Practical Education and the Cultivation of Professional Competence: Reform Strategies for Vocational Education

Dandan Zhang

Henan Vocational College of Applied Technology, Zhengzhou, 450000, China

Keywords: Practical education, professional competence, vocational education, educational reform

Abstract: Against the backdrop of increasing societal demand for higher vocational education, there is an urgent need for profound reform in the educational models of higher vocational education to better align with the evolving needs of economic and social development. This paper focuses on the cultivation of talents possessing advanced vocational skills and comprehensive competence, making this the central goal of the reform. Through an in-depth analysis of the intrinsic relationship between practical education and the cultivation of vocational competence, this study explores a series of reform strategies for higher vocational education. These strategies include emphasizing the importance of practical education, advocating for interdisciplinary comprehensive training, and promoting innovative teaching methods. The aim is to comprehensively enhance students' vocational competence, meeting the urgent expectations of society for graduates of higher vocational education in various capacities. By nurturing talents with comprehensive competence, higher vocational education will better cater to society's demand for the integration of professional skills and comprehensive competence, providing robust support for cultivating more competitive talents.

1. Introduction

In recent years, higher vocational education has received widespread attention in society. How to equip vocational students with stronger practical skills and professional competence has become a hot topic in the field of education. This article aims to propose an effective reform strategy for higher vocational education, providing a reference for cultivating high-quality talents that meet the needs of society.

2. Relationship between Practical Education and Professional Competence

2.1. Definition and Characteristics of Practical Education

Practical education is an educational approach that emphasizes achieving learning objectives through hands-on experience, practical operations, and active participation in real or simulated environments. In contrast to traditional purely theoretical teaching, practical education aims to foster holistic student development, enabling them to apply acquired knowledge and skills in real work and
life situations.

The core philosophy of practical education is "learning by doing and doing by learning." It posits that the most effective learning often occurs during practical operations and when facing real-world problems. Consequently, practical education encourages students to step out of the classroom and engage in hands-on activities, solving practical issues.[1]

Furthermore, practical education exhibits several prominent characteristics. Firstly, it emphasizes student agency. In this educational model, students are no longer passive recipients of knowledge but actively participate in learning activities, exploring knowledge, skills, and values through practical experiences. Secondly, practical education emphasizes teamwork. Many practical activities require students to work as a team, fostering not only their collaborative abilities but also enabling them to learn interdisciplinary and cross-cultural communication and collaboration. Thirdly, practical education focuses on individualized attention to students. Each student possesses unique backgrounds, interests, and abilities, and practical education allows students to choose and design activities according to their own situations, thereby achieving personalized learning.[2]

2.2. Connotation of Professional Competence

Professional competence describes the comprehensive abilities demonstrated by individuals in their professional activities. This competence extends beyond specific professional knowledge and skills in a particular field. Broadly, it encompasses attitudes, values, communication skills, and a spirit of teamwork related to work. An individual with high professional competence not only possesses a profound knowledge base in their field but also exhibits a range of "soft" skills, such as problem-solving ability, critical thinking, innovative thinking, and moral responsibility.[3]

Professional knowledge serves as the cornerstone of professional competence, involving fundamental concepts, principles, and methods related to a specific profession or field. This knowledge provides individuals with the theoretical basis for effective work. On the other hand, professional skills encompass the practical application of this knowledge, focusing on an individual's ability to perform specific tasks in particular work environments. For instance, a doctor not only needs to understand how to diagnose illnesses but also requires surgical skills.

In addition to these components, individuals must possess a broader range of "soft" skills to succeed in today's increasingly complex work environments. Communication and interpersonal skills enable them to collaborate effectively with others, while a spirit of teamwork allows them to excel in group settings. The ability to solve problems and make decisions equips them to face various challenges. Deep understanding of professional ethics and responsibility ensures they pursue their career development while honoring their responsibilities to the team, organization, and society.[4]

Professional attitudes and values also hold a central position in professional competence. This encompasses not only an individual's enthusiasm and dedication to their work but also their profound understanding of the value and significance of their work. Those with genuine professional competence exhibit a passionate commitment to their work, take responsibility for the team and organization, genuinely respect every client and colleague, and consistently uphold professional ethics.

2.3. Inherent Connection between Practical Education and Professional Competence

There exists a profound connection between practical education and professional competence. Practical education provides students with a platform to apply theoretical knowledge and skills in simulated or real work environments. This experiential learning approach not only strengthens students' mastery of professional knowledge but also helps them cultivate essential skills closely related to their future careers. In fields such as medicine, engineering, or education, practical
experience offers students the opportunity to face real challenges and better prepare for their future professional careers.

Moreover, practical education offers students valuable opportunities to develop their professional attitudes and values in real-world settings. Interactions with colleagues, clients, or patients require students to adhere to professional behavioral norms, emphasizing integrity, responsibility, and respect. These experiences deepen students' awareness of professional responsibilities and help them establish expectations and goals for their future work. From this perspective, the relationship between practical education and professional competence is not just a combination of theory and practice; it also lays a solid foundation for students' future success.\[5\]

3. Current Issues and Challenges in Higher Vocational Education

3.1. Disconnection between Theoretical Teaching and Practical Education

The goal of higher vocational education is to equip students with practical work capabilities and technical skills. However, in the current educational models, there is often a disconnect between theoretical teaching and practical education. This disconnect means that students, while mastering theoretical knowledge in their field, often struggle to effectively apply this knowledge to real-world situations.

Theoretical teaching predominantly occurs within classrooms, focusing on knowledge transmission and student comprehension. Practical education, on the other hand, involves real-world or simulated environments such as laboratories, workshops, or actual workplaces. When these two teaching forms are not effectively integrated, students may find a gap between the theoretical knowledge they've acquired and its practical application. They may feel confused and uncertain about how to translate bookish knowledge into practical skills.

Due to the rapid changes in the modern work environment and ongoing technological advancements, many traditional teaching methods and materials may no longer meet current vocational requirements. If higher vocational education institutions fail to update their curricula and teaching methods promptly, graduates may discover that their knowledge and skills lag behind industry standards. This not only affects their employment opportunities but also exposes them to challenges and difficulties in their careers.\[6\]

To address this issue, higher vocational education institutions must ensure a close integration of theoretical teaching and practical education. This necessitates close collaboration among educators, businesses, and government to ensure that educational content aligns with real work demands. Simultaneously, educational institutions should continuously update teaching methods and resources to ensure that students receive cutting-edge knowledge and skill training.

3.2. Neglect of Professional Competence Development

Higher vocational education should not only focus on the impartation of skills and knowledge but also encompass the cultivation of students' professional competence. However, in the current educational system, the development of professional competence is often overlooked or considered secondary. Professional competence covers aspects such as teamwork, communication skills, critical thinking, and professional ethics, all of which are crucial for students' success in the future workplace.

In many higher vocational education institutions, curriculum design primarily revolves around professional skills and knowledge, with a lack of systematic training in the aforementioned aspects of professional competence. This emphasis on hard skills can leave students well-versed in their specific field but lacking in the ability to cooperate with others, communicate effectively, or handle complex problems. Particularly in today's highly competitive and rapidly changing work environment,
mere technical skills are insufficient to meet employers' needs, underscoring the critical importance of professional competence.

Neglecting the development of professional competence can also affect students' career choices and career planning. Without sufficient professional competence, students may have a lack of clarity regarding their interests, abilities, and career goals. This can lead to them choosing inappropriate job positions and encountering confusion and setbacks in their future careers.

Higher vocational education institutions need to reevaluate their curriculum design and teaching methods to ensure that professional competence receives the attention and development it deserves. This will not only help students achieve more holistic development but also lay a solid foundation for their future professional careers.

3.3. Unequal Distribution of Educational Resources

In the field of higher vocational education, the unequal distribution of educational resources is a prominent issue. This inequality is often manifested through regional disparities, school facilities, and teaching staff, severely constraining the improvement of educational quality and students' equitable development.

Regional disparities represent a significant manifestation of unequal resource distribution. In economically developed cities and regions, higher vocational schools usually have more abundant funding, facilities, and teaching staff. In economically disadvantaged areas, especially remote rural areas, higher vocational education often lacks the necessary teaching conditions, such as advanced laboratories, teaching equipment, and professional teachers. This leads to significant differences in students' opportunities and the quality of education.

Apart from regional factors, the allocation of educational resources is also influenced by school size and reputation. Some well-known higher vocational colleges, benefiting from their brand reputation and strong fundraising ability, can acquire abundant educational resources, including funding, equipment, and high-quality teaching staff. Conversely, smaller or less-known schools struggle to obtain resources at the same level, which poses significant challenges for student education, research, and international exchange activities.

The unequal distribution of educational resources not only negatively affects students' learning and development but also harms the overall quality and social benefits of higher vocational education. To address this issue, comprehensive reforms are necessary at the policy, funding, and management levels to ensure fair and reasonable distribution of educational resources, thereby promoting the healthy and sustainable development of higher vocational education.

4. Application Strategies of Practical Education in Higher Vocational Education

4.1. Strengthening Collaboration with Enterprises

In higher vocational education, collaboration with enterprises is a crucial means to implement practical education. This collaboration provides students with real work scenarios, helping them integrate theoretical knowledge with practical work to better develop their vocational skills and competence.

Enhancing cooperation with enterprises can bring a range of resources and opportunities to higher vocational schools. Enterprises can offer internship programs, practical training, and project collaborations, enabling students to learn and gain experience in real work environments. This not only helps students enhance their professional skills but also cultivates their teamwork, communication, coordination, and problem-solving skills. Furthermore, enterprises can provide technical expertise, equipment, and financial support to schools, enriching teaching resources and
facilities.

However, collaboration with enterprises requires strategic planning and capabilities on the part of educational institutions. Schools need to establish long-term and stable partnerships with enterprises to ensure both parties benefit from the collaboration. This necessitates continuous updates of teaching content and methods to align with enterprise needs and standards. Additionally, schools should focus on faculty development and training, enabling educators to effectively communicate and collaborate with enterprises.

In summary, strengthening collaboration with enterprises is the key to practical education in higher vocational education. Only through deep collaboration with enterprises can the integration of teaching and practical experience be realized, producing highly qualified professionals that meet market demands.

4.2. Building Practical Education Platforms

In higher vocational education, constructing practical education platforms is an effective way to enhance educational quality and cultivate students' vocational competence. These platforms provide students with learning environments that simulate real work settings, allowing them to acquire professional knowledge and skills through practical experience.

The core of a practical education platform is the creation of a learning environment that is both realistic and safe for students. This can take the form of laboratories, workshops, simulated enterprises, or other practical training facilities. In these environments, students can conduct various experiments, operations, and projects, simulating actual work processes and tasks. This mode of learning not only deepens students' understanding of professional knowledge but also nurtures their practical skills, teamwork, and innovative thinking.

To build effective practical education platforms, schools need to consider various factors. Equipment and technology form the foundation of platform development, and schools should ensure their equipment is advanced and practical. Additionally, teaching content and methods are critical, and schools should continuously update and adjust them according to industry trends. The role of teachers is also essential; they must not only possess extensive professional knowledge and practical experience but also be capable of guiding students effectively in their learning and practice.

By constructing practical education platforms, schools can provide students with a broader and more diverse range of learning opportunities, helping them better adapt to their future careers and become genuine industry elites.

4.3. Innovative Educational Methods with an Emphasis on Developing Students' Practical Abilities

In the modern educational environment, traditional teaching methods are no longer sufficient to meet the needs of students and society. To better develop students' practical abilities, higher vocational education must innovate in its teaching methods, making instructional content and methods more closely aligned with practical applicability.

Innovative educational methods involve breaking away from conventional approaches and exploring new teaching modes and techniques. These include, but are not limited to, project-based learning, situational teaching, flipped classrooms, and blended learning that combines online and offline components. These methods emphasize active student engagement and encourage them to learn and grow by addressing real-world problems. For example, project-based learning allows students to research and practice around a real project, developing their teamwork, project management, and problem-solving abilities.

To better emphasize the development of students' practical abilities, educational institutions need
to collaborate deeply with industries, enterprises, and other practical platforms. This not only provides students with more authentic practical opportunities but also ensures that educational content remains consistent with market demands and industry standards. Furthermore, schools can stimulate students' interest and enthusiasm for learning by organizing various competitions, challenges, and practical activities, helping them discover and solve problems through hands-on experience.

At its core, education is about nurturing talent, and practical abilities are a fundamental requirement of modern society. Through innovative educational methods and an emphasis on developing students' practical abilities, higher vocational education can not only improve teaching quality but also produce more high-quality, applied professionals for society.

5. Specific Measures for Cultivating Professional Competence

5.1. Integration of Career Planning Education

Career planning education is an integral part of cultivating students' professional competence. Through planning and forecasting their future careers, students can gain a clearer understanding of their career goals and the value of their chosen majors and skills in their professional lives.

The integration of career planning education involves incorporating the principles and methods of career planning into everyday education and training. This includes providing knowledge about career choices, development, and transitions, as well as developing students' self-awareness, career decision-making, and adaptability. For example, schools can organize various career exploration activities such as on-site business visits, career seminars, and career counseling to help students explore different career fields and positions and discover their career interests and potential.

Furthermore, career planning education should focus on the development of students' career psychology and emotional intelligence. Students may face various challenges and uncertainties in their careers, such as difficulties in career choices, feelings of frustration in career development, and confusion in career transitions. Schools can assist students in developing a positive career mindset and enhancing career adaptability and resilience through methods like psychological counseling, career growth groups, and experience sharing, enabling them to better cope with various challenges in their professional lives.

5.2. Strengthening Professional Ethics Education

Professional ethics are the behavioral norms and value orientations that every professional should follow throughout their careers. It directly affects an individual's professional image, a company's reputation, and the harmonious development of society. Therefore, fostering professional ethics in higher vocational education is of paramount importance.

Strengthening professional ethics education means integrating moral values into the teaching of professional knowledge and skills, ensuring that students establish the right professional ethics while mastering vocational skills. This requires educational institutions to design and implement a series of targeted educational activities, such as professional ethics courses, case analyses, role-playing, and simulated practices, allowing students to experience and contemplate the importance of professional ethics in real or simulated professional situations.

Moreover, schools should collaborate with society, enterprises, and industry organizations to conduct professional ethics promotion and education activities. For instance, they can invite experienced professionals and entrepreneurs to share their career experiences and lessons with students or organize students to participate in professional ethics competitions and training within the industry. Through these means, students can develop a strong sense of professional ethics, laying a solid foundation for their future careers.
5.3. Providing Professional Skills Training

In the modern professional environment, the pace of skill and knowledge updates is rapid, necessitating professionals to not only possess foundational professional knowledge but also continually update and refine their vocational skills. In higher vocational education, aside from imparting theoretical knowledge, it is essential to provide students with skill training relevant to their professions, enabling them to quickly adapt to professional settings and meet employers’ needs.

Professional skills training is a targeted educational approach emphasizing practicality and hands-on experience, integrating with actual work scenarios. Such training typically includes experiments, practical tasks, simulations, and projects in various forms, with the aim of helping students translate theoretical knowledge into practical skills. For instance, students majoring in accounting not only study basic accounting theory but also receive skill training in financial software operation, tax form preparation, and auditing practices.

To ensure the effectiveness of professional skills training, higher vocational institutions should collaborate closely with enterprises, industry organizations, and experts, staying updated on the latest industry requirements and standards, and regularly updating training content and methods. Additionally, educational institutions should provide students with ample practical opportunities such as internships, project collaborations, and competitions, allowing them to apply their acquired skills in real professional environments, enhancing their professional confidence and competitiveness.

6. Conclusion

In order to cultivate vocational college students with enhanced practical skills and professional competence, vocational education should undergo deep reforms by strengthening collaboration with enterprises, emphasizing the development of students' practical skills, and incorporating the cultivation of professional ethics. Only in this way can vocational education better meet the demands of society and make a greater contribution to China’s economic and social development.

Acknowledgement

Young Backbone Teachers of Henan Vocational College of Applied Technology, Project No.: 2020-GGJS-X002.

References