

# Facing Problems Exploration Strategies of Ideological and Political Education Practice of Course on Database System Principles

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## ABSTRACT

For a long time to come, ideological and political education will be transformed from a single ideological and political course to a full curriculum ideological and political course. Aiming at the problems existing in the current course education practice and research, such as lacking of curriculum ideological and political teaching content, difficulty of unifying cognition value, insufficient reflective resources, students not being the subject of knowledge construction, relatively high promotion costs, and lacking of incentive measures, etc., this paper takes the principle of computer professional core courses database system as an example and proposes a mingle environment strategy of classroom and media environment.

**Keywords:** Curriculum ideological and political education; Strategy; Practice; Problem.

## 1. INTRODUCTION

Ideological and political work in colleges and universities is related to the fundamental question of what kind of people they should cultivate, how to cultivate them and for whom. We should take moral education as the central link, carry out ideological and political work throughout the whole process of education and teaching, educate people in the whole process and in all aspects, and strive to create a new situation in the development of China's higher education. To do ideological and political work well in colleges and universities, it is necessary to adapt to events, advance in time and renew in circumstances. We should follow the law of ideological and political work, the law of teaching and educating, the law of student growth, and constantly improve the work ability and level. To use good classroom teaching the main channel, to adhere to in the improvement of ideological and political theory to strengthen and improve ideological and political education and targeted affinity and meet the demand of students' growth development and look forward to, other each lesson is to keep a canal, a kind of good responsibility farmland, make all kinds of courses with the direction of ideological and political theory, form a synergistic effect [1].

Young people are the future of China and the hope of the nation. As the Party aspires to the eternal cause of the Chinese nation, we must train generation after generation of useful talents who will uphold the leadership of the CPC (Communist Party of China) and the socialist system of China and dedicate their lives to the cause of socialism with Chinese characteristics. We must take a clear and unequivocal line on this fundamental issue. This requires us to educate and cultivate the next generation well, starting from school and from children. It is very necessary to set up ideological and political theory courses in universities and primary schools step by step and in a spiraling way, which is an important guarantee for training generations of socialist builders and successors [2-5].

From what has been discussed above, fully make use of the classroom teaching is the main channel for the teachers to carry out curriculum ideological and political education in all kinds of professional courses in higher education. Therefore, this paper will take the database system principle of the core course of computer science as an example, and focus on discussing the existing problems and practical strategies in the course ideology and politics.

## **2. RELATED WORKS**

The following will be elaborated from two aspects, namely the practice and theoretical research and exploration.

### ***2.1. Practical Aspect***

In terms of curriculum ideological and political construction, Shanghai city is undoubtedly the pioneer of reform, and has provided a set of valuable experience with both program and system guarantee. At present, there are 12 pilot schools, 12 key schools and 34 general schools in Shanghai, which have basically achieved full coverage of all the colleges and universities in the city. Colleges and universities have built nearly 30 "China series" courses, 175 comprehensive quality courses, and nearly 400 specialized courses to apply for pilot reform [6].

Recently, Shanghai issued a new document entitled "Implementation opinions on further promoting curriculum ideological and political construction in Shanghai Universities", which comprehensively revised the talent training program and launched the curriculum ideological and political teaching guide for the first time in China. This curriculum reform is called Shanghai Curriculum Ideological and Political Reform 2.0.

For example, the document makes it clear that in medical courses the education of medical ethics must be strengthened, and the students' abilities to cope with major public health emergencies must be improvement.

Next, relying on the leading universities of ideological and political courses and combining with the construction of "double first-class", Shanghai will launch the development of teaching guides for eight majors, namely, literature, history and philosophy, economics and management law, education, science, engineering, agriculture, medicine and art.

### ***2.2. Theoretical Research and Exploration Aspect***

Following the footprint of Curriculum ideological and political construction in Shanghai, colleges and universities in other provinces and cities have also followed up and started the research and exploration of curriculum ideological and political construction based on their own actual conditions. These researches and explorations mainly include teaching method, teaching means, teaching mode and related theoretical issues.

## ***2.3. Six "Pain Points" in Current Curriculum Ideological and Political Research***

### ***2.3.1. Lacking of Curriculum Ideological and Political Teaching Content Research***

In short, curriculum ideological and political education is that all courses should play the role of ideological and political education, and all teachers should fulfill the responsibility of educating people. It is of great significance to guarantee the socialist direction of running a university, carry out the fundamental task of cultivating people with morality and build an integrated education system. Curriculum ideological and political reform is a systematic project. In order to integrate ideological and political education with professional education, it is necessary to redesign the teaching content according to the characteristics of each professional course, and do a good job of ideological guidance and value guidance while imparts knowledge and methods.

For example, the ideological and political contents of foreign language course and principles course of database system should be significantly different. The latter obviously involves the law, professional ethics and ethics, privacy protection principles and other ideological and political contents that students should abide by in their future work, while the former generally does not have to cover all these contents.

At present, there are few researches on the ideological and political teaching content design of database system principle course and its organic integration with professional knowledge.

### ***2.3.2. Difficult to Unify Right and Wrong Judgment and Value Judgment***

In the learning process of specialized courses, students will automatically make these two kinds of judgments, and whatever knowledge they think is truth will automatically admit its value and significance. The nature of "making people become people" determines the two kinds of judgments must be made on the teaching content in the course of teaching. However, the ideological and political content of the course involves complex "benefit analysis" and "value evaluation", and needs to overcome various "meaning barriers" [5]. It is very difficult for teachers to convince students completely and make them make the same two kinds of judgments, especially in the case of limited time.

### ***2.3.3. Insufficient Resources for Reflection***

Professor B. G. Chen, a famous pedagogical expert in China, points out that value education and value acceptance are essentially a process of reflection, including adaptability, truth, value, fact and aesthetic

reflection. In the process of reflection, the necessary resources must be provided [8, 14-16].

In the current research, although some people propose to provide reflection resources in the form of WeChat and microblog, these methods have the problem of very limited information, which cannot meet the practical needs.

#### *2.3.4. Students Being Not the Subject of the Teaching Process*

Relevant theories of pedagogy and psychology tell us that only through the process of subject construction can make students be more receptive to the knowledge that they have learned, enter their minds and hearts, and become more active in learning.

However, in the current research, curriculum ideological and political teaching is completely handled by teachers, students cannot become the main body of the teaching process, and their individual needs cannot be met.

#### *2.3.5. Cost of Achievement Promotion Being Relatively High*

The promotion of construction results is generally achieved through the publication of papers, website publicity, organization of publicity conference and other methods. Except the website publicity, the costs of the other two methods are all very high. At the same time, there are relatively few audiences to accept the results through these methods. Therefore, the promotion efficiency of the construction results is relatively low.

#### *2.3.6. Lacking of Incentive Measures to Maintain Interest in Ideological and Political Study*

For most students, it is difficult to keep their interest in learning over a long period of time. If there is no incentive measures, it is difficult for us to achieve the purpose of curriculum ideological and political Education. From the current research, there are few studies on incentive measures to maintain interest in curriculum ideological and political learning.

### **3. STRATEGIES BASED ON THE MIXED ENVIRONMENT OF CLASSROOM AND WE MEDIA**

Aiming at the pain points in curriculum ideological and political research and combining with the current research status, the practical strategies based on the mixed environment of classroom and we media are put forward. The strategy addresses all of these pain points. The explanations are as follows.

#### **3.1. Solving of the First "Pain Point"**

The strategy will study and design the ideological and political teaching content of database system principle course, and study how to "seamlessly" integrate it into the teaching process of professional knowledge to solve the first "pain point".

#### **3.2. Solving "Pain Points" from the Second to the Fifth**

This strategy will build an integrated curriculum ideological and political teaching environment organically combined by professional classroom and we media platform. In this strategy, we media platforms Douyin and Kuaishou will be adopted, while WeChat, weibo and other we media platforms commonly used in the current study will be abandoned. Compared with WeChat and weibo, Douyin and Kuaishou have the following advantages.

- Holding more information.
- Taking mobile Internet as the carrier, the transmission speed is faster.
- Stickiness is greater, and customers stay longer.
- More influential. For examples, Xinhua News Agency, People's Daily, CCTV network and other important organizations are their registered users.
- The audience is much larger, with about 400 million users.
- Teachers and students in many colleges and universities are their users.
- The review mechanism is more perfect and strict, providing two kinds of review mechanisms: automatic matching of participle and manual review.

An integrated mixed teaching environment will bring the following benefits to this strategy.

- We media platform can provide a large number of well-designed, complete, detailed and rational multi-media resources, so as to solve the second "pain point", that is, it is difficult to unify the judgment of right and wrong and the judgment of value in curriculum ideological and political education.
- Theoretically, we media platform can store as many resources as you want, so the third "pain point" -- shortage of resources has been solved naturally.
- Through the media platform in the learning process, students can fully discuss online questions, feedback advices to teachers, and

teachers may adjust the learning content accord to the feedback of the platform and resources. Thus students turn from passive recipients into active learners and realize self- construction, so as to solve the fourth "pain point", the students are not teaching main body, that is, the lack of subject construction process problem.

- Since the two we media platforms adopted are characterized by large number of users and high communication efficiency, the promotion process of resources begins immediately after uploading. Therefore, the fifth "pain point", namely, the promotion cost of construction results is relatively high, the audience is relatively small, and the efficiency is relatively low, is also solved.

### **3.3. Solving the Sixth "Pain Point"**

The strategy will address the sixth "pain point" by studying and developing incentives for students to maintain their interest in ideological and political learning.

The incentives and measures are diverting. Several examples are as following.

- The students answer the open-ended questions set by the teacher, and the teacher gives them regular points as incentives based on the students' understanding of the questions.
- Organize extracurricular interest groups, carry out speech contests, and finally give regular points as incentives in the form of teacher evaluation and mutual evaluation among groups.

As for which method is more effective and can stimulate students' interest in learning, or whether there are better measures, it depends on the continuous exploration and improvement. Open questions mentioned here might include:

- How can IT professionals better serve the community while ensuring that their needs are met?
- What can we do if the commercial database is blocked?
- What will happen if we take some measures on the future development of China's IT industry?
- Combined with the current situation, how to break or get rid of the backward situation in database field?
- What advantages will the independent database management system bring to the future development of China?

- What professional ethics should a DBA abide by?
- What are the direct and indirect harms to the society if these professional ethics and morals are not observed?
- How to effectively guarantee the database information security in China? Please give us your opinion.

## **4. CONCLUSIONS**

Based on the analysis of the "pain points" in the curriculum ideological and political research, combined with the current research status, this paper proposes a practical strategy based on the mixed environment of classroom and we media. With the advantages of we media such as Douyin and Kuaishou, an integrated curriculum ideological and political teaching environment organically combined with professional classroom and we media platform is constructed. Under this strategy, teachers through research and practice, explore the teaching rules, teaching methods, teaching content design, research and cultivation of students' interest in learning to maintain incentive measures, the accumulation of teaching resources, and the establishment of a set of effective teaching mode, which not only can effectively solve the "pain points" in the curriculum ideological and political education research, but also can provide reference and ideas for professional courses, and realize the sharing of resources and experience.

In addition, due to the principles of database system and other computer science courses, such as high level language program design (C), object oriented programming (C++, Java), data structure, operating system, computer network, the embedded system principle, algorithm design, software engineering and software testing, etc., with links and intersection of knowledge, so the results of the research results is very easy to migrate and promote on the other professional courses.

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