

Research on IT Talent Training Practice in Higher Vocational Colleges from the Perspective of Ideological and Political Education

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Abstract

Ideological and political education needs to form a synergistic effect between professional courses and ideological and political courses. In order to solve the problem of roll doubles in ideological and political education, the information technology majors of Jiangsu Maritime Institute takes moral cultivation as the foundation, craftsmanship cultivation as the starting point, and ideological and political education runs through the whole process of talent cultivation. Based on the big data technology, it analyzes the current situation of the cultivation of information technology talents in higher vocational education. by the integration of project-based teaching, professional spirit cultivation into professional courses, promoting the Three Education Reform, implementing Three All-around Education, skill competition and many other carriers and paths. It builds a talent training mode for the cultivation the IT talent with craftsmanship spirit, which achieves the organic integration of ideological and political elements into talent training, and the educational effect of moistening things silently.

Keywords

Ideological and Political Education; Craftsmanship; Skilled Talents; Higher Vocational Colleges; Talent Training; Three Education Reform; Three All-around Education.

1. Introduction

As a type of education, higher vocational education plays an important role in Chinese higher education system. It aims to cultivate application-oriented and skill-oriented talents with craftsmanship spirit for socialism. Higher vocational colleges need to cultivate the craftsman spirit of students based on the vision of ideological and political education, to achieve full education, full process education and all-round education, and to meet the talent training requirements facing the unprecedented changes in a century [1-2].

Enterprises, nations and countries need skilled talents who are dedicated, strive for perfection, meticulous, and pursue outstanding craftsmanship spirit to form unique competitiveness. Higher vocational colleges should explore how to build a craftsmanship training path with higher vocational education characteristics in the perspective of ideological and political education [3]. The information technology majors of Jiangsu Maritime Institute take foster character and civic virtue as the fundamental task, and build a new talents cultivation way, which achieves ideological and political education throughout the whole process of talent training, integrates project-based teaching reform and ideological and political education, constructs a coordination between professional teachers and counselors, and combines professional spirit and skills competition.

2. Ideological and Political Education Throughout the Whole Process of Talent Training

With ideological and political education as the main line, the information engineer school simultaneously cultivates students in class and out class. A ideological and political education system which integrates the whole process of talent training is built. It integrates socialist core values into talent training, and builds a professional quality curriculum system covering ideological basis, physical and mental health, innovative thinking, labor education and other modules. By strengthening the construction project of the student party branch, the school cultivates diversified forms of brand learning, practice and education activities, cultivate the soul of cultivation, internalize the socialist core values into the mind and practice, consciously integrate personal ideal pursuit into the cause of the country and the nation, and strive to grow into a socialist successor who takes strengthening agriculture and prospering agriculture as his own responsibility and is worthy of the important task of the times.

By integrating resources inside and outside the school, the school takes the campus IT culture and art festival as an important starting point, and create a second classroom training system oriented to the cultivation of students' professional general abilities. Relying on the second classroom, the school fully taps the educational resources of enterprises and alumni, carries out various forms of educational activities, encourages students to benchmark professional skills standards and corporate culture, cultivates ingenuity by infiltrating, and establishes the trend of IT people to be brave in innovation and strive for excellence.

3. Integration of Project-Based Teaching Reform and Ideological and Political Education

As shown in Figure 1, taking big data technology as an example, the core courses with the real project cases from the industry are implemented by docking the posts competency standard. These cases organically links major core courses as a common teaching carrier to form a project-based curriculum system. Taking the big data technology major as an example, it implements the core courses of data acquisition, data storage, data analysis and data visualization by the shipping big data analysis project of the water traffic management platform.

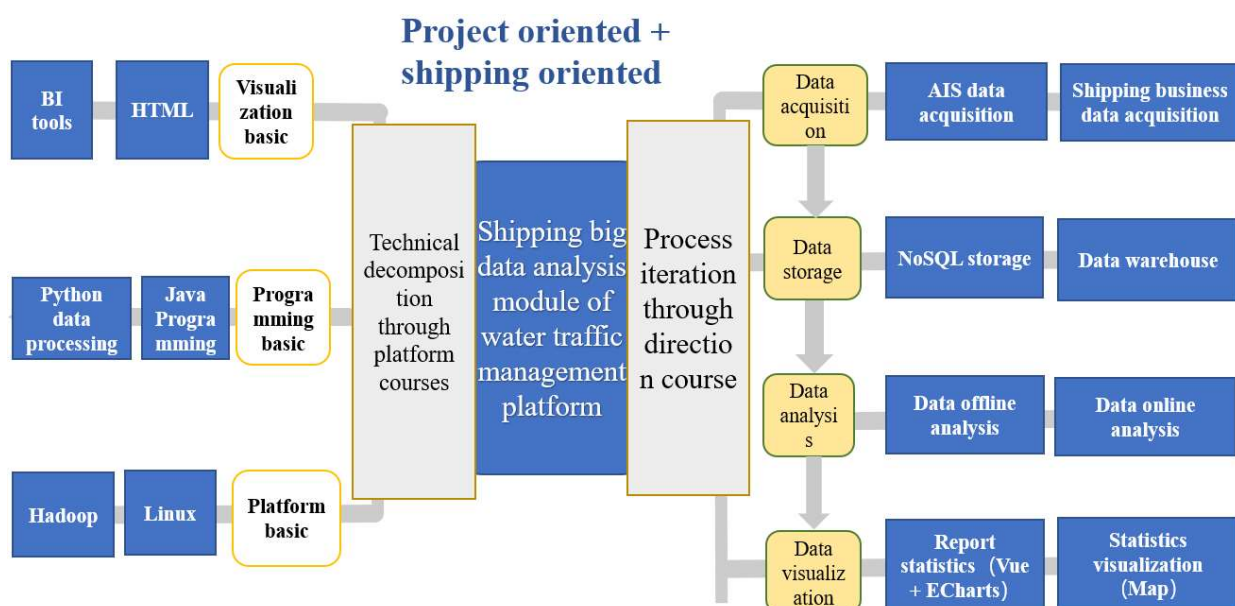


Figure 1. The Curriculum system of the big data technology major based on project oriented + shipping oriented

The development of big data analysis module adopts mainstream offline and online data analysis technology, offline analysis adopts Spark+Hive, and real-time analysis adopts Flink+OLAP data warehouse. The data visualization adopts the front-end and back-end separation technology. The back-end uses Spring Boot technology, which provides data in an interface mode. The front-end obtains data through Axios, binds data through Vue, and displays data through Echarts and Mapbox. Data acquisition and transmission include Internet of Things, Flume and Kafka, crawler and other methods, basically covering mainstream data collection technologies. This technical route is the mainstream development route of big data at present. Through the study of the complete project, it can meet the job requirements of the enterprise. In the talent cultivation based on the project-based curriculum system, through the engineering process oriented design of the teaching process, learning by doing is realized. The students' professional abilities are cultivated in a simulated real working environment. In the process of project completion, students not only need to comprehensively use professional knowledge and exercise operating skills, but also need to cultivate the ability of independent learning, innovative thinking, unity and cooperation, bearing pressure and responsibility.

Through the joint construction of craftsmanship workshops in schools and enterprises, an innovative education model that combines work with learning and integrates production with learning is created. The workshop takes specific projects as the carrier, takes work tasks as the driving force, organically combines theory with practice, so that students can master knowledge and skills in the process of completing tasks. At the same time, the workshop also gives full play to the talents and discipline advantages of colleges and universities. As a project incubator in the college, it actively opens professional industries, closely combines industry with teaching, and realizes the active integration of colleges and universities into local economy and local construction.

4. Coordination between Professional Teachers and Counselors

Professional teachers are the main force to promote the ideological and political construction of the curriculum, ideological and political teachers are the main force to promote the ideological and political construction, and counselors are the main force to promote the ideological and political study of students [4]. Professional teachers are close to ideological and political education, and counselors are close to professional education. They participate in the construction of curriculum ideological and political education through the construction of the style of study, so as to realize the path of co integration and symbiosis of education.

Professional course teachers and counselors make a pair to accurately tap the ideological and political elements contained in professional courses. The counselors give key suggestions on ideological and political teaching from the perspective of students' future development, transform discipline resources and academic resources into educational resources, and achieve the organic unity of ideological and political education and knowledge system education.

5. Combines of Professional Spirit and Skills Competition

The vocational skills competition project is challenging, basically in line with the students' ability level, basically the same as the real scene, and will be updated with the development of technology. The integration of skills competition into the curriculum reform of vocational education is conducive to improving the teaching effect of the curriculum and students' professional post ability, and promoting professional development. The general idea of integration of professionalism and skills competition is based on the vision of ideological and political education, which organically combines skills competition, project-based teaching and ideological and political education to achieve a new path of talent training mode based on moral cultivation.

6. Conclusion

The cultivation of IT talents in higher vocational colleges should adhere to the cultivation of morality and talents, and patriotism and craftsmanship should be run through the whole teaching process. Guided by the fundamental issues of who and how to train, and to what end, the resources of ideological and political theory education in talent training should be deeply explored. Every major should guide and educate students to fully understand the development of the industry and society, constantly enhance their sense of professional honor and pride in the industry, consciously serve the construction of a powerful transportation country and the national strategy, integrate their personal self into the greater self of the motherland and the people, and take the initiative to contribute to the development of the country and the nation.

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