Blended Teaching Reform and Practice of Tax Law Based on TPACK Framework

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Abstract. Affected by the outbreak of the novel coronavirus, the beginning of new term is delayed in many places. Most schools are adopted the method of “network teaching” to teach classes, so as to “suspending classes without stopping teaching”. With the development of the times, information-based learning will become a necessary part of normal teaching. With the same time, our educational concept, teaching knowledge and subject content all need to be innovated. This paper takes the “tax law” course as an example, based on the TPACK framework, integrate the blended learning into the curriculum, with the combination of “online” + “offline”, from the curriculum to the contact arrangement all are made corresponding adjustment. To enable students to have a deeper understanding of the learning content, to cultivate students’ financial management ability and professional quality, and to have basic tax processing ability. Finally, to achieve student-centered teaching mode, the optimization of teaching resources, and the high efficiency of teaching quality.

Keywords: TPACK · Blended teaching · Teaching reformation

1 Introduction

With the rapid development of information and communication technology, especially the popularization of Internet technology in the field of education, the deep integration of information technology and education teaching has become an inevitable trend of education reform and development. Issued by the Ministry of Education, “Development plan for the decade of education and information (2011–2020)” also explicitly proposed that give top priority to cultivating the integrity of students, take the innovation of educational concept as the guide, with high quality education resources and education information construction as the foundation, take the innovation of learning style and education mode as the core, and take the system and mechanism and team building as the guarantee. Then in the process of building a learning-oriented society and a powerful country with human resources, the education informatization should plays an important role in supporting development and leading innovation [1]. In particular, after the great success of MOOCs in the market, the educational technology generated around the research and application of blended learning has become the mainstream of education reform. Especially recently, affected by the outbreak of novel coronavirus, teachers and students cannot communicate face to face in the short term, which led to great changes in teaching methods. Even for the technology, management,
teaching design and other aspects are a serious challenge, the education technology with the support of blended learning teaching methods as the core will play an increasingly important role. This paper takes the teaching of “tax law” as an example, explores the application mode of blended teaching under the TPACK framework, and verifies it through the teaching practice results, so as to provide new methods and ideas for the teaching reform of tax law.

2 Construction of Blended Learning “Tax Law” Course Mode Based on the TPACK

The tax law is the basic legal norm to adjust the distributive relationship between the state, tax paying units and citizens. It is the legal norm to maintain economic order, maintain social stability, and protect the interests of the state and the legitimate rights and interests of citizens. And it is also the code of conduct for both parties. “Tax law” is the course with strong professional and cross multi-disciplinarily, which is one of the compulsory courses for finance and economics majors. In the process of the curriculum design, to complete the tax agent task as the guidance, divide the tax post daily job into the different job items, to determine the teaching project according to the job item, meanwhile based on vocational ability to choose the teaching content in each teaching program. Finally, the contents scattered among various tax regulations will be integrated according to the internal relationship of job items. At the same time, in the process of organizing teaching contents, based on the framework of TPACK and to use the “blended learning” teaching method and combine the practice and theory, the contents of relevant theoretical teaching are embedded in each relevant work project and inserted into the process of tax business of enterprises. So that will take consideration the demand of students’ textual research and career development. Therefore, the author explored and studied the teaching framework, teaching objectives and blended mode.

2.1 Teaching Framework

TPACK is the teaching knowledge of integrated technologies. Under this framework, teachers need to make full use of the three core elements of subject content knowledge (CK), pedagogical knowledge (PK) and technical knowledge (TK), integrate technology into teaching content, take the students as the center, and fully mobilize the initiative and creativity of students [2]. The teaching framework fully reflects the effective integration of subject teaching and technical knowledge, which is designed by Power Point, flash, etc. By using software to perform the teaching actives, such as Ding Talk, Mind Master, etc. After class, homework and exercise tests can be arranged and completed by using the Rain Classroom, WenJuanXing and other mobile phone apps. Take this “blended mode” teaching methods can be used to achieve the integration of technology and teaching method no matter for before class, after class or in the class. In terms of the integration of technology and teaching content, the timeliness of “tax law” course is need fully considered, and the teaching content should be updated at any time. Students are encouraged to carry out brainstorming before class, interact with bullet screen, vote and WeChat group in class, and solve students’ questions by messages and emails after class.
2.2 Teaching Objectives

Based on TPACK, the blended teaching of “tax law” course built into the process of teaching and cultivating students’ cognitive development then will form a dynamic and open framework. The “online + offline” mode is used to enrich the teaching objectives according to the changes of technology, teaching content and students. Under this framework, the “tax law” course focuses on four abilities: professional knowledge, analytical skills, professional behavior and financial management skills, as shown in Table 1. Hope that students can understand the basic knowledge and the basic theory of tax law, meanwhile have basic understanding of the current tax system in China, so that can correctly analyze the tax obligations and tax paying behaviors of the four major types of taxes, namely, enterprise value-added tax, consumption tax, enterprise income tax and individual income tax. At the same time, students can use the relevant knowledge of tax law to deal with the tax payment business of enterprise affairs, develop the professional quality, master the financial management ability, and have the basic tax calculation ability.

| Objective                  | Expected effect                                                                 | Ability indicators         | Cultivating ways                                                                                         |
|----------------------------|--------------------------------------------------------------------------------|----------------------------|----------------------------------------------------------------------------------------------------------|
| Knowledge objective        | Students are able to apply tax law knowledge to solve practical financial problems | Professional knowledge    | Through case introduction, students majoring in financial management can make use of relevant knowledge of tax law |
|                            | When facing tax problems, students are able to know from what aspects to analysis | Analysis question          | Through the introduction of cases, example analysis and other links to strengthen the process of problem analysis, so as to guide students to actively discuss the tax issues in today’s society |
| Ability objective          | In the face of social phenomena, students should know what kind of tax issues are reflected in them | Financial management       | Through the basic financial management method, the case introduces and analyzes the calculation process, so that students can know what kind of tax problems are reflected in the social phenomenon, and can conduct tax calculation |
| Quality objective          | Students should maintain proper professional ethics when dealing with tax affairs | Professional behavior      | Through the introduction of the cases, from the pros and cons, students should maintain professional ethics when solving tax treatment |
2.3 Blended Teaching Mode

“Tax law” course adopts a blended teaching mode of online before class, online and offline in class and offline after class. Each unit is taken as the teaching unit, and the teaching content of each unit is carried out around one kind of tax. After analyzing, selecting and reconstructing the teaching content, teachers perform the online teaching through micro-class, multimedia courseware, mind map, discussion area and other targeted video, text and image forms. The blended teaching for combination of online and offline not only retains the advantages of the traditional teaching method, but also benefits the systematic teaching of knowledge and the interaction between teachers and students, enhances the participation of students, and cultivates their social knowledge construction, cooperative learning ability and active learning ability [3]. According to the data of online teaching feedback before class, teachers choose teaching contents and teaching techniques to meet different learning needs and achieve the teaching goal, so that carry out the teaching activities which is helpful for students to understand, apply and expand the “tax law” course. Of course, the flexible and diverse technologies are only the intermediary of teaching interaction, the tools and means of presenting teaching content, which cannot be controlled by technology. The blended teaching based on TPACK model, through teaching methods, teaching contents, teaching techniques of effective integration to achieve targeted teaching content, diversity teaching methods, flexible media technology [4]. So as to make use of the complementary advantages of online teaching and classroom teaching, and to promote the mutual development and progress of teachers and students in both directions, and finally achieve personalized teaching.

3 The Blended Teaching of “Tax Law” Course Based on TPACK

3.1 The Design of Teaching Resource

The blended teaching mode based on TPACK framework is the integration of teaching methods, subject contents and information technology [5]. The integration of technology and tax law teaching provides a new idea for the innovation and reform of teaching mode, and endowing the design and presentation of teaching resources with the new characteristics of situational, interactive, dynamic and diverse. Teaching resources mainly include course resources, blended teaching platform and presentation methods of curriculum. Curriculum resource management system is mainly the integration of online resources and classroom teaching resources. Online resources serve for the classroom teaching, and classroom teaching can enrich the content of online resources. The course resources of “tax law” mainly include courseware, micro-course, cases, books, reference, network disk, document, page, outer chain and label, etc. Students can make full use of the course resources platform to realize the learning, consolidation, detection and expansion of the knowledge. Since TPACK is a dynamic and multi-dimensional framework, teachers should not simply list materials when designing teaching resources. They should pay attention to the combination of online
and offline, and the organic combination of online teaching and classroom teaching, so as to realize the mutual penetration and integration of teaching resources.

3.2 The Design of Teaching Contents

Teachers integrate the TPACK framework into teaching activities to inspire students to think while imparting knowledge. So that change the traditional teacher-centered way of teaching, and diversify the role of teachers. Teachers are not only the initiators of knowledge, but also the leaders of the class and the listeners of the students. In order to demonstrate the subjectivity of students, it should to increase the interaction between teachers and students and achieve the progress of students and teachers together. In the traditional teaching mode, the course of “tax law” is relatively boring and has many contents, as shown in Table 2. Students have less contact with the course previously, coupled with a large amount of calculation, which will have a natural sense of rejection for this course.

| Week   | Item          | Content of courses                                                                 |
|--------|---------------|------------------------------------------------------------------------------------|
| Week 01 | Teaching      | Fundamentals of tax law                                                           |
|        |               | The scope of VAT collection                                                        |
| Week 02 | Teaching      | VAT rates and deductions                                                          |
| Week 03 | Teaching      | VAT calculation                                                                    |
| Week 04 | Exercise      | Tax analysis item: value-added tax (1)                                             |
| Week 05 | Exercise      | Tax analysis item: value-added tax (2)                                             |
|         | Teaching      | Object of consumption tax                                                          |
| Week 06 | Teaching      | Tax rate and basis of consumption tax                                             |
| Week 07 | Teaching      | Calculation and payment of consumption tax                                        |
| Week 08 | Exercise      | Tax analysis item: consumption tax                                                |
|         | Teaching      | Object of taxation of enterprise income tax                                       |
| Week 09 | Teaching      | Tax rate of enterprise income tax                                                  |
| Week 10 | Teaching      | To calculate the taxable income of enterprise income tax                           |
| Week 11 | Teaching      | Tax preference and calculation of enterprise income tax                             |
| Week 12 | Teaching      | Calculation and payment of enterprise income tax                                   |
|         | Exercise      | Tax analysis: corporate income tax                                                 |
| Week 13 | Teaching      | Individual income tax payers and income sources                                   |
| Week 14 | Teaching      | Individual income tax rates and tax preferences                                   |
| Week 15 | Teaching      | Calculate individual income tax and pay                                            |
| Week 16 | Exercise      | Tax analysis: personal income tax and course review                                |
|         | Teaching      | Tax collection administration and tax administration legal system                  |

Table 2. Traditional teaching mode
The blended teaching based on TPACK mode changes the media, organizational form, interaction mode and communication mode. The application of multi-modal also promotes the development of students’ independent learning and the occurrence of effective learning. The teaching link is divided into pre-class, in-class and after-class. Before class, the main purpose is to stimulate students’ interest. By videos and discussing hot topics that students are interested in, students can truly feel the practicability of the teaching content, rather than empty laws and regulations. In-class, flipped classroom, student report and other teaching methods can be adopted to complete teaching tasks and improve teaching quality. After-class is not the end of learning, students can deepen their understanding of the teaching content through exercises and reading materials. The detail teaching links as below:

**3.2.1 Pre-class Key Information and Specific Measures**

Resourcing and update courseware: Upload relevant courseware and materials to the teaching platform to assist students to finish the preview before class.

In-class key information and specific measures

1. Strengthen classroom management: To treat students, should not only have strict requirements, but also have enthusiastic solicitude. Record the students’ attendance, and determine the students’ qualification according to relevant regulations. Students who are late for class, leave early or are absent from class should be found out the reasons, made records and criticized in time.

2. Maintain the classroom teaching order: Pay attention to the students’ listening dynamics, and firmly stop the students’ behavior of not paying attention to listening, talking, sleeping, making small gestures, using communication tools and disturbing the classroom teaching order [6].

3. Perform teaching tasks according to the teaching plan: Do not arrange students to preview, review or study by themselves for a long time during in class. For the exercise or discussion required by the syllabus, it is necessary to have a clear teaching purpose and requirements to guide students to practice and discuss. Consciously accept the teaching review or other teaching quality inspection by instruction office and the teaching management department.

4. Class test: Test the students’ learning effect through the classroom test.

**3.2.2 After-Class Key Information and Specific Measures**

1. Homework: By assigning homework and assessing the completion of the homework, can master the students’ gaps of the course, and then can adjust the course content and schedule in time.

2. Learning resource outside of class sharing: Upload the relevant materials of the course to the teaching system; assist the students to complete the review after class.

**3.3 The Design of Evaluation Method**

The assessment method mainly includes the composition of regular grade and final grade. A scientific and reasonable multi-dimensional assessment system is adopted to
ensure the objectivity and diversity of assessment indicators [7]. It should not only focus on the results, but also pay attention to the learning process. The regular grade can be comprehensively evaluated by completing tasks before class, learning online resources, participating in classroom activities, and testing knowledge points after class, which reflects the dynamic characteristics of the evaluation process. Regular grade assessment includes autonomous learning ability, learning participation and problem solving ability [8]. Through the assessment of learning participation, students’ interest in the course can be understood. Through the independent learning ability test, to understand the students’ ability to deal with tax, and through the completion of exercises to understand the degree of students’ mastery of the teaching content [9].

The final grade assessment makes a comprehensive assessment on the learning mastery of this course through the diversification of exam questions, the diversification of assessment methods and the gradation of difficulty, which reflects the characteristics of comprehensive assessment content [10]. Moreover, by combining the subject with the examination ability, students’ mastery of ability indicators can be known through their scores, so as to detect the completion of teaching objectives.

4 Conclusion

The “tax law” blended teaching based on TPACK is a process in which teachers integrate technology into teaching content to improve students’ ability on tax handling. Through the effective integration of technology, teaching methods and subject contents, the blended teaching build up one teaching mode with “cultivate the critical thinking ability as the guidance and individualized teaching as the goal”. Blended teaching is helpful to meet students’ personalized learning needs, to innovate teaching methods and to improve the teaching quality. It is worth noting that teachers should also pay attention to constantly review and reflect on the teaching process, fully integrate, optimize and apply a variety of knowledge, and promote their own professional development.

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