

# Reform and Research on Ideological and Political Education of PHP Programming Course

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**Abstract:** Ideological and political curriculum is an important reform way to achieve all-round education in colleges and universities. However, in the actual teaching process, there are still many difficulties and limitations in integrating ideological and political elements with professional curriculum content. Taking PHP programming course as an example, this paper discusses the existing problems and develops corresponding strategies in actual teaching. First of all, improve the ideological and political level of teachers. Teachers should actively pay attention to current affairs in their daily life, constantly strengthen the study of relevant knowledge of current affairs theory, encourage teachers to learn more about the advanced educational concepts of various universities, and understand the advanced technology and experience of enterprises. Then, the ideological and political elements are integrated into the teaching content to imperceptibly influence the education of students, so that students can master professional knowledge and improve their own ideological and political literacy. Finally, based on information technology, innovative teaching methods, effective use of multimedia, superstar platform, computer-aided tools and other teaching means. Implement the teaching concept of taking students as the main body and teachers as the auxiliary, make the teaching process more interesting, and constantly mobilize and stimulate students' enthusiasm for learning. Improve the curriculum evaluation system, strengthen the evaluation of the whole process according to the curriculum objectives and characteristics, and then cultivate high-quality innovative, compound and application-oriented talents.

**Keywords:** Ideological and political education, Education teaching, PHP Programming Course.

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## 1. Overview of PHP Programming Course

Premier Li Keqiang proposed that enterprises should be encouraged to carry out personalized customization and flexible customization, and cultivate the craftsmanship spirit of excellence. The essence of craftsmanship is: preciseness, dedication and professionalism. Colleges and universities are the cradle of cultivating various talents, and the quality assurance of talents is the guarantee of the country's prosperity. In talent training, the output of professional knowledge is the basic standard for professional teaching. At the national college ideological and political work conference, it was pointed out that to make good use of classroom teaching as the main channel, all kinds of courses should go hand in hand with ideological and political theory courses to form a synergistic effect. The concept of ideological and political education of the curriculum well explains what is "teaching and educating people". "Educating people" is not only to teach skills, but also to "teach people well". Teachers are important life mentors for students. Many students' outlooks on life and values are formed under the influence of teachers. How to integrate ideological and political elements into professional courses and "teach students well" has become an important part of teaching and educating people.

The PHP programming course is a professional elective course for software engineering majors, as well as a prerequisite course for the PHP framework technology course. Through the learning of this course, the objectives to be achieved include knowledge objectives, ability objectives and quality objectives. The knowledge goal is to master PHP syntax basics, arrays, web interaction, classes and objects, HTTP protocol and other knowledge, and further learn PHP object-oriented programming, graphics processing, directory

operation and other technologies after mastering the basic syntax. The ability goal is to master the ability of PHP application programming, and constantly cultivate students' ability of independent analysis and independent thinking in the process of programming and debugging, so as to enhance students' practical ability and scientific research awareness, and form the ability of independent thinking and solving various problems. The quality goal is mainly to cultivate students' spirit of innovation and pursuit of excellence. Based on disciplines and fields, they should study hard to become application-oriented, innovative and compound talents in the new era, and become responsible successors of socialism.

Traditional teaching pays more attention to the cultivation of knowledge goals and ability goals. It can use PHP to develop applications, strengthen students' practical ability and innovation ability, etc., but it lacks the shaping and guidance of students' moral cultivation. How to integrate ideological and political elements into the curriculum, imperceptibly cultivate students' ideological and political literacy, establish a correct outlook on life and values, and enable students to become talents with both ability and morality and all-round development is the theme of our exploration.

## 2. Exploration of Ideological and Political Integration Teaching

At present, in the actual teaching process, the integration of ideological and political elements into professional courses still has many difficulties and limitations. First of all, it is difficult to achieve random integration of ideological and political elements and professional courses. Since the teacher is not a member of the ideological and political education department, he or she often has only a little knowledge of ideological and political education itself, and his or her theoretical knowledge of ideological and political education

is not strong enough, which leads to a somewhat rigid transition between professional courses and ideological and political content in the classroom, affecting students' understanding of knowledge and acceptance of ideological and political content. Secondly, for programming courses, it is difficult to find the integration point of ideological and political education and professional knowledge. PHP programming is a programming course. The knowledge points of the course are too professional, and it is difficult to seamlessly connect with the ideological and political elements horizontally. For example, the basic syntax of PHP, the three basic structures of programming, arrays, user-defined functions, etc. These knowledge points are difficult to connect with the ideological and political content from the surface, but can only be integrated from the extension of knowledge points. Finally, it is difficult to grasp the quantity and time of ideological and political elements in professional teaching. How long will it take for ideological and political education to achieve the goal of ideological and political education? In the whole semester design of course teaching, how much content should be integrated into ideological and political education to achieve the standard of ideological and political education. Our professional teachers are constantly exploring and seeking solutions to these problems.

### **3. PHP Programming Course Ideological and Political Measures**

#### **3.1. Improve the ideological and political level of teachers**

Teachers are the ladder of human progress, bearing the sacred mission of imparting knowledge and educating people. Teachers in colleges and universities should strengthen the study of current affairs, improve their ideological and political literacy and level, and strengthen the construction of teachers' ethics and style. Only in this way can they teach by example and guide students correctly. Specifically, in the teaching of PHP programming course, teachers should actively pay attention to current affairs in daily life, constantly strengthen the study of relevant knowledge of current affairs theory, and improve their theoretical level and ideological and moral awareness. At the same time, the school can regularly organize teachers to watch patriotic educational films and current political news, and after watching, they can make speeches and discuss, and learn collectively to promote common progress. In addition, the school should encourage teachers to participate in external exchanges and training, learn the advanced educational concepts of various colleges and universities, understand the advanced technology and experience of enterprises, and constantly strengthen the study of business knowledge while improving their ideological and political literacy to improve their comprehensive quality, so as to lay a good foundation for training high-quality composite and application-oriented talents.

#### **3.2. Integrate ideological and political elements into the teaching content**

This course focuses on PHP programming methods, mainly including basic syntax, arrays, object-oriented programming ideas, classes and objects, encapsulation, inheritance, polymorphism, exceptions and other knowledge of PHP programming. In the teaching content, ideological and political elements are quietly integrated into the teaching content, and students are imperceptibly educated, so that

students can master professional knowledge, improve their own ideological and political literacy, and achieve the goal of integrating ideological and political elements into the teaching content.

First, when explaining the basic syntax of PHP, students are required to program according to the basic syntax rules of PHP. Small grammar rules lead to large social rules. Only when everyone abides by the law, can society operate normally and orderly and develop better. Secondly, when explaining arrays, students can learn from cases that a single variable name can only define a single variable, and arrays can define and store a group of multiple variables or objects with the same data type, which reflects that the collective power is far greater than the individual power and cultivates students' team spirit. Third, when explaining the class definition, how to encapsulate the data and the operation of the data together to make the data more secure, carry out national security education for students, and enhance their national security awareness. We will raise the awareness of the whole people about national security and the rule of law, gradually form a rule of law atmosphere to safeguard national security, and enhance their ability to withstand security risks. Fourth, the web interaction in PHP is based on data requests to achieve input/output. If the data is transferred from the browser to the PHP server, this is called input operation. If the data is from the PHP server to the browser, this is called output operation. The input and output are all from the perspective of the browser to see the problem, so as to tell the students that if you look at the problem from different perspectives, you will get different conclusions. Therefore, we should learn to look at the problem from multiple perspectives and analyze the problem from multiple perspectives. To learn to think in terms of others' positions, only by looking at problems from different angles can we see them more clearly and comprehensively. Fifth, when explaining PHP exceptions, tell students that a simple mistake may cause the entire program to fail to run, so be rigorous when writing programs, which leads to the need to be rigorous, careful and down-to-earth in everything you do in your work and life. Sixth, when explaining how to use PHP to develop integrated applications, tell students how to engage in software development, software testing, software system maintenance, etc. in the future. To ensure the stability, reliability and efficiency of the software, it is necessary to rely on the craftsmanship spirit of software developers, guide students to lay a solid foundation and cultivate a scientific and rigorous work spirit. At the same time, the development of a new software can't be separated from the spirit of innovation. Innovation is the source of a country's continuous development and prosperity, and the driving force for the continuous progress of human society. Cultivating students' spirit of innovation is of great significance to the future of the motherland and social progress. In today's society, as large as a country, as small as an enterprise, the competition in economy, science and technology and other aspects is intensifying, and the competition for talents is becoming increasingly fierce. The competition of talents is essentially the competition of human creativity and innovation ability. With the continuous development of society and the increasingly fierce competition, the country and society also pay more attention to the cultivation of innovative talents. As the base of talent cultivation, colleges and universities also pay more attention to the cultivation of students' innovative spirit and ability.

### 3.3. Innovative teaching methods based on information technology

With the continuous enrichment of curriculum content, teaching methods also need to be effectively innovated. With the continuous development of information technology, we should effectively use multimedia, super star platform, computer aided tools and other teaching methods. Based on the teaching concept of taking students as the main body and teachers as the auxiliary, the teaching process is more interesting, and students' enthusiasm for learning is constantly mobilized and stimulated, so as to effectively improve the teaching efficiency. At the same time, we should break the restrictions of time and space, extend classroom teaching to extracurricular activities, extend offline teaching to online, and combine online and offline teaching to improve the teaching effect of PHP programming course Ideological and Political Education. Through the communication on the Superstar platform, we can more comprehensively understand the students' ideological trends and interests, and provide a basis for the development of ideological and political education. The specific measures include the following aspects.

First, using multimedia, computer aided tools and other auxiliary teaching methods, animation, video and other ways to vividly display the ideological and political knowledge points of the course contained in the teaching content, so that students can more intuitively understand the teaching content and the ideological and political elements contained. The second is to make full use of the Superstar platform, so that teaching is no longer limited to the classroom and classroom, and only teaching ideological and political knowledge points in the classroom. The time is relatively limited, and many contents are difficult to effectively carry out. By using the Superstar platform, classroom teaching can be extended beyond the classroom, so that students have more time to carry out the study of ideological and political knowledge, and realize the combination of online and offline teaching and learning from multiple angles and all directions. The third is to strengthen communication between teachers and students, including communication in class, communication after class and communication on the Superstar platform, so that teachers can timely grasp students' learning situation, understand students' interests, that is, which knowledge points are more interested in, and then strengthen the teaching of ideological and political content on the knowledge points that students are interested in. Fourth, strengthen cooperation and exchange between students. In the teaching, students in the class are divided into several groups in the form of group discussion. For a certain knowledge point or classroom task, group discussion is carried out, and members of the group cooperate to complete the task. Through this method, students' team consciousness can be enhanced.

### 3.4. Improve the curriculum evaluation system

In the teaching of PHP programming course, the fundamental goal should be to cultivate high-quality innovative, compound and application-oriented talents, and the score should not be the only criterion. The evaluation of the whole process should be strengthened according to the

curriculum objectives and characteristics. According to the students' classroom performance, learning attitude, teamwork spirit, innovation ability, etc., give the usual scores. Combine the usual scores, midterm exam scores, final exam scores, and practice class or experimental class scores, and calculate according to a certain proportion to get the final comprehensive scores, and investigate and evaluate the students' entire learning process. It is necessary to investigate how much the students' ability has improved and whether their comprehensive quality has improved after completing this course, rather than just depending on the exam results. In addition, because of the differences in students' learning bases, it is difficult to achieve the same learning effect even if they make the same effort. When giving students' usual achievements, teachers should consider those students who are hardworking and hard working at ordinary times and give them encouragement and affirmation, so as to enhance students' sense of gain and self-confidence, stimulate students' enthusiasm for learning, encourage them to constantly strive and forge ahead, dare to surpass themselves, and make greater progress.

## 4. Conclusions

Ideological and political education is a long-term and continuous systematic project, which requires teachers to persevere in learning theoretical knowledge and current political news, keep pace with the times, constantly improve their professional level and ideological and political quality, and then set an example in the teaching process to cultivate innovative, compound and application-oriented talents with correct outlook on life and values.

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