



Research on the Blended Teaching Model of Vocational Education Curriculum from the Perspective of Curriculum Ideology and Politics

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Abstract. Cultivating morality and nurturing talents is the fundamental task of higher education, and one effective way to achieve this fundamental task is to promote the construction of ideological and political education in the curriculum. In response to the current situation of curriculum teaching, by deeply exploring the ideological and political elements in the curriculum, and organically combining traditional teaching and online teaching, a three-dimensional blended teaching model is created. Through pre class preview and self-test, the aim is to solidify the foundation of the students; In class guidance enables students to develop job skills and hone their professional skills through group presentations and practical job operations; The after-school task aims to allow students to review the learning content, consolidate and improve. Practice has proven that this teaching model can stimulate the learning interest and enthusiasm of students, effectively improve their professional abilities and professional qualities, and achieve the goal of peer and collaborative education.

Keywords: Course ideological and political education; Employment education; Blended learning mode.

1 Introduction

Teaching and education are an organic whole. Professional course instructors should base themselves on the familiar professional field, deeply explore the ideological and political elements contained in professional courses, and sublimate the ideological and political content, which is the foundation for the in-depth promotion of ideological and political education. At the same time, universities need to study the innovative development of blended learning from multiple levels, aspects, and perspectives, and build a blended learning model that integrates online learning and offline classrooms, and mutually benefits online teaching and offline classrooms, in order to ensure that the classroom is returned to students.

2 Current Situation of Vocational Education Curriculum Teaching

Aviation Material Storage Management is an important mandatory course for aviation material management professionals. The combination of theory and practice in this course plays an extremely important role in cultivating students' job skills. In the case of fixed class hours, students report that learning is difficult, while the traditional teaching model mainly focuses on imparting a large amount of textbook knowledge to students, which can easily lead to problems such as low learning enthusiasm and poor teaching effectiveness. In this situation, based on online teaching platforms, a blended online and offline teaching model is adopted for teaching method reform, increasing pre class self-study preparation, in class discussion and Q&A, and post class review and consolidation, guiding students to engage in self-learning and pre class and post class discussions, transforming passivity into initiative, stimulating students' interest in learning, helping them establish correct outlooks on life, world, and values, and achieving a high degree of integration between course teaching and ideological and political education [1-3].

3 Teaching Practice of Blended Teaching Model Based on Course Ideological and Political Education

In order to fully leverage the value leading role of ideological and political elements and effectively improve the effectiveness of ideological and political education in the curriculum, a blended online and offline teaching model with students as the main body is adopted to carry out ideological and political education in the curriculum. Classroom resources and online resources are highly integrated, organically combining traditional teaching and online teaching, achieving diversified teaching methods and increasing the autonomy and enthusiasm of students.

3.1 Cultivating Virtue and Cultivating People, Adopting a Spiral Course Design for Ideological and Political Education

Adopting a spiral progressive teaching strategy (as shown in Fig.1.), achieving deep interaction and integration of knowledge and ideological and political education, always paying attention to integrating ideological and political elements throughout the entire teaching process, realizing the ideological and political construction pattern of "three comprehensive education", focusing on cultivating new military talents who love their country, love their jobs, are diligent and hardworking, and pursue excellence, and achieving an organic unity of value guidance, knowledge education, and ability cultivation [4].

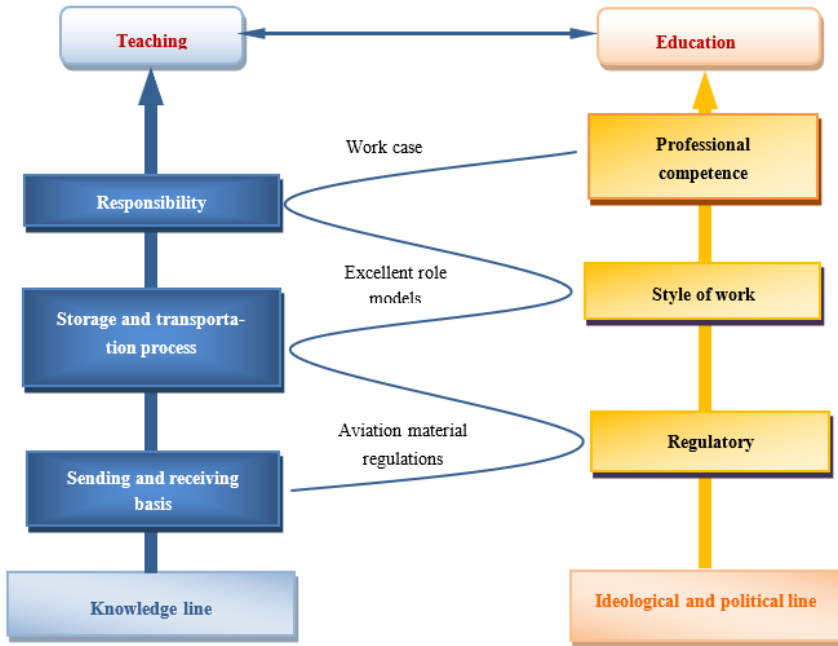


Fig. 1. Spiral progressive ideological and political education design

3.2 Adopting a Three-dimensional Blended Teaching Model to Cultivate Students

In the early stage of teaching feedback, it was found that there were two obvious problems. One was the teacher centered emphasis on theoretical teaching, with a prominent phenomenon of rote learning, which led to weak learning initiative among students; Secondly, due to fixed class hours and insufficient practical training for students, the conversion of knowledge into abilities is not effective.

In view of this, this course adopts a student-centered blended online and offline teaching model, which divides the teaching implementation into three stages: "self-learning of knowledge before class, exploration of internalization in class, and consolidation and expansion after class" [5-7], as shown in Fig. 2. The teaching process revolves closely around the job tasks of the students and is divided into three stages: pre class, in class, and post class.

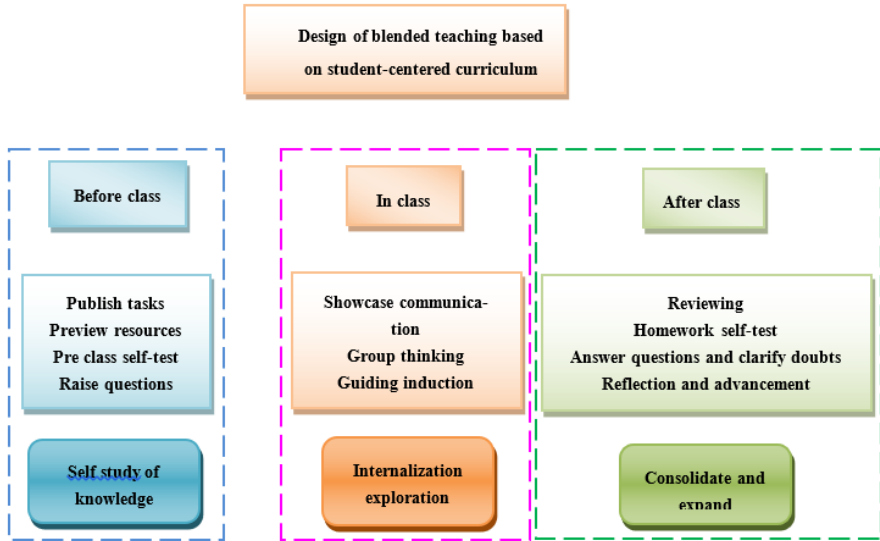


Fig. 2. Design of blended teaching based on student-centered curriculum

Before class, the instructor releases a preview task sheet through the smart teaching platform, and students self learn resources such as micro videos, courseware, and regulations. The instructor answers difficult questions, and the students complete the unit self-test.

In class, six teaching segments were set up based on the characteristics of the course and the students. Through interactive questioning, clarify the key and difficult points of this lesson. In the task introduction phase, the instructor selects practical case tasks from the teaching resource library and organizes students to study and implement plans. Explain the process of sorting out the three steps of aviation material storage and transportation operations, explain difficulties, and summarize them. Under the guidance of the instructor, the trainees carry out the job implementation in stages and steps according to the task process. The task is driven throughout the entire process, and the flipped classroom is used to highlight the student-centered position. Through deep interaction between the instructor and the trainees, a comprehensive knowledge system is constructed, highlighting key points and solving difficulties, stimulating the learning interest of the trainees, improving their practical abilities, and achieving the goal of knowledge internalization, reflecting the teaching philosophy of "learning as the center". Organize students to conduct self-evaluation and mutual evaluation in the summary and induction stage, and the instructor will provide feedback and induction. The classroom evaluation process records the practical scores of students based on their classroom performance, forming an overall evaluation.

After class, open the laboratory to improve the skills of students in ensuring the supply of aviation materials, and organize students to complete limited time assignments on the teaching platform. Teachers carefully answer questions and clarify doubts based

on feedback, timely release expansion training programs, carry out program guidance, and improve professional ethics.

The three stages of pre class, in class, and post class are interconnected. Through task driven and flipped classroom teaching, students are guided to go from the surface to the inside, layer by layer, draw lessons from each other, and cultivate their ability to transfer knowledge and skills. This achieves the goal of "learning before teaching, and teaching according to learning", effectively improving teaching effectiveness.

Through curriculum reform, students have been transformed from "I want to learn" to "I want to learn", achieving the goal of learning while doing, asking questions while learning, and thinking again while learning, transforming the previous teaching centered approach into a learning centered approach. At the same time, through pre class preview, the teaching time of the instructor was compressed, and the practical practice session of the students was extended, completely solving the problems of weak initiative and insufficient practical training of the students before the curriculum reform.

4 The Effectiveness of Blended Teaching Based on Course Ideology and Politics

This class aims to impart knowledge about the process of aviation material storage and transportation operations, as well as provide practical training for job positions. The purpose is to lay the foundation for future career positions as aviation material statisticians and aviation material custodians, solve difficulties, and overcome key and difficult points. By utilizing information technology tools such as MOOCs, micro courses, and smart teaching platforms, with the ultimate goal of being competent in military positions, we gradually guide students to master and apply knowledge and skills. Through the learning of this course, we have achieved the following results.

4.1 Taking Multiple Measures to Further Stimulate the Learning Enthusiasm of Students

The process of aviation material storage and transportation is an important task in aviation material assurance. How to complete the entry of the aviation material management information system and the standardized filling of the aviation material registration account based on the sending and receiving basis has always been the focus of aviation material sending and receiving work. The traditional teaching method generally feels dull and lacks a strong sense of immersion. By using various multimedia methods and information resources in the classroom, it can stimulate students' interest in learning, stimulate their subjective initiative, and enable them to learn knowledge and develop skills more deeply.

4.2 Multi Job Collaboration Further Highlights the Student-centered Teaching Philosophy

The methods of role-playing and group training have formed a student-centered classroom. By dividing into groups and roles, the design and innovation of the teaching content for this course were achieved. The students had a good understanding and mastery of the process and operational steps of aviation material storage and transportation operations, while cultivating a sense of teamwork, laying a solid foundation for their job duties. The use of role-playing as an organizational approach has overcome the phenomenon of some students not being proactive enough and having a weak sense of participation, thereby enhancing learning effectiveness.

4.3 Multi Environment Transformation, Further Solving the Key and Difficult Problems in Teaching

In the past, there was a lack of practical training environment and information technology means in teaching, and students were unfamiliar with their positions and lacked a sense of identity. Through simulating real-life scenarios in aviation material service training rooms and intelligent teaching platforms, practical training can be conducted to repeatedly practice key and difficult problems, allowing students to immerse themselves in various immersive experiences and providing favorable conditions for breakthroughs in key and difficult points.

5 Conclusions

The purpose of ideological and political education in courses is to align professional curriculum education with ideological and political education, stimulate educational synergy, and permeate correct values into the entire teaching process, achieving a subtle and silent educational effect. By adopting a blended online and offline teaching model reform, deeply exploring ideological and political elements, achieving the goal of curriculum education, organizing teaching according to job requirements, and achieving good course teaching results. In the process of imparting knowledge and skills, guide students to establish correct values, integrate knowledge imparting with value guidance, and achieve resonance between knowledge and value, promoting the healthy development of curriculum construction and teaching reform[8-9].

References

1. Qiying Shen, Ruijun Ju, Zhihong Zhang, et al. Teaching Reform and Practice of Pharmacology Curriculum under the Background of "Curriculum Ideology and Politics" [J]. Journal of Higher Education, 2020 (8): 114-116.
2. Cuiping Jiang, Huoji Chen, Lidong Weng, et al. Research on the Construction of a Hybrid Teaching Model for Traditional Chinese Medicine and Pharmaceutical Engineering Based

- on the Perspective of Curriculum Ideology and Politics [J]. *Modern Distance Education of Traditional Chinese Medicine in China*, 2021,19 (19): 192-193, 2022.
3. Rovai,A.&Jordan,H.(2004).Blended learning and sense of community: A comparative analysis with traditional and fully online graduate courses. *International Review of Research in Open and Distance Learning*,5(2),1-12.
 4. Li Wang, Xue Li, Yanxin Liu, et al. Investigation and Analysis of the Current Situation of Ideological and Political Awareness and Ability of College Teachers in Curriculum [J]. *Exploration of Higher Education*, 2021 (9): 67-74.
 5. Yanhong Liu, Changmei Liang, Hua Yang. Construction of a blended teaching model from the perspective of ideological and political education in courses: A case study of data structure courses in computer science [J]. *Education Observation*, 2023,12 (10): 100-104.
 6. Wei Chen, Xiaodong Zheng, Fengqin Feng, et al. Exploration and practice of the "Five in One" blended teaching model for the national first-class undergraduate course "Food Safety" [J]. *Food and Fermentation Industry*, 2022 (1): 330-334.
 7. Means B,Toyama Y,Murphy R F, et al. The Effectiveness of Online and Blended Learning:A Meta-Analysis of the Empirical Literature[J]. *Teachers College Record* 2013, 115 (3):134-162.
 8. Yuqing Zhang, Yuqing Qu. Exploration of the Teaching Model of "Course Ideology and Politics" in College English Based on Blended Learning [J]. *Overseas English*, 2020 (2): 174-175.
 9. Zhiyong Yang, Jing Wang, Jianzhang Zhao, et al. Practice and Experience of Ideological and Political Education in the Course of Principles of Chemical Engineering [J]. *Shandong Chemical Industry*, 2020,49 (7): 213-216.

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