

Research on Teacher Ability Improvement in Higher Vocational Colleges under the background of new engineering

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Abstract. The new engineering construction is a major strategic choice of higher education reform and innovation. In order to comprehensively promote the construction and reform of new engineering, the improvement of teachers' core competence is the key. Teachers are the main force in the construction of new engineering. Both discipline construction and talent innovation training need a group of high-level teachers with excellent informatization vocational ability, strong ideological and political ability, high innovation and entrepreneurship ability, and strong teaching and research ability. Based on the construction of new engineering, this paper expounds the ability of teachers in higher vocational colleges and the significance of improving teachers. Through the analysis of the practical problems facing the ability improvement, explore the path of ability improvement, and promote the high-quality development of vocational education.

1 The introduction

China is implementing a major strategy of innovation-driven development. The Ministry of Education requires to comprehensively promote the high-quality construction of new engineering, and the cultivation of emerging engineering talents is the key, which is the top priority of higher education teaching quality reform in the new era. Higher vocational colleges take training high-quality innovative talents as its ontological mission. The cultivation of talents cannot be separated from the careful cultivation of teachers. Under the background of new engineering, high-quality innovative technical talents with interdisciplinary knowledge integration are urgently needed to meet the needs of local economic development and social development. Pay attention to the enhancement of teachers' comprehensive quality of theoretical knowledge and professional practical skills, teachers need to constantly improve their own teaching level, the improvement of teachers' teaching ability is an important guarantee for the implementation of new engineering construction. Governments at all levels in China attach great importance to the improvement of teachers' teaching ability and have issued relevant policies and incentive measures to strengthen teachers' training and development. Teachers' teaching ability mainly includes information vocational ability, ideological and political education ability of professional courses, innovation and entrepreneurship education ability and teaching research ability. It is an urgent problem to be solved how to integrate the above four abilities with professional education in the teaching

practice of higher vocational college teachers and cultivate new engineering talents.

2 Education development under the background of new engineering

With the development of the new generation of information technology, people's way of thinking, way of learning, way of production and life are constantly affected and slowly changed. Education informationization 2.0 requires to promote educational reform and innovation, build a networked, digital, personalized and lifelong education system, and build a learning society in which "everyone can learn, everywhere can learn, and always can learn"[1]. With the development of economic globalization, various values are increasingly impacting the ideological bottom line of college students, and some of the values and ways of thinking of college students are undergoing subtle changes. The Ministry of Education issued the Guidance Outline of Ideological and Political Construction in the Curriculum of Higher Education pointed out that: comprehensively promote the construction of ideological and political construction in the curriculum [2]. It is required to construct curriculum resources for ideological and political science, build a case base for ideological and political science, support colleges and universities across the country to establish a platform for ideological and political communication, and comprehensively promote the construction of high-quality ideological and political science in college courses. Our country attaches great importance to the training of innovative skills talents, and relevant policies

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have been issued to strengthen the training of new applied technology skilled talents, takes deepening the reform of innovation and entrepreneurship education in colleges as a breakthrough to advance the comprehensive reform of higher education, and issues relevant policies to strengthen the cultivation of new engineering applied technical skills talents.

3 Influencing factors and ways of improving teachers' educational ability in higher vocational colleges

3.1 Factors influencing the improvement of teachers' educational ability in higher vocational colleges

The factors that affect the improvement of teachers' educational ability in higher vocational colleges include self-influencing factors and external environmental influencing factors. From their own point of view, with the rapid development of information technology, some teachers' teaching thinking is solidified, they are not willing to break the routine, and the information ability is insufficient, and they are not willing to try some information teaching methods. In addition, some teachers have low teaching quality, poor ability to accept new knowledge and new things, insufficient vision and awareness of their own teaching limitations. In addition, some teachers have a poor sense of responsibility, do not take talent training as the first priority of teachers, often busy in the second side job. From the perspective of environment, teachers' motivation mechanism is low and the assessment standard is high, which leads to the continuous decline of teachers' self-improvement enthusiasm. More importantly, the daily teacher workload is large, can not timely self-learning, failed to keep up with the pace of development of The Times. In some areas, the foundation of education is weak, the training of teachers is less, and the professional development of teachers is limited. Various factors lead to the poor effect of teachers' teaching ability improvement.

3.2 Ways to improve teachers' educational ability in higher vocational colleges

The improvement of talent training quality is inseparable from the improvement of teachers' teaching ability. Under the background of new engineering, ideological and political education is relatively weak. Ideological and political education is not only the work of ideological and political teachers, but also the upper class leaders, front-line teachers and teaching assistants should implement ideological and political education for students. Teachers should change their teaching thinking, deepen the recognition of ideological and political ideas in the curriculum, and broaden their ideas of education. It is also necessary to strengthen the teaching reform of the traditional teaching and training mode. The curriculum system, course assessment methods, teaching

resources and the construction of teaching staff all need to be improved, There is an urgent need to integrate ideological and political elements to achieve the goal of educating people from a professional perspective, cultivate people with virtue, and improve the quality of talent training. The following will elaborate specific improvement paths from three aspects: the improvement of teachers' vocational ability in information technology, the improvement of curriculum ideological and political education ability, and the improvement of innovation and entrepreneurship education ability.

3.1.1 Improvement of teachers' informatization professional ability

The rapid development of the new generation of information technology has brought challenges to teachers' traditional classroom teaching. It requires teachers to have the professional ability of information technology. What would be the effective implementation of the information teaching? What is the information professional ability? According to the definition of "Informatization professional ability" in Baidu Encyclopedia, it is the ability of teachers to use educational technology to teach under the guidance of modern teaching theories and with the support of information technology.[3]Information-based teaching requires teachers to master at least the ability requirements of media technology, information application, teaching practice, evaluation and research.[4] Teachers should change traditional teaching concepts, enhance information awareness, cultivate information thinking, take information education as the development goal, cultivate information literacy, explore multi-subject cross-border collaborative education ability. Teachers should continue to practice and study. By learning a variety of information-based teaching tools from various resources, teachers can skillfully retrieve and integrate teaching resources, master the ways and methods of information-based teaching design, improve their personal competitiveness, and avoid being disconnected from the information-based education model. In addition, teachers should integrate information technology into teaching practice, improve the information teaching management mechanism, ensure the effective implementation of information teaching strategies, and promote the improvement of teaching methods and teaching quality.

3.1.2 Improvement of teachers' ideological and political education ability

Teachers are the guide of students' values education, and teachers' education consciousness and ability are the key factors that determine the effect of "curriculum ideological and political education". Our curriculum ideological and political education teaching team mainly includes three types: professional teachers, ideological and political teachers and counselors. Among them, professional course teachers are the key of ideological and political key of the curriculum. In order to give

ideological and political flavor to all classes and integrate them into innovation and entrepreneurship education, it is necessary for all teachers to take ideological and political responsibility and jointly explore the construction of a "big ideological and political" teaching system for educating students. We should strengthen the demonstration and guidance of ideological and political reform in the curriculum. Relying on the curriculum ideological and political pilot projects, based on the school's professional characteristics, we should actively explore and practice. Combining the courses taught and focusing on the needs of students, this paper explores the ideological and political education objectives of the course, reconstructs the course knowledge system, explores the ideological and political elements of the course, collects the ideological and political case materials, builds the course resource base, reforms the course assessment standards, and steadily promotes the pilot course construction. To promote special training of teachers' moral education ability guidance, organize special seminars, strengthen teacher ethics training and other ways, and constantly improve teachers' professionalism and dedication. Through discussions with ideological and political teachers, construction of class evaluation mechanism, establishment of ideological and political workshops, curriculum ideological and political teaching observation and other measures, strengthen teachers' ideological and political implementation of the teaching strategy, teaching design and teaching characteristics [5]. By improving the teacher incentive and evaluation mechanism, based on the education effect, and with the supervision tour and attendance as the proof, the implementation of ideological and political education in the curriculum is included in the teacher evaluation mechanism [6].

3.1.3 Improvement of teachers' innovation and entrepreneurship education ability

Learning is the source of innovation, and the improvement of innovation and entrepreneurship ability requires constant learning of new knowledge. Especially, as a teacher, it is necessary to establish the concept of lifelong learning, track hot topics, closely follow the frontier innovation of the profession and have a deep understanding of innovation and entrepreneurship education. Teachers should constantly innovate teaching methods in classroom teaching. The teacher guides the students in effective learning methods while teaching knowledge. Teachers should be able to compile professional teaching materials for innovation and entrepreneurship. Based on the current national situation, and starting from the problems that college students often encounter in entrepreneurship, more typical cases of successful entrepreneurship of ordinary people will be compiled into the textbook. Let students feel the hardships of the entrepreneurial process and the joy of successful entrepreneurship, so as to strengthen the awareness of innovation and entrepreneurship. In addition, teachers should keep pace with The Times and

update the content of textbooks in time from the current situation of professional technology development. Cut from the market demand, guide the students to pay attention to the present situation of Chinese professional technology development, stimulate the students' innovation consciousness, make a breakthrough in core technology. As the main battlefield of scientific and technological innovation, colleges and universities should pay attention to the cultivation of students' invention and creation and industrial transformation, social development. By improving teachers' incentive and evaluation mechanism, teachers' initiative of innovation can be mobilized. The relevant departments of the state hold teacher skill competitions and innovation and entrepreneurship competitions at all levels every year. By participating in various competitions at all levels, I can improve my competitiveness, train my innovative thinking and practice my practical ability in the future work. Taking "Internet +" and other innovation and entrepreneurship competitions as the starting point, the project, theoretical knowledge of innovation and entrepreneurship, competition process and experience will be introduced into the classroom. Let students take the initiative to think, take the initiative to implement, deeply tap students' innovation and entrepreneurship potential, and encourage students to abide by the rules in innovation and entrepreneurship behavior. Teachers should guide students to assume social responsibility, dedication, in line with the mainstream values of society, so that students can actively think and implement, improve students' learning enthusiasm, increase classroom fun habits, expand the dimension of knowledge, and further enhance students' participation. We will give full play to the functions of "maker space" and incubator base for innovation and innovation of college students, and inspire students' enthusiasm and love for their major. The school also pays special attention to the improvement of young teachers' competition ability. It has organized many innovative classroom teaching competitions in the school to expand the research direction, standardize teachers' teaching design, and consolidate their teaching skills. The school also pays special attention to the improvement of young teachers' competition ability. It has organized many innovative classroom teaching competitions in the school to expand the research direction, standardize teachers' teaching design, and consolidate their teaching skills. In addition, it is necessary to build a teaching innovation team and a "double-qualified" teacher team. Professional teachers can also practice in enterprises through school-enterprise cooperation, participate in enterprise production and operation, communicate and cooperate with entrepreneurial elites, and integrate industry and education.

3.1.4 Teachers' scientific research ability is improved

Teachers' scientific research ability mainly includes the ability to write academic papers and project. Teacher

professionalization requires that we must do research, and we must study the problems of educational science. We must change from experience-oriented teachers to research-oriented teachers. With the continuous development of teachers' professional development, project research is the only way for teachers to become real researchers. Scientific research is innovation and creation. To do a good job in scientific research, teachers should be conscientious in teaching practice. They should discover and select research problems through constant observation and thinking, constantly understand through scientific research lectures and academic forums, constantly understand and summarize through the writing of papers, projects and project applications, and accumulate learning through educational news media and constant communication. Master the types, structures and writing methods of research papers and reports. Clarify the academic norms and academic anomie in research. Teachers should adhere to the practical research of "teaching and research" and implement the teaching subject. Teachers should strengthen the research method of "teaching reflection", constantly bring forth the old in teaching practice, drive teaching research with scientific research, and integrate teaching research into scientific research.

4 The significance of teachers' teaching ability improvement

The improvement of teachers' informatization professional ability, curriculum ideological and political education ability, innovation and entrepreneurship education ability, and scientific research ability is the basis of guaranteeing teaching efficiency, providing a guarantee for the improvement of talent training quality under the background of new engineering, enriching the theoretical knowledge system of curriculum ideological and political education and innovation and entrepreneurship education, and improving the talent training system. Give full play to the initiative of professional teachers and strengthen the deep integration of "creative thinking" education and professional curriculum education. It has improved the teaching level of the teaching staff, given full play to the basic function of colleges and universities to establish virtues and cultivate people, and effectively promoted the development of national education informatization. The talents cultivated can directly connect with the industry enterprises, and also has a good effect on the cultivation of enterprise talents.

5 Summary

Teachers are the guide of students' values education and innovation and entrepreneurship ability. They adhere to the integration of "thinking, creativity and specialization" education. adhere to the integration of "thinking, creativity and specialization" education. By improving teachers' education and teaching ability, we can cultivate German and technical talents with national feelings and professional responsibility. The

improvement of teachers' education and teaching ability needs continuous work. In the process of ability improvement, it should follow the improvement idea of practice, reflection, re-practice and re-reflection to guide the spiral and gradual development of teachers' information technology application ability. Teachers should establish the concept of lifelong learning, and constantly strengthen their professional ability of information technology, "creative" education ability and scientific research ability. With correct methods to guide students to explore and learn independently. In the process of teaching implementation, ideological and political education elements and innovation and entrepreneurship education elements are integrated into the curriculum. In the future teaching practice will continue to summarize and reflect, to improve the overall teaching quality to lay the foundation.

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