Research on the Integration of Ideological and Political Courses and Professional Courses

-- Taking Java Programming Courses as an Example

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Abstract

Over the past 40 years of reform and opening up, Chinese society has undergone comprehensive changes, and various social concepts have undergone rapid changes. Universities as the forefront of education, how to cultivate qualified socialist builders and successors while sharing the fruits of reform and opening up, and to enhance the core socialist values of students, has become a new requirement for colleges and universities in the new era. Curriculum ideology and politics is the main channel to give full play to the role of teaching and educating. This article will use the curriculum ideological and political design, excavate the ideological and political elements of the Java programming course, and establish implementation cases, so as to achieve the unity of imparting knowledge and moral educating people in the course of teaching.

Keywords

Java Programming Course; Ideological and Political Education; Ideological and Political Design; Practical Research.

1. Introduction

In 2016, General Secretary Xi Jinping made a request at the National University Ideological and Political Work Conference, that various courses should be in the same direction as the ideological and political theory courses. In March 2019, General Secretary Xi Jinping once again emphasized the organic combination of ideological and political education and professional courses at the School's Ideological and Political Theory Course Teachers' Symposium, that is, the reform and innovation of ideological and political theory courses, "We must insist on the unity of explicit education and implicit education, and excavate the resources of Ideological and political education contained in other courses and teaching methods, so as to realize the education of the whole people, the whole process and all-round." In order to thoroughly implement General Secretary Xi Jinping's important expositions on education and the spirit of the National Education Conference, the Ministry of Education issued a document on the "Guidelines for the Ideological and Political Construction of Higher Education Curriculum" in June 2020, which clearly stated that ideological and political education should be integrated into the talent training system, Promote the ideological and political construction of college courses in an all-round way, give full play to the educating role of each course, and improve the quality of talent training in colleges and universities[1].

Incorporating ideological and political education into each course has become a new situation of ideological and political education in the new era. In the process of professional knowledge teaching, incorporate political theory education, world outlook, outlook on life, and values of

the three education and spiritual pursuit into the syllabus of the course, achievement implicitly has an impact on students' political ideology, behavior and behavior. To do a good job of "curriculum ideological and political" work, first of all, we need to determine the teaching objectives of "curriculum ideological and political"; Secondly, according to the needs of the curriculum, find suitable connecting points between professional knowledge and "curriculum ideological and political" elements; Next, ideological and political concepts of the curriculum are integrated into the classroom teaching. Finally, professional teachers select corresponding teaching methods according to the different types of students, and evaluate the implementation effect.

2. Curriculum Ideological and Political Design

Java programming is the basic core course of information management and information system major in our university. In order to do a good job in curriculum ideological and political work, first of all, it is necessary to establish the construction goals of the ideological and political work of the Java programming course; then, according to the ideological and political objectives, dig deep into the ideological and political elements of the curriculum and establish the connecting point of the curriculum ideological and political.

2.1. Curriculum Ideological and Political Construction Objectives

According to the knowledge and ability that graduates majoring in information management and information system should achieve of our school, while completing goals of professional ability training, they also set requirements for goals of ideological and political education. These include awareness of innovation, intellectual property protection, industry policies, laws and regulations, awareness of environmental and social sustainable development, compliance with engineering ethics and norms, awareness of fulfilling responsibilities, awareness of teamwork and coordination, management awareness, and awareness of independent learning and lifelong learning.

According to the goals of curriculum education, focusing on integrating the core socialist values, Chinese excellent traditional cultural education, the achievements of China's reform and opening up, especially the content of the "four self-confidence" education of socialism with Chinese characteristics, cultivate students' sense of innovation, teamwork ability, Scientific literacy, artisan spirit and other aspects. Therefore, in addition to cultivating students' professional skills in this course, the Java program course should also achieve the following ideological and political objectives:

(1) By guiding students to their future career visions, stimulate students' sense of identity with the core values of socialism, and cultivate political beliefs, and ideals beliefs.

(2) By guiding students to think carefully about every sentence in the process of programming, students will be trained to be serious, responsible and meticulous in software craftsmanship.

(3) Establish a correct concept of skills, strive to improve their skills, and establish a correct value concept for the benefit of society and the people.

(4) Improve students' awareness and ability of continuous learning, and cultivate spiritual pursuit and scientific thinking.

(5) Cultivate students' honesty, trustworthiness, and perseverance, and improve their moral sentiment.

(6) Improve students' ability in communication, self-learning and teamwork.

2.2. Connecting Points of Curriculum Ideological and Political

Based on the goal of talent training, fully excavate the seven aspects moral education elements of ideological and political education in the curriculum, such as political beliefs, ideals beliefs,

values concept, moral sentiments, spiritual pursuits, scientific thinking and craftsmanship spirit[2], and fully explore the fields that can organically integrate ideological and political education and professional knowledge education in the curriculum teaching. According to the ideological and political objectives, the connecting point can be carried out from the following aspects:

(1) Cultivate political beliefs, ideals beliefs: through the introduction of the relationship between the new era and personal growth, the development prospects of the software industry, the proportion of Chinese among global programmers, and advanced IT companies such as Ali.

(2) Cultivate craftsman spirit: Introduce the recruitment conditions of Java engineers in software companies; analysis software industry specifications, etc.

(3) Establish the correct value concept: share the work experience of excellent senior students; use classes and objects to solve practical problems in life, etc.

(4) Cultivate spiritual pursuit and scientific thinking: introduce China Software Cup; share experience through national competition winners; etc.

(5) Improving moral sentiment: Introduce the struggle stories of leading figures in the software industry to share.

(6) Cultivate teamwork ability: complete a simple Java project through cooperation.

3. Teaching Realization of Curriculum Ideological and Political

Through the analysis of the ideological and political teaching objectives and connecting points of the Java. To realize the curriculum ideological and political of Java programming, it is necessary for professional course teachers to fully excavate the ideological and political content in the course preparation process, and integrate the ideological and political knowledge into the original knowledge system framework. To achieve the fit between the curriculum ideological and political and Java teaching [3].

In order to better complete the curriculum ideological and political teaching goals and fully adjust the enthusiasm of students, project-driven, case-driven, and online and offline hybrid teaching methods are used in the course of teaching to implement the curriculum ideological and political goals.

(1) Project-driven

The project-driven method is to cultivate students' team consciousness and innovation consciousness by introduction the form of projects in the teaching process. First of all, according to students' hands-on ability, organizational ability and autonomous learning ability, etc., the whole class is divided into project groups. This ensures that there are students of different levels in each group, and encourages students to collaborate and learn from each other through teamwork, and finally complete the course knowledge while cooperating to complete a small project. So as to cultivate students' teamwork and innovative spirit, and at the same time improved students' moral sentiment.

(2) Case-driven

Case-driven is mainly introduces cases appropriately according to the course content to carry out ideological and political education in the teaching process. For example: through the data leakage incident of 500 million Sina Weibo user, strengthen students' awareness of personal information security; use of software for big data discriminatory pricing, strengthen professional ethics; scientific and technological ethical issues of using software to monitor partners. In addition, in the development of software engineering projects, we should abide by laws and regulations such as intellectual property rights, and abide by professional ethics, scientific and technological ethics, and national security; so that students can put national sovereignty and security in the first place at any time[4].

(3) Analogy method

Analogy method can realize the goal of ideological and political education by comparing and analyzing two objects to find the similarities. For example: through the life stories of contemporary Chinese craftsmen from different industries in the video of "Great Power Craftsmen", and by analogy with the craftsman spirit in software development, students are guided to carefully craft their own programs, be responsible for their own programs, and be in awe of the programs. When explaining the choice sentence, compare the choice of life path to guide students to establish a scientific outlook on life, values and world.

(4) Discussion method

Through setting the theme discussion Integrating Ideological and political elements, inspire students to express their opinions freely, and finally the teacher summarizes the discussion, and stimulates students' patriotism and responsibility[4]. For example: when explaining inheritance and polymorphism, by setting the theme of inheriting the excellent traditional Chinese culture, education and guiding students to inherit the Chinese culture, full of Chinese heart, full of Chinese sentiment, and full of Chinese flavor, stimulates students to innovate on the basis of "inheritance", and stimulates students' positive humanistic spirit such as " Green comes from blue, but it excels blue "[5].

(5) Online and offline mixed teaching

Taking advantage of the network, teachers assign learning tasks before class, and students carry out online self-learning according to requirements; student-centered teacher-student interactive teaching is carried out in class; after class, teachers reflect on teaching and help students expand and improve. Make full use of the advantages of online and offline mixed teaching, publish preview videos, courseware, instructional design, classroom testing, ideological and political discussion topics, etc. on the Rain-Classroom teaching platform, and require students to learn about relevant courses and ideological and political topics in advance to check relevant materials in order to attend class Discuss during the process[6].

4. Teaching Evaluation and Achievements of Curriculum Ideological and Political

Through the ideological and political design and realization of the Java course, the effect evaluation and teaching achievements are analyzed. So as to master the integration effect of professional knowledge system and ideological and political in the Java course, and actively improve.

4.1. Teaching Evaluation

Integrate the curriculum ideological and political assessment into the curriculum assessment and evaluation, and realize the whole process assessment of curriculum ideological and political in teaching. The assessment is mainly conducted in three aspects: pre-class inquiry, classroom teaching and after-class teaching effect evaluation[7].

(1) Evaluation of the effect of pre-class inquiry. Through Rain-Classroom, we conduct online layout of pre-class preview materials and class discussion topics, and use students' viewing, feedback, and whether they can actively ask teachers and discuss questions, etc., investigate students' learning initiative, spiritual pursuit and scientific thinking. So as to evaluate the completion effect of pre-class inquiry.

(2) Evaluation of classroom teaching effect. It mainly examines the performance and learning of students in class, including on-time attendance and early departure, students asking for leave and absence without reason, playing mobile phones in class and other situations that have nothing to do with the classroom, and students actively speaking and participating in class discussions[8]. In addition, examine the changes in students' mental outlook and behavior

during the learning process. A good learning atmosphere is an important aspect of examining whether students love their majors and building self-confidence in the industry.

(3) Evaluation of teaching effect after class. It is mainly reflected in the completion of final exams, and major assignments (projects), as well as students to fill in the questionnaires to analyze the professional learning content and the realization of curriculum ideology. Investigate the students' team consciousness, innovation consciousness, law-abiding consciousness, enterprising spirit and sense of responsibility.

4.2. Teaching Achievements

In the java programming course, through multiple methods and a lot of materials has been established to achieve the goal of achieving curriculum ideological and political.

(1) Through the integration of ideological and political education and knowledge points, the students' socialist core values and patriotism are cultivated imperceptibly, and the students are actively guided in the form of signing proposals.

(2) Guide students to love their majors, and work hard to achieve the unity of personal value and social value. Taking the information management and Information System Majors of grades 18 and 19 as an example, from the perspective of classroom performance, homework completion, project completion, and final exam scores, after the implementation of the course Ideological and political education, the number of students playing mobile phones in class has decreased sharply, the course participation has improved, and the learning enthusiasm of students has improved.

(3) Participate in the project design with the goal of serving the society as a team, and submit a software program. It has cultivated students' ability to think and solve problems independently, and cultivated students' craftsman spirit, teamwork spirit and innovation and entrepreneurship through teamwork, so as to lay a good foundation for future work.

5. Conclusion

In the process of classroom teaching, it is an important and long-term task to integrate ideological and political elements, such as ideals and beliefs, value orientation, political beliefs, and social responsibilities into the teaching of professional knowledge and realize the integration of knowledge teaching and value guidance. First of all, teachers need to be able to recognize and strengthen socialist values, and have a deep understanding of my country's national conditions. Secondly, to give full play to teachers' subjective initiative, continue to pay attention, explore and excavate the current political hotspots, and integrate them into the teaching of curriculum ideological and political, so as to arouse students' enthusiasm in learning. Finally, teachers should actively improve self-cultivation and set a good learning example for students.

Acknowledgments

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