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Study and Practice on Construction of Characteristic Specialty in Colleges and Universities

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Abstract. The construction of characteristic specialty in colleges and universities is a teaching reform activity involving specialty innovation and development, its guiding ideology has a far-reaching impact on the direction and performance of specialty development in universities. This article studies the construction plan of characteristic specialty, the support and guarantee of the university, the concrete implementation measures, the construction of practice and training base and the anticipated achievement of the university; expounds the problems existing in the construction, and puts forward corresponding countermeasures for the problems. From the perspective of clarifying concept running a school, cultivating outstanding teachers, and establishing scientific incentives and self-control, it will effectively promote the construction of specialties in higher education in the new era.

1. Introduction

With the continuous development of higher education in China, a new development trend has been formed, and the effectiveness of higher education in promoting social development has been expanded [1]. However, in the process of development, some colleges and universities blindly pursue the expansion of the scale of running schools and neglect the construction of characteristic specialties.

Characteristic professional education can form a driving force sustainable development for universities, especially the construction of local universities, not only can broaden professional caliber, but also cater to employment market and enhance connotation of graduates' own development [2, 3]. In the education of colleges and universities, can give full play to the advantages of schools, colleges and professions, associate with ventures, industry and social forces, strengthen formulation and reform of talent training program, construct a curriculum system that meets the requirements of social and economic development [4]; Combine market development and highlight curriculum practices and innovations, highlight the characteristic education, in turn, we will cultivate excellent talents who have adapted to the needs of society and have strong practical and entrepreneurial abilities [5].

2. Analysis on the Construction of Characteristic Specialty in Colleges and Universities

2.1 Regularly communicate with enterprises and industries; jointly develop talent training programs that keep pace with the times.

Focus on application of talent training and education, and in accordance requirements of the required talents, work with the professional professionals to develop a talent training program (curriculum system). Invite relevant talents from enterprises to participate in teaching and enhance the practicality of course. Let students always contact enterprises and markets, deepen the "production, study and research" education, that is, strengthen school-enterprise cooperation, industry-university cooperation, improve personnel training, and jointly develop talent training programs that keep pace with the times.

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2.2 Strengthen rationality curriculum and practicality of teaching materials, and increase the bilingual teaching of professional courses.

Strengthen the professional teaching infrastructure and reform the curriculum content. Integration and optimization of curriculum and time arrangement, so as to achieve the best link between courses, while allowing students to appropriately contact professional knowledge in freshmen.

Focus on strengthening the construction of new textbooks, formulating updated plans for professional textbooks, striving to synchronize knowledge and teaching materials, adopting the latest teaching materials in course of teaching. Organize relevant personnel to compile and introduce new teaching materials, the preparation of new textbooks should be closely integrated with new developments and new demands of current market enterprises, and gradually increase the intensity of the introduction and use excellent foreign textbook. In addition, the demand for development of foreign trade industry in the market, increase the number of professional foreign language courses properly, strengthen bilingual teaching, and add professional knowledge lectures, innovative knowledge lectures and professional foreign language lectures.

2.3 Training, Introduction and Dispatch of Professional Teachers.

Strengthen construction of professional teachers, introduce and send teachers in a targeted manner according to content of course and practical internship. In the introduction of professional teachers, the profession should hire professionals from enterprises, companies and related fields with high professional quality and practical ability to teach part-time professional teachers in schools. It is planned to hire fixed part-time teachers and invite corporate social groups to hold lectures on a regular basis, enrich students' professional knowledge and social information.

Establish a regular mechanism to encourage teachers to carry out training and further education, establish cooperative mechanisms with enterprises. Select teachers to conduct business research, support teachers to enter the enterprise line learning and communication. Actively cultivate a high-level teacher team that understands the needs of company and has rich teaching experience.

2.4 Teaching Reform Combining Talent Cultivation and Production Practice.

Strengthen the reform of practical teaching methods and establish an effective management system and assessment system. Increase the proportion of in-class practice hours in course content, strengthen the construction of professional training bases, improve experimental teacher's business level and guiding ability, adopt an open laboratory system, improve experimental conditions. Establish a practice activity group, participate in social practice training under the guidance of teacher; Create conditions to participate in corporate bidding projects and project implementation. By understanding the internship, course internship, graduation practice and other social practice courses, encourage students to go to laboratories, factories, and enterprises for practical learning.

3. The Support and Guarantee of School Policy in the Construction of Characteristic Specialty in Colleges and Universities

3.1 Setting up a management team for construction of characteristic specialties.

Establish a management group of "characteristic specialty construction sites" led by the dean of the college, participated by the educational administration department of the school, and participated and guided by the subject leaders and construction leaders. It is responsible for establishing a management system and operation mechanism conducive to the development of characteristic specialty construction sites, and strengthening the management and implementation of special specialty construction sites.

3.2 Construction of system and mechanism.

Actively explore the mode construction of specialty points, reflecting the advantages of interdisciplinary and integration, make teaching achievements always at the forefront of international talent training, fully embody the characteristics of dominant disciplines and specialty. At the same time, it is necessary to strengthen the strategic analysis ability of teaching, system integration capabilities and organizational management capabilities, pay attention to special professional training mode; through professional



construction, we will develop sustainable development capabilities with independent innovation, strive to build a world-class specialty.

3.3 Supporting funds investment of school.

Employees of colleges and universities, supporting funds, organization and management and other aspects to give strong support to coordinate the relevant forces to successfully complete the construction project. Build related discipline laboratories and professional practice bases, supporting related equipment, meet the teaching and research needs of featured majors, and increase the proportion of funds for student professional practice funding.

4. Suggestions for Implementation Steps

4.1 First stage.

A. Set up the management team for the construction of characteristic specialties.

Set up the management group of "characteristic specialty construction point". Responsible for setting up the management system and operation mechanism that are conducive to the development of characteristic specialty construction points; Strengthen management and implementation of characteristic specialties.

B. Talent training program and teaching material system construction.

Combining professional features and industry development characteristics revise and improve training program for featured professionals. Encourage teachers to introduce foreign teaching concepts, and in combination with the actual situation in teaching, write a new textbook.

C. Improve the structure of teaching staff.

Teachers are sent to the production line for study and inspection, to lay a foundation for practical teaching, and to employ professionals with high professional quality and practical ability to teach for students.

D. Expand the research work of characteristic professional education reform.

By means of visiting, investigating, studying and academic exchanges, we can build and perfect the training system and teaching system suitable for professional talents.

4.2 Second stage.

Continue to complete established work of previous year, focusing on the following tasks.

A. Building of quality courses.

Building a school-level quality course, accumulate teaching experience and practical experience, to lay foundation for declaration of provincial-level quality courses in the future.

B. Construction of teaching material system.

Introduce foreign textbooks, organize teachers to examine and improve the imported textbooks, develop professional teaching multimedia courseware, and realize the CAI teaching of related professional courses.

C. Construction of teaching practice laboratories and practice bases.

While strengthening construction of the original teaching practice base, expand student production practice base, continue to sum up experience, and establish a production internship system and internship evaluation mechanism with the enterprise.

4.3 Third stage

Continue to complete established work of previous year, focusing on the following tasks.

A. Construction of quality courses.

Encourage teachers to carry out provincial quality courses, and actively declare national quality courses.

B. Construction of teaching material system.

Organizing teachers to conduct research on the introduction of teaching materials, according to the teaching situation to carry out teaching updates; develop multimedia teaching courseware.

C. Construction of teaching practice laboratories and practice bases.

While strengthening construction of the original teaching practice base, we will expand production practice base outside the school. Constantly sum up experience and work together with enterprises to complete the production practice system and practice evaluation mechanism.



5. Expected Results (Including Main Results and Features)

Through the construction of three to five years, a group of teaching staff with special specialties will be trained for the country and the society. Combining with the specialty characteristics, the perfection and improvement of the specialty training scheme and teaching system will be established and promoted, and the teaching system and relevant reference standards for the specialty will be formed.

Combining with the production practice, we should strengthen the practice teaching, train the badly needed professional and technical personnel for the society, so as to meet the needs of the rapid development of the industry. We should integrate the effective experience and practical results gained in construction and development, and give play to the role of popularization and demonstration.

5.1 Training of professional knowledge teachers.

- A. Strive to cultivate national-level teaching masters and provincial-level teaching masters.
- B. teachers are sent to enterprises and factories every year for training.
- C. Hiring enterprise and factory production technicians as part-time teachers.

5.2 Improving of scientific research and teaching material system.

- A. Strive to build a national-level quality course, provincial-level quality courses, school-level quality courses.
- B. Update teaching materials and experimental guidance programs, improve professional courses; renewal of teaching materials and test guides for elective courses.
- C. Introducing foreign excellent professional teaching materials, self-developed multimedia teaching courseware.
- D. Actively carry out research on teaching and research topics, complete the school-level teaching reform project, provincial Educational Reform.

5.3 Construction of production practice training base combining teaching and practice.

- A. On the original basis, build a new production practice training base;
- B. Set up a group of students' independent innovation practice activities encourages students to participate in various competitions and actual bidding projects;

5.4 Construction of teaching system

- A. Establish and improve the teaching assistant system and teacher training system, realize the training of teachers' echelons.
 - B. Establish effective production practice and internship evaluation system.
 - C. Establish and improve the lecture system of professional knowledge.
 - D. Establish a group system for student independent innovation and production practice activities.

6. Conclusion

With the rapid development of higher education, China's higher education presents a new trend, the construction and development of characteristic specialties can effectively enhance the radiation intensity of higher education. Deepen the depth and breadth of higher education undertakings and social development, become an effective driving force for sustainable development of higher education institutions. Characteristic specialty construction can promote the influence of schools; enhance students' own knowledge reserves, training to meet social needs, excellent talents with strong practice and entrepreneurial ability.

At the same time of student training, colleges and universities should strengthen the construction of professional teachers. According to the teaching content and practical practice, teachers are purposefully introduced and sent to carry out training, encouraging teachers to go to enterprises to investigate, and then cultivate high-level teaching team with rich teaching experience. The development of characteristic specialties in Colleges and universities is not achieved overnight, but should be based on the long-term development, which is bound to improve the teaching quality and influence of colleges and universities.



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