Research on the Construction of Talent Training System and Practical Teaching System in Modern Higher Vocational Education

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Abstract: With the urgent demand of social modernization for high-quality skilled talents and the rapid expansion of the scale of higher vocational education, building a scientific, rigorous, perfect and systematic education and teaching guarantee system and strengthening the monitoring of teaching quality have become the lifeline of improving the teaching quality of higher vocational education. Higher vocational education includes not only the inheritance of basic theory, but also the cultivation of practical ability, innovation ability and entrepreneurial ability. Knowledge, ability and quality should be developed in a coordinated manner. This requires us to build a teaching quality control system. Higher vocational education must be guided by the unique concept of talents, quality and teaching. This paper discusses the practical theory of practical teaching in higher vocational education. I hope it can provide reference for the construction and improvement of practical teaching system.

1. Introduction

The practical teaching guarantee system in higher vocational colleges is the basic project to ensure the quality of practical teaching and an important factor to ensure the implementation and effect of practical teaching. The teaching material is the basic carrier of the cultivation of talents’ quality and practice. Establishing a high-quality team of double qualified practical teaching teachers is the key to improve the quality of practical teaching and ensure the effect of practical teaching. Stable and high-quality experimental and training conditions and the construction of modern practical training base and practical teaching place are also the basic guarantee to improve the quality of practical teaching.

2. Overview of Practical Teaching System in Higher Vocational Colleges

Practical teaching system includes theoretical teaching system and practical teaching system, which complement each other. Among them, the practical teaching system consists of the objectives, contents, management and conditions of practical teaching activities. Around the training goal of professional talents, develop reasonable professional courses and effective practical teaching links, such as experiment, practice, training, curriculum design, graduation design, innovative production, social practice, etc. the overall organic connection of the above elements of practical teaching activities is the practical teaching system. As shown in Figure 1.

At present, there is a wide demand for compound talents with innovative spirit and practical ability. However, due to the limitations of teaching methods and teaching models, from theory to theory, most students only master professional principles and have poor ability of design, creation and practice. In the teaching practice system of higher vocational education, the combination of practical teaching plan and educational technology is gradually implemented according to the ability characteristics of students. As shown in Figure 2:
First, let modern educational technology enter the classroom as a teaching means, change students’ way of thinking and improve teaching quality. At the same time, let modern educational technology enter the classroom as teaching content, update teaching content and optimize students' knowledge structure;

Second, apply modern educational technology to practical teaching links such as experiment, training, practice, curriculum design and graduation design, so as to closely combine modern educational technology with learning;

Third, adopt modern educational technology and virtual simulation practice teaching environment to carry out simulation practice and training, so as to solve the practical problems such as insufficient practice teaching base, inconvenient continuous production of enterprises and students’ operation; Fourth, build a professional teaching network, expand the breadth and depth of professional teaching, and realize the informatization of teaching and learning.

3. The Role of Educational Technology in Practical Teaching System

Practical teaching system is an organic part of teaching mode, but it can also be analyzed separately. It is a typical and typed teaching method, which can be fully displayed through the beautiful practical teaching environment (Liu Chang, 2018). It can be said that the practical teaching system with the participation and penetration of modern educational technology as the main line will get twice the result with half the effort. The specific characteristics of the content model of the practical teaching system may vary greatly, but its constituent elements should be relatively
consistent as a whole. The difference may come from the organic proportion or effective default of the constituent elements. According to the actual situation and content, the participation degree and mode of educational technology will also be different.

Practical teaching media can be divided into six media forms: paper and pen media, prop media, audio-visual media, network media, comprehensive media and on-site practice. Paper and pen media and props media are not only traditional teaching media, but also general basic teaching media. They still have a stable position in the practical teaching mode. Network media is a unique, frequently used and most promising teaching media in the practical teaching mode of modern distance education, which has attracted more and more attention. Audio visual media was originally a kind of teaching media developed from distance education, which is widely used, but now it has also become a general teaching media (Li Aiying, 2021). As a special case without media, on-site practice can be regarded as a kind of non media. It is not only the most important form in practical teaching, but also a mainstream form. Comprehensive media is the comprehensive application of various teaching media, which embodies the new concept of multimedia comprehensive teaching. It is the mainstream form and ultimate trend of modern teaching media. Network virtual environment is a new teaching environment provided by distance education institutions for learners. After the development of network technology to a certain stage, it is a new thing closely combined with education. It enables the free extension of educational space and time, and fully affirms the autonomy and consciousness of learning subjects, but it is also easy to cultivate learners’ dependence on new technologies and tools.

As a dynamic and open system, practical teaching system is also a key factor in the application of educational technology. The application of practical teaching system and educational technology system without feedback loop is incomplete and flawed. Teaching itself is a process of continuous development, change and improvement. Learning feedback is not only a key process element to ensure the integrity and openness of practical teaching system, but also an important process to improve the application level of educational technology. In order to further understand the application of practical teaching and modern educational technology, it is necessary to investigate and study the current practical teaching information platform. So as to have a preliminary understanding of the current practice information platform of higher vocational colleges, and achieve a targeted goal for the construction, application and research of educational technology.

4. The Goal and Policy Guarantee of Implementing Practical Teaching by Using Modern Educational Technology

Establish and improve the policy guarantee mechanism of practical teaching and the application of modern educational technology, and form a good situation of practical teaching and the application of modern educational technology.

4.1. Specific objectives of implementing practical teaching

All practical teaching places in higher vocational colleges shall be equipped with basic educational equipment and facilities, and experiments, internships and training courses can be set up according to the requirements of the syllabus. All higher vocational colleges should set up practical courses according to the requirements of the syllabus. Schools with conditions can establish their own training bases, and schools with poor conditions can jointly establish public practice and training bases. Build a team of teachers with modern educational awareness and able to meet the needs of practical teaching and the application of modern educational technology; Cultivate a number of backbone forces in practical teaching and the application of modern educational technology; Develop a series of software that conforms to the law of education and teaching and basically meets the needs of education and teaching; Establish a set of teaching material system and evaluation system for practical teaching and audio-visual education.

4.2. Guarantee the realization of the goal of practical teaching

First, emancipate the mind, take a long-term view, stand at the height of meeting the challenges
of the 21st century and China's educational reform and development, understand, plan and implement practical teaching with a positive and enterprising attitude, and use modern educational technology. If we still adhere to the concept of exam oriented education, practical teaching will not be better developed, and modern educational technology will become a tool of exam oriented education. When computer technology is applied to the field of education, we should spend our energy on the development of teaching software. Applying modern educational technology, especially computer technology, to quality education will become a powerful means to promote the implementation of quality education. If it is applied to exam oriented education, it will also become a tool to strengthen exam oriented education. Therefore, to strengthen practical teaching and apply modern educational technology, we must first change the educational concept and deeply understand the importance, necessity and urgency of practical teaching and modern educational technology in quality education.

Second, learn to make overall arrangements for curriculum materials, teaching staff, software and hardware construction and theoretical research, strengthen management and guidance, straighten out the relationship, and make the healthy development of practical teaching and the application of modern educational technology. Textbook compilation is an important link. All localities should organize forces to compile practical course materials and audio-visual teaching materials with local characteristics that meet the actual needs. After examination and approval, it will be listed in the catalogue of teaching books and recommended for use. Establish the database of educational software as soon as possible, and establish the collection, research, development, evaluation and management system of educational software.

Third, we should share information. The most important way of information sharing is networking, and the training of teachers is the key. In order to carry out practical teaching and apply modern educational technology, higher vocational colleges should strengthen teacher training and training to meet the needs of practical teaching and modern educational technology.

Fourth, we should pay attention to social participation. Education is a social undertaking, which needs the attention and support of the whole society. Practical teaching and the application of modern educational technology are closely related to the reality of production and life, and are at the forefront of teaching reform. They need more investment and more attention and support from all walks of life. We should attach importance to social participation, make full use of the forces of government departments, enterprises and institutions, various publicity media and other sectors of society, serve practical teaching and the application of modern educational technology, and accelerate the development of practical teaching and the application of modern educational technology.

Fifth, strengthen experimental research. In the process of implementing quality education, it is a new and arduous work to carry out extensive and in-depth practical teaching, especially the application of modern educational technology. There is no ready-made experience to learn. We should strengthen experimental research, strive to explore laws and summarize experience to ensure the healthy development of practical teaching and the application of modern educational technology.

Sixth, establish the concept of seeking development with quality and efficiency. Carrying out practical teaching and the application of modern educational technology requires a lot of investment. At present, education funds are still very limited. We should pay attention to how to make full use of limited resources and obtain the best educational benefits. Otherwise, large investment and low benefit will affect the development of practical teaching and the application of modern educational technology.

5. Conclusion

Since the reform and opening up, with the continuous strengthening of the strategic position of education, with the efforts of governments at all levels and education departments, China’s practical teaching and the application level of modern educational technology have been greatly improved. However, we should earnestly solve the problem of emphasizing theory and neglecting practice in
China's higher vocational education. Paying attention to knowledge transfer and neglecting ability training still needs hard work. Carrying out practical teaching and applying modern educational technology is the need of the reform and development of higher vocational education. Only by making full use of modern educational technology can we promote the reform of higher vocational education and the rapid development of practical teaching system of Higher Vocational and technical education.

References
