Exploration of New Loose-leaf Textbooks under the Background of "Three Education Reforms"

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Abstract: Different from traditional textbooks, the NLLT (new loose-leaf textbooks) mainly organize teaching work with a single task as the main unit, and the main presentation form of textbooks is loose-leaf, which connects different learning tasks in series. Teachers can improve students' theoretical knowledge level by using the NLLT to carry out teaching work. In the application of traditional teaching materials, teachers play a leading role. The integrity of the NLLT is relatively high. This paper puts forward the research of NLLT under the background of "Three Education Reform". Firstly, the connotation of "Three Education Reform" is discussed, secondly, the advantages of NLLT are discussed, and finally, the design of NLLT under the background of "Three Education Reform" is put forward again: improving the educational ability of teaching materials, reconstructing the content of teaching materials and modular evaluation. The purpose of this paper is to provide reference for the reform of curriculum teaching materials in HV (higher vocational) colleges.

Keywords: "Three Education Reform"; New loose-leaf textbooks; Teaching materials

1. Introduction

Textbooks are an important carrier of HV (higher vocational) education, the most intuitive form of curriculum reform, and the main media for students to participate in education and teaching activities. The implementation plan of vocational education reform points out that there is no modernization of education without modernization of vocational education. Vocational education has been promoted to an unprecedented new height. Provide students with rich, applicable, innovative, multi-type, three-dimensional and informational curriculum resources, realize the integration of teaching materials, learning materials, workbooks and other functions, and lead the construction of a deep learning management system [1]. The development of loose-leaf teaching materials for vocational education is a pioneering and innovative work.

The "Three Education Reform" focusing on teachers, teaching materials and teaching methods has become an important starting point for promoting the development of vocational education [2]. The reform of teaching materials is not thorough enough, and the selected teaching materials are not suitable for the majors and do not keep pace with the times. These problems have seriously hindered the development of the reform of "Three Education". Therefore, this paper puts forward a research example of the development of NLLT (new loose-leaf textbooks) in HV colleges under the background of "Three Education Reform".

2. Interpretation of the connotation of "Three Education Reform"

After the beginning of the new technological revolution represented by artificial intelligence and big data, a large number of professional posts have been fully or mostly mechanized, and at the same time, some brand-new occupations have been born. In order for vocational education to truly cope with such social trends, it is urgent to promote the reform process of vocational education. The most important thing here is naturally the reform of teaching materials.

"Three Education Reform" refers to the "three-education" reform of teachers, teaching materials and teaching methods in vocational education. "Three Teaching" is the basic element of teaching, and teachers are important participants and guides in teaching activities. The level of teachers' ability has a direct impact on the level of students' knowledge acquisition. Textbooks are an important carrier of teaching and provide rich teaching resources for teaching activities [3-4]. See Figure 1 below for details:
(1) Teacher reform: Schools should establish a high-level and structured teaching innovation team and a high-quality double qualified teacher team. Students should steadily promote the construction of a high-pressure teacher management system through the above steps.

(2) Teaching material reform: Schools should establish high pressure college teaching material standards and develop teaching material information resources. In addition, schools should also update the content of teaching materials in a timely and dynamic manner.

(3) Teaching reform: Schools should take school-enterprise cooperation, education and training as the breakthrough points in teaching reform, and use modern information technology to promote the reform of teaching methods. Schools should establish a group based training room based on the combination of professional group basic skills and virtual reality by combining with tradition; Schools should also introduce enterprise technology research and development, innovation and entrepreneurship for teachers and students, and scientific research projects, and establish technological skills innovation platforms such as the Internet of Things and the National Big Data Collaborative Innovation Center; Schools should also cultivate the abilities of teachers and students in innovation and entrepreneurship, product research and development, and social services. The above methods can help teachers who lack teaching experience identify shortcomings, analyze the reasons, and improve their teaching level.

3. Advantages of NLLT

3.1. Flexible use

The main presentation form of the textbooks is loose-leaf, and different learning tasks are connected in series. Teachers can use the NLLT to carry out teaching work, which can improve students' theoretical knowledge and strengthen their ability to combine theory with practice. Binding loose-leaf is one of the most easily associated features in understanding loose-leaf textbooks.

Similar to a loose-leaf notebook, the teaching materials are bound in a loose-leaf way. Loose-leaf binding is also beneficial for teachers to adjust the teaching content according to the characteristics of different students' classes, or to update the teaching content at any time according to the changes of professional tasks in the industry. It can also make teachers' teaching more flexible, so that students can better interact with the knowledge in the teaching materials during the learning process [5].

3.2. Mobilize students' learning initiative

Loose-leaf teaching materials can fully mobilize students' learning initiative and cultivate their correct concept of vocational learning that "practical ability is greater than knowledge theory" while ensuring students to learn vocational knowledge that meets national standards. At the same time, teachers can better understand students' learning situation based on the digital teaching AIDS matched with loose-leaf textbooks, so as to implement one-on-one guidance and ensure the practical improvement of students' ability. Loose-leaf textbooks put more emphasis on learning and practice, emphasizing the matching between learning and practice, removing the logical main line thinking used in previous textbooks, and making the "student-centered" color of the whole teaching activity more
obvious. In the content, more emphasis is placed on conciseness, which reduces the difficulty of students’ theoretical study [6]. But at the same time, students’ professional operation ability can be fully exercised to meet the needs of the post.

3.3. High integrity

In the application of traditional teaching materials, teachers play a leading role. The integrity of the NLLT is relatively high. Through the synchronous use of digital teaching resources, the teaching work in HV colleges can be better realized intellectualization, informationization and modernization [7-8]. Different from traditional textbooks, the NLLT is a new form of teaching materials, which can effectively integrate various teaching resources, such as video, text, audio, pictures and other forms of teaching resources, improve the flexibility and interest of teaching to a certain extent, and enhance the interaction between students and the content of teaching materials, so that students can develop into a relatively comprehensive comprehensive talent in the learning process. Teachers are no longer the leaders of teaching activities, but become the supervisors of participants.

4. Design of NLLT under the background of "Three Education Reform"

4.1. Improve the ability of teaching materials to educate people

At present, the use of NLLT has become a new development trend and mainstream direction, whether for comprehensive training courses in HV colleges or for courses in other colleges. Teaching and educating people focuses on educating people, while educating people focuses on cultivating morality, so does the development of teaching materials. First of all, we need to have the ability to educate people, have correct values, guide students to form correct ideological values, and establish students’ feelings of loving the party and patriotism. We should pay attention to the cultivation of students’ ability, and help them make different study plans according to their different learning situations, so as to achieve relatively ideal teaching results. Next, let's discuss the content construction of loose-leaf textbooks in detail. Based on the orientation of the college to undertake the strategy of ecological security, the direction of running the school is to fully serve the development of regional economy and ecological industry, and the teaching goal is to cultivate high-quality compound technical and technical talents with distinctive ecological characteristics.

4.2. Reconstruct the content of teaching materials

The construction of NLLT mainly includes theoretical content, practical content and the latest progress. Theory mainly serves practice, and the ultimate goal of the textbook is to cultivate students’ professional practical operation ability, so the theoretical content of the textbook mainly plays a certain role in paving the way. To achieve the union of schools, enterprises and industries and realize the union of the main body; In-depth cooperation with big data industry enterprises, joint training, joint construction of majors, enterprise projects into teaching materials, industry experts into the classroom [9]. The content reconstruction process of the NLLT is shown in Figure 2:

![Figure 2: Reconstruction process of teaching material content](image-url)
The demand orientation of compiling includes that the content should be scientific and reasonable, conform to the operating norms of the industry, conform to the cognitive rules of HV students, and conform to the actual post requirements of big data collection; For the selection of other high-level related content, we should consider the application frequency in the follow-up practice of related majors as much as possible, and help students understand the high-frequency content in detail by increasing the introduction space and other ways.

For some theoretical knowledge that may be used in practical operation in the future, it is necessary to appropriately expand its quantity or length so that students can understand it more thoroughly and carefully [10]. So that students can better master the relevant knowledge of electronic instruments and skilfully operate them, so that students can really master the operation of various electrical work through learning.

4.3. Modular evaluation

Modular assessment is based on the modular teaching of teaching materials. Loose-leaf teaching materials explore the division of different positions in the professional field into several skill modules, and each skill module contains several tasks. Students do, learn and finish the assessment in school, thus achieving the unification of learning theoretical knowledge, practical practice and assessment against job standards. The presentation form of the NLLT is not only the loose-leaf in form, but also the loose-leaf in content. The teaching materials will be compiled in the form of “five in one”, which are: loose-leaf teaching materials, loose-leaf notes, function inserts, work training and self-evaluation.

Each independent module and task in the textbook should include knowledge goal, ability goal, knowledge link, design idea, after-school training and learning resources. Set up the selected teaching materials in the structure of "module+project+appendix", make overall planning for all sections of the teaching materials according to the curriculum standards, develop mobile learning terminals and teaching platforms, organically integrate the teaching materials with information technology, and develop a new loose-leaf teaching material in digital form.

Schools should hold monthly course team meetings to report on the completion of tasks in charge and the progress of platform construction; Schools should also use platform data to monitor the completion of textbook construction, and provide early warning and analysis of the reasons for incomplete projects during the construction process; Schools should seek countermeasures to promptly correct projects to be completed in the short term and set goals and tasks. To evaluate and monitor the satisfaction of teaching effects that are difficult to achieve in the short term.

5. Conclusions

The "Three Education Reform" focusing on teachers, teaching materials and teaching methods has become an important starting point for promoting the development of vocational education. Vocational education has been promoted to an unprecedented new height. Provide students with rich, applicable, innovative, multi-type, three-dimensional and informational curriculum resources, realize the integration of teaching materials, learning materials, workbooks and other functions, and lead the construction of a deep learning management system. The development of loose-leaf teaching materials for vocational education is a pioneering and innovative work. Different from traditional textbooks, the NLLT is a new form of teaching materials, which can effectively integrate various teaching resources, such as video, text, audio, pictures and other forms of teaching resources, improve the flexibility and interest of teaching to a certain extent, and enhance the interaction between students and the content of teaching materials, so that students can develop into a relatively comprehensive comprehensive talent in the learning process. This research is of great practical significance to promote the reform of teaching materials of HV courses, improve the teaching level of HV courses and realize the goal of socialist modernization education.

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