

The Way to Realize the Golden Course Under the Perspective of Internet + Vocational Education

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Abstract: The course builds teaching resources pool in an learning platform named Super Star Learning Platform to create an teaching and learning model that includes students self-studying online before class, interactive learning during physical class and further study after class. The resources pool expands the scope of students learning resources, and insert a variety of high quality learning video resources to render students the opportunity to contact more and more new more cutting-edge knowledge about building materials. Amid the background of Internet assisted teaching, the new teaching method wants to break away from the awkward situation of little interaction inside the classroom through concrete practice. Based on the building materials course, this paper aims at the construction of gold course, and makes full use of online resources to realize the organic integration of online and offline teaching, so as to improve the professional ability and quality goals of higher vocational students.

Keywords: Vocational education, Resource library, Gold course, Curriculum thinking and politics.

1. Introduction

Since April 2018 when the Ministry of Education issued by the teaching informatization 2.0 action plan, efforts to build "Internet +" talent training mode has been made throughout the country, and there arises new development of Internet-based education services to explore new education governance mode in the information age. The education informatization ten years development plan (2011-2020), and other documents also emphasized the importance of teaching intelligent informatization, promote education informatization from fusion application to innovation and development of advanced evolution, information technology and intelligent technology depth into the education process, promote improved teaching, optimize management, improve performance.

In February 2019, the long-awaited National Implementation Plan for Vocational Education Reform (20 vocational education articles) was finally released. In Article 9, it is mentioned that improving the professional teaching resource database and establish the resource certification standards and trading mechanism of the co-construction and sharing platform, and further expand the coverage of high-quality resources. A large number of online quality courses have been selected and identified, and a large number of national planning textbooks jointly developed by schools and enterprises have been built, advocating the use of new leaflet and manual textbooks and the development of information resources. To meet the development needs of "Internet + vocational education", we will use modern information technology to improve teaching methods, and promote the construction and universal application of network learning space such as virtual factories. Therefore, the "classroom revolution" is imperative. Classroom is the main battlefield of education. One end of the classroom is connected to students and the future of the nation. Only when the education reform enters the classroom level can it really enter the deep water zone. The release of 20 vocational education has put forward urgent requirements for the teaching reform of higher

vocational colleges in China. At present, it is urgent for teachers in higher vocational colleges to invest more time to think and explore how to realize the construction of golden courses in the era of Internet + vocational education [1-7].

2. Presentation of the Questions

Since the release of the Ten-year Development Plan for Education Informatization (2011-2020), the 13th Five-Year Plan for Education Informatization and the Action Plan for Teaching Informatization 2.0, China has paid more and more attention to education informatization, and a variety of new online teaching methods have emerged accordingly. However, with the practice of these new online teaching methods, it is found that the single mode of online course learning can not well complete the teaching objectives of the course, although the traditional course teaching has its disadvantages, but it also has the advantages that network learning can not be replaced. Therefore, how to fully and effectively integrate traditional teaching environment and network learning resources, use information technology to optimize teaching design, improve teaching and evaluation methods, and promote the improvement of teaching quality is an important research direction of current curriculum teaching reform[8-12].

As a form of flipped classroom, golden course construction based on the background of Internet + vocational education breaks the traditional teaching process of "teaching before learning" and emphasizes "learning before teaching". On the basis of inheriting the advantages of traditional classroom teaching, reform the teaching mode, give play to the advantages of Internet + technology in building materials teaching, improve students' learning enthusiasm, and build a platform for students to learn independently, individually and cooperatively. The learning of professional courses is basically limited to the classroom, a chalk, a blackboard, teachers talk, students listen to the model, so that the integration of wisdom teaching and student learning. I believe that the promotion of wisdom teaching in golden class will certainly boost the teaching level of the school to a higher

level. Based on the building materials course, this paper aims at the construction of gold course, and makes full use of online resources to realize the organic integration of online and offline teaching, so as to improve the professional ability and quality goals of higher vocational students[11-16].

In view of the current situation of teaching reform in higher vocational colleges, this study focuses on finding and solving the following problems:

(1) How to use online resources as an auxiliary teaching means to improve the teaching effect, efficiently complete the quality requirements of building materials courses and achieve breakthroughs.

(2) How to improve students' independent learning ability, critical thinking ability and innovation ability by combining in-class and out-of-class.

(3) How to evaluate students' learning process through effective evaluation methods, how to evaluate students' learning process from diversified, sustainable and personalized perspectives, through the deep learning process such as pre-class self-study, in-class interaction and after-class expansion, and make adjustments for the next course teaching according to the evaluation results.

(4) How to integrate ideological and political elements into the teaching of professional courses vividly, so as to form a synergic effect with ideological and political courses, so as to achieve moral education, cultivate people and nourish things silently.

3. The Current Situation of Research

The student training of higher vocational colleges is different from that of undergraduate colleges, which has its own special problems and needs. The academic performance and learning ability of students in higher vocational colleges are weak, and some students' learning ability is not good, and then they have a fear of difficulties in learning, resulting in their low enthusiasm for learning. However, most of the current teaching modes are still the traditional classroom teaching system, which leads to students' subjective initiative but not full play, and their learning is still in a passive state, which hinders their innovation potential to some extent. To sum up, the following problems are the main problems in vocational learning.

Firstly, students' independent learning ability is limited. Although teachers consciously pay attention to cultivating students' independent learning ability in daily teaching, we find that most students are used to nanny-style education before college, with poor autonomy, can not effectively use time, and habitually rely on teachers. The vast majority of students do not have the awareness and strategy of independent learning. The popularity of smart phones even makes some students have no independent awareness and consciousness of independent learning in class.

Secondly, neglect the cultivation of students' innovation ability. The reason for students' lack of innovation ability can be attributed to the "cramming" and "full irrigation" teaching mode. This mode makes students form the habit of passive acceptance, lack of active learning, independent thinking and innovation ability, lack of innovation ability is a common problem among students. The neglect of traditional teaching on the cultivation of students' innovative ability makes it difficult for the cultivated college students to meet the social demand for innovative talents and the social recognition.

Thirdly, the traditional professional course teaching neglects to cultivate students' world outlook, outlook on life and values. Traditional teaching often only pays attention to teachers' teaching content and students' academic performance, while ignoring the cultivation of students' emotions, attitudes and values. The new era curriculum not only requires to impart professional knowledge, but also needs to vividly integrate ideological and political education into the professional curriculum teaching to spread positive energy to students, so as to realize the moral education and moisten things silently. Teachers should really make good use of online and offline classes, organically combine all kinds of courses with ideological and political elements, and walk together with ideological and political courses to form a synergistic effect.

4. Implementation Plan

(1) Formulate curriculum standards for building materials with the characteristics of higher vocational colleges: the curriculum standard should meet the Teaching Requirements of Building Materials Curriculum issued by the Ministry of Education, reflecting the orientation of talent training, seeking truth from facts and teaching students in accordance with their aptitude.

(2) Corresponding course content system of building materials Publish teaching materials suitable for the learning ability of higher vocational colleges, build a course content system with practical content, cultivate students with basic knowledge and experimental skills of building materials, so that students can learn to correctly choose and reasonably use the basic ability of building materials in practice.

(3) Build a teaching resource library of building materials based on the Superstar Learning Communication platform. According to the requirements of the quality courses and the content of the curriculum system, the six curriculum teaching elements of teaching, discussion, homework, practice, assessment and teaching materials are earnestly implemented. Provide picture bank, exercise bank, question bank and other teaching resource bank. Provide curriculum standards, teaching video, electronic courseware, network courseware, teacher-student communication and other network courses. Combined with the actual course, in the content and way to form their own characteristics.

(4) Carry out research on the teaching process of gold course. In the teaching process, the most acceptable way will naturally integrate ideological and political elements, promote the ideological and political flavor of professional courses, spread positive energy for students, and cultivate qualified talents for the national and social development. At the same time, summarize the important knowledge points of each chapter, let the students understand the whole picture and context of the whole building materials, so as to understand the variety, basic composition, preparation, performance and use of all kinds of building materials.

Actively explore and carry out the "three types, three guides and three abilities" curriculum ideological and political education model. Using "immersive, interactive, projects" ideological education a new way, through the "professional guide, leading, innovation education guide" the mutual fusion, using online hybrid teaching, improve students in the course of "professional ability, Ideological instruction ability, Innovation and entrepreneurship ability" to create a basic ideological gold professional class.

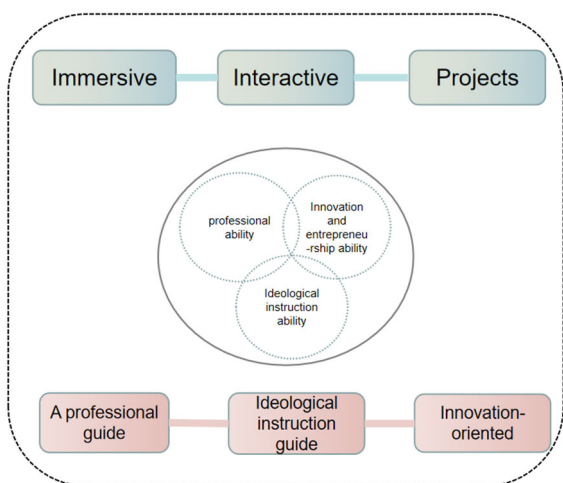


Figure 1. Ideological and Political Education Model

(5) Based on the project of "cement flowerpot making and research and development", personalized teaching is carried out to create a research and development environment for students to realize the whole process of their own design and making of various building materials, and to cultivate students' independent learning ability, innovation ability and problem-solving ability.

5. Reform and Innovation

(1) Stick to the classroom position and update the teaching concept. The student-centered teaching concept should be firmly established in classroom teaching, and the students' enthusiasm, initiative and thirst for knowledge should be fully aroused by attractive teaching language, innovative expression forms, rich teaching situations and classic cases centering on their psychological characteristics and needs for success.

(2) Tell the Story of China well and create ideological and political courses. Ideological and political elements run through the whole process of teaching, comprehensively implementing the fundamental task of moral cultivation and promoting the talent cultivation of craftsmen in the new era.

(3) Innovative methods and means to release the vitality of the classroom. Make full use of the ubiquitous learning advantages of multiple mobile platforms to build a student-oriented teaching resource library. Make full use of heuristic teaching, case teaching, situational teaching, interactive teaching, inquiry teaching and other forms, break the silence of the classroom, coruscating the vitality of the classroom, improve the classroom teaching effect.

6. Conclusion

In this paper, the teaching resource library of building materials is constructed, and the Internet + resources are integrated into the normal teaching process to build online courses, which are easy to learn. The teaching methods are diverse and the teaching means are advanced. The teaching ideological and political cases are close to the professional content, the case selection is reasonable, and the professional sharing and reference value is high. Effective teaching supplementary learning, such as self-study before class, interaction in class and extension after class, improves students' freedom of learning and strengthens their subjective initiative in learning.

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References

- [1] Luyu Huang, Jiaqi Sun. Research and Practice of flipped Classroom Teaching Mode based on creating online "Golden Lesson" of Ideological and political course [J]. Forest Teaching,2022, pp. 5-9.
- [2] Xin Wang, Ting Chen, Guoxiang Xu. Construction and application of "building materials" online course in higher vocational colleges from the perspective of golden course [J]. Journal of yangzhou vocational university,2020, pp.53-55.
- [3] Xiaoyang Mu. Research on the Construction of Gold courses in Applied Universities under the Background of Curriculum Ideological and political Science [J]. Journal of Heilongjiang Teacher Development College,2022, pp.45-47.
- [4] Jianbin Wang. "Golden Lesson" oriented teaching reform of Ideological and Political Education Theory course [J]. Journal of Yangzhou University (Higher Education Research Edition),2022, pp.79-84.
- [5] Yang Bin. Research and practice on the construction of curriculum resource database of building materials in Higher Vocational Colleges based on "Internet + Entrepreneurship" model [J]. Building Materials and Decoration, 2016(47), pp. 143-144.
- [6] Wenbin Liu, Xiangping Chen, Jing Yu, Hui Zhou. Exploration and Research of Scientific Research Classroom in Higher Vocational Colleges based on "production, learning, research, innovation and Application" -- Taking building materials Engineering and Technology specialty as an example [J]. Jiangsu Education Research,2022, pp.33-37.
- [7] Wen Li. Preliminary Study on construction of Curriculum resource database of Building Materials and Testing in Higher Vocational Colleges [J]. Residence Industry,2019(11), pp.2-3.
- [8] Qinfang Zhang, Kaiying Wang, Huajun Zhu, Haijun Hou. Construction of virtual Simulation gold course of Ecological Building Materials: A Case study of Material Major in Yancheng Institute of Technology[J]. China Education Technology and Equipment,2020, pp.45-46+51.
- [9] Mingyang Zuo, Jiuhua FANG, Huining Sun, Yong Jiang. Research on the construction of professional teaching resource bank of vocational education under the "Demand-oriented" concept -- Taking the construction of building materials resource bank as an example[J]. Journal of wuhan polytechnic,2020, pp.20-25.
- [10] Jingpeng Zhang. Practice and exploration of Curriculum Ideology and Politics in professional courses -- Taking building materials course as an example [J]. Modern Vocational Education,2020, pp.48-49.
- [11] Junnan Han, Tingting Zhang, Hongmei Ai, Baomin Wang, Mingli Cao, Liyan Zhao. Construction and teaching practice of moocs for building materials [J]. Higher architectural education,2020, pp.68-73.
- [12] Xiyu Zhu, Ying Cui. A preliminary study on the methods of ideological, political and educational reform in curriculum -- a case study of micro-class of building materials [J]. Education modernization,2019, pp.67-68.
- [13] Yanyan Lv. Analysis on the Role of Ideological and Political Reform of Professional Curriculum in Higher Vocational Education -- A Case study of building Materials Curriculum construction [J]. Urban architecture,2019, pp.14-16.

- [14] Hui Xu, Ruiqin Liu. The Integration strategy of Mobile Internet and Higher Vocational Education [J]. Journal of China Multimedia and Network Teaching (Mid-day),2022(02), pp.1-4.
- [15] Nan Zhao. Research on strategy and Application of Stratified Teaching in Higher Vocational Education [J]. University, 2021(07), pp. 90-91.
- [16] Zhongqing Guo, Congcong Gao. Feedback and optimization of online and offline mixed teaching in higher vocational Education [J]. Shaanxi Education (Higher Education), 2020(11), pp.54-55.