactive platform to encourage discussion, questioning, and collaboration among students. Teachers can propose discussion topics or questions to guide students to engage in deep thinking and communication. Assign group projects or tasks, requiring students to collaborate and complete financial accounting case studies, problem-solving activities, or simulation decision-making exercises. Through group discussion and cooperation, students can explore and solve complex problems together, improving their overall literacy.

3.1.2. Real-time interaction and tutoring

Utilize online platforms to provide real-time chat or video conferencing functions, allowing teachers to interact with students in real-time, answer their questions, and provide guidance. Schedule regular online tutoring sessions, allowing students to pose questions during specific time periods, and have teachers provide centralized answers. This can improve students' understanding and application of course content.

3.1.3 Case analysis and role-playing

Design practical cases that require students to

apply their knowledge to real-life situations by analyzing financial data and making financial decisions. 10The cases can involve real businesses or industries to help students better understand the application of financial accounting. Conduct role-playing activities during teaching, allowing students to play different roles in simulated situations and engage in the communication of financial accounting information and decision-making. This can increase student participation and practical ability.

3.1.4 Online interactive assessment and feedback

Design online interactive assessment activities, such as online quizzes, exercises, etc. Students can complete assessment tasks through online platforms and receive immediate feedback and analysis to test and consolidate their knowledge. Provide regular individual or group feedback, evaluating and encouraging students' interactive participation, collaboration contributions, etc. This can stimulate students' learning motivation and enthusiasm.

3.1.5 Role transformation of teachers

In the SPOC model, the role of teachers is not only to impart knowledge but also to guide and facilitate learning. Teachers should encourage students' interactive participation and guide them to actively explore and discover knowledge. Teachers should provide timely feedback and guidance, stimulate students' thinking and creativity, and cultivate their critical thinking and problem-solving abilities.

3.2. Integration of Case Analysis and Practical Operations

In the financial accounting course based on the SPOC model, integrating case analysis and practical operations is an effective teaching method. Through case analysis and practical operations, students can apply theoretical knowledge to real-life situations, improving their problem-solving ability and practical ability⁶.

3.2.1 Case analysis

Provide real or hypothetical financial accounting cases, allowing students to apply their knowledge by analyzing and solving problems. The cases can cover different financial accounting topics, such as balance sheets, income statements, cash flow statements, etc. Guide students to analyze

financial data in cases, understand the financial condition and performance of enterprises. Students can extract key information and interpret and analyze the data.

3.2.2 Practical operations

Provide opportunities for practical operations, allowing students to operate and apply financial accounting software or tools personally. Through practical operations, students can become familiar with the actual work processes and operating steps of financial accounting. Design practical tasks, such as preparing financial statements, making accounting entries, calculating financial indicators, etc. Students can complete these tasks in a virtual environment and receive real-time feedback and result analysis.

3.2.3 Group discussion and cooperation

Divide students into groups and require them to collaborate on case analysis and practical operations. Group members can discuss and solve problems together, sharing different perspectives and solutions. Each group can have different role divisions, such as financial manager, accountant, financial analyst, etc., to simulate actual work environments and collaboration styles.

3.2.4 Reflection and discussion

Guide students to reflect and discuss after case analysis and practical operations. Students can share their thoughts and experiences, discuss methods and strategies for solving problems. Teachers can guide students to deeply consider the challenges and complexities in cases, helping them analyze and understand practical financial accounting issues from different perspectives [3].

3.2.5 Integrating online platforms and tools

Utilize online platforms and tools, such as simulation software, online data analysis tools, etc., to assist students in case analysis and practical operations. These tools can provide real-time data and simulated environments, increasing students' practical experience.

4. Evaluation and Feedback

4.1 Design Diverse Forms of Assessment

By designing diverse forms of assessment, students' knowledge mastery, practical application ability, and collaboration skills can be comprehensively evaluated. This type of assessment approach can provide more comprehensive feedback and guidance,

helping students develop and enhance their financial accounting skills and abilities. At the same time, it can also stimulate students' learning interest and initiative, and promote their active participation in learning.

4.1.1 Online quizzes and exams

Design online quizzes and exams to assess students' mastery of financial accounting concepts, principles, and skills. Create automated multiple-choice, fill-in-the-blank, and calculation questions to ensure timely feedback and grading.

4.1.2 Individual assignments and projects

Provide students with individual assignments and projects that require them to apply financial accounting knowledge to solve practical problems. Assignments can include case studies, report writing, financial statement analysis, etc., to demonstrate students' analytical and problem-solving abilities.

4.1.3 Group cooperation projects

Encourage students to form groups and complete financial accounting-related cooperative projects together. When evaluating group projects, consider the teamwork ability, collaboration communication skills, and the quality of the project results.

4.1.4 Online discussion and participation evaluation

Consider evaluating students' participation and contribution in online discussion boards. Evaluate based on the quality of their contributions and their ability to respond to others in the discussion.

4.1.5 Practical operations and simulation exercises

Design practical operations and simulation exercises that require students to apply financial accounting skills in actual practice. Assessment can be conducted using financial software simulations, case analysis drills, etc.

4.1.6 Academic presentation and demonstration

Require students to give academic presentations and demonstrations to showcase their research and understanding in the field of financial accounting. When evaluating the presentations and demonstrations, consider the accuracy, logic, and presentation skills of the academic content.

4.1.7 Participation and classroom performance evaluation

Observe students' participation in online and offline classes and evaluate their

understanding and application of course content. Consider factors such as students' ability to ask and answer questions, their active participation in discussions, etc.

4.2. Provide Timely Evaluation Feedback

Providing timely evaluation feedback is an important aspect of the financial accounting course design based on the SPOC model. Teachers can gain timely understanding of students' learning status and provide targeted evaluation feedback. Such real-time feedback can help students adjust their learning strategies and improve their learning effectiveness, while also enhancing the interaction and communication between teachers and students.

4.2.1 Automated evaluation tools

Utilize online learning platforms or teaching management systems' automated evaluation tools, such as online quizzes and automated grading systems. These tools can assess students' answers in real-time and provide scores and feedback immediately, helping students understand their performance.

4.2.2 Timely feedback on assignments and projects

Provide feedback and evaluation on students' assignments or projects as soon as they are submitted, highlighting their strengths and areas for improvement. Personalized feedback can be provided through online annotations, comments, or specific feedback documents [1].

4.2.3 Real-time interaction and discussion

Encourage interaction and discussion in online and offline classes, and provide prompt feedback and guidance in response to students' questions, opinions, or discussion content. This promotes student learning communication and thinking development.

4.2.4 Learning diary and self-assessment

Encourage students to record their learning diary, reflecting on their learning process and achievements. Students can evaluate their own learning progress through self-assessment, and discuss and provide feedback with teachers.

4.2.5 Real-time Q&A and online consultation

Provide real-time Q&A and online consultation channels through online chat tools, forums, or emails, allowing students to ask teachers questions anytime and receive immediate feedback and answers.

4.3. Analysis and Application of Evaluation Results

The analysis and application of evaluation results are crucial links in the design of financial accounting courses. Analysis of evaluation results can help teachers better understand students' learning situations in order to carry out targeted teaching improvements and personalized guidance.

4.3.1 Statistical analysis and comparison

Use statistical analysis methods to analyze and compare the evaluation results overall. Average scores, standard deviations, score distributions, etc., can be calculated to understand students' overall performance and distribution [1].

Compare different evaluation items, such as the scores of different test questions, the evaluation results of different homework, etc., to identify students' strengths and weaknesses.

4.3.2 Abnormal data and trend analysis

Check for abnormal data in the evaluation results, such as extremely high or low scores, which may require further understanding of the reasons. Analyze students' learning trends and observe their performance changes and progress in different evaluation items.

4.3.3 Student group analysis

Divide students into different groups, such as classified by level of proficiency, learning style, or learning objectives. Analyze the differences in evaluation results among different student groups, and understand the characteristics and needs of different groups' learning.

4.3.4 Teaching improvement and personalized guidance

Based on the analysis of evaluation results, make teaching improvements. For example, adjust teaching content or teaching methods according to students' weaknesses to improve students' learning effectiveness. Provide personalized guidance and suggestions for individual students to help them overcome difficulties and improve their learning levels.

4.3.5 Teaching Reflection and Optimization

Combined with the analysis of evaluation results, reflect on teaching methods, resources, and evaluation methods to consider their effectiveness and areas for improvement. Continuously optimize course design and teaching strategies to meet students' learning needs and improve teaching effectiveness [9].

5. Challenges

5.1 Technical Requirements and Equipment Limitations

The SPOC teaching model requires students to have certain technical abilities and equipment support, such as a stable internet connection and computer or mobile devices. However, not all students can easily meet these requirements. Some students may lack necessary technical equipment or face unstable internet connectivity issues, which can affect their learning experience and participation.

5.2 Self-discipline and Time Management Challenges

The SPOC teaching model requires students to actively participate in learning and interaction, and requires students to have self-directed learning and time management skills. Students need to schedule their own learning time and complete learning tasks according to a plan. However, for some students, lack of self-discipline and time management skills is the biggest problem they encounter in self-directed learning, causing them to struggle and struggle in the learning process.

5.3 Personalized Learning Support

Although the SPOC teaching model provides opportunities for personalized learning, some students may require more individual guidance and support. In large-scale SPOC courses, providing individual feedback and guidance for each student can be burdensome for teachers and may pose challenges in practice [2].

6. Conclusion

The application of the SPOC model in the construction of "Financial Accounting" courses has great potential. The characteristics of SPOC, including its small-scale, private, and personalized learning approach, can effectively improve the teaching effectiveness and learning experience of the course. In "Financial Accounting," the SPOC model can better meet the learning needs of students and enhance their learning motivation and interest. In terms of teaching content, attention should be paid to combining theory with practice to strengthen students' practical skills. In terms of teaching methods, we should take advantage of the advantages of the SPOC model and

introduce a hybrid teaching model that combines online and offline teaching to improve teaching effectiveness. In terms of the teaching staff, it is necessary to strengthen professional training and practical experience for teachers to enhance their overall quality.

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