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Article

# The Undergraduate Computer Network Teaching Case Library Based on Curriculum Ideological and Political Education

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Abstract: The paper studies the significance, content, key issues, innovative points, and research methods of the undergraduate computer network teaching case library based on curriculum ideological and political education. The undergraduate computer network teaching case library based on curriculum ideological and political education enables students to have a deep understanding of computer network knowledge, stimulate their autonomy in learning, improve their computer network skills, and enhance their ideological and political level. Through this case library, we aim to cultivate new era college students who possess both network professional skills and high levels of ideological and political education.

**Keywords:** computer network; case library; curriculum ideology and politics

## 1. Background

The ideological and political work is the lifeline of the school's various work. It is rooted in the classroom. The value and deep meaning of "ideological and political curriculum" are self-evident, reflecting the Zeitgeist of advancing with the times.

The computer network courses in universities mainly include "Computer Network", "Computer Network Security", "Computer Network Management", etc. These courses are important courses for majors such as computer science and technology, network engineering, and Internet of Things engineering.

However, based on the knowledge structure and teaching characteristics of the above courses themselves, the long-standing problems in the teaching process include: (1) multiple knowledge points, fast class pace, large classroom capacity, complex and abstract content,

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strong theoretical and comprehensive nature; (2) The existing teaching resources are not well integrated with the existing new network technologies and trends; (3) The course teaching did not consider the cultivation of students' ideological and political aspects. Due to the above problems, students may have unclear understanding of knowledge and confusion in logic during class. In addition, it is difficult to find corresponding case resources for in-depth learning after class, ultimately leading to a lack of accurate and comprehensive grasp of the learned content, and failing to achieve the ideal effect of offering this course.

Currently, there are few research results on teaching case libraries related to computer network courses. The only ones include "Research on the Construction of Network Information Security case library for Professional Degrees" published by Tang Chenghua, "Research on Segmental Teaching in the Construction of" Computer-aided design "Course case library" published by Shen Rongfeng, etc., and "Construction and Application of Xinjiang University Computer Software Design Characteristic case library" published by Chen Yanhong, etc.

The above teaching case library did not include new network technology cases, nor did it take into account the ideological and political aspects of the curriculum, resulting in students not learning the latest computer networks and not improving their ideological and political level.

Therefore, how to integrate the ideological and political education of courses with the teaching cases of computer network courses in universities and build a case library of undergraduate computer network teaching based on ideological and political education of courses is an urgent problem that needs to be solved.

Studying the undergraduate computer network teaching case library based on curriculum ideological and political education can stimulate students' autonomy in learning, improve computer network skills, and enhance students' ideological and political level.

#### 2. Content

The content of the undergraduate computer network teaching case library based on curriculum ideological and political education includes:

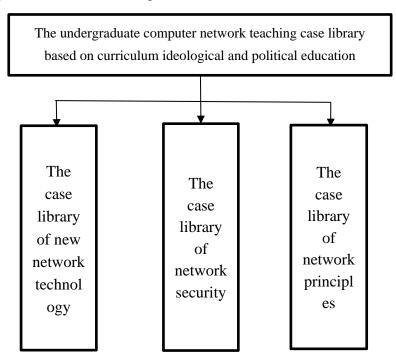
(1) The combination of course ideological and political education with teaching cases of computer network courses.

The teaching cases of ideological and political courses and computer network courses are comprehensively integrated from four aspects throughout the teaching process. Including:

- ① The combination of ideological and political courses with teaching objectives, and the design of teaching objectives for computer network courses in universities that combine ideological and political courses.
- ② The combination of ideological and political courses with teaching content, and the design of teaching content for computer network courses in universities that combine ideological and political courses.
- ③ The combination of ideological and political education in the curriculum and the teaching process, and the design of teaching cases for computer network courses in universities that combine ideological and political education in the curriculum.

- ④ The combination of course ideological and political education with homework setting, and the design of homework setting for teaching cases of computer network courses in universities that combine course ideological and political education.
- (2) Build a case library for undergraduate computer network teaching based on course ideological and political education.

Based on the teaching cases of computer network courses in universities that combine ideological and political courses, a case library of undergraduate computer network teaching based on ideological and political courses is constructed. The teaching case library consists of three parts, namely the network new technology teaching case library, network security teaching case library, and network principles teaching case library. Each part also contains several teaching cases. As shown in Figure 1.



**Figure 1.** The undergraduate computer network teaching case library based on curriculum ideological and political education

(3) The Practice of Undergraduate Computer Network Teaching Case Library Based on Course Ideological and Political Education.

On the basis of constructing a case library for undergraduate computer network teaching based on curriculum ideological and political education, this paper applies the case library for undergraduate computer network teaching based on curriculum ideological and political education to teaching practice and conducts empirical research.

# 3. Key Issues

The traditional case library for computer network courses does not include new network technology cases, nor does it consider the ideological and political aspects of the course, resulting in students not learning the latest computer networks and not improving their ideological and political level. The undergraduate computer network teaching case library based on curriculum ideological and political education includes a network new technology

teaching case library, which enhances students' interest in learning computer network courses and enhances their ideological and political level.

The undergraduate computer network teaching case library based on curriculum ideological and political education enables students to have a deep understanding of computer network knowledge, stimulate their autonomy in learning, improve their computer network skills, and enhance their ideological and political level. Through this case library, we aim to cultivate new-era college students who possess both network professional skills and high levels of ideological and political education.

### 4. Innovation

The innovative points of undergraduate computer network teaching case library based on course ideological and political education are as follows:

- (1) Boldly breaking through the design of traditional teaching cases, integrating ideological and political courses with teaching cases of computer network courses in universities from teaching objectives, teaching content, teaching process, and homework settings throughout the entire teaching process and in all directions.
- (2) The undergraduate computer network teaching case library based on curriculum ideological and political education includes a network new technology teaching case library, which not only enhances students' interest in learning computer network courses, but also enhances their ideological and political level.

#### 5. Research Method

The research method for undergraduate computer network teaching case library based on course ideological and political education is as follows:

# (1) Bibliographic method

Before constructing the case library, utilize existing network resources and literature resources to search for the latest developments in relevant fields both domestically and internationally, in order to provide a solid theoretical foundation for the research of this project.

# (2) Research method

The research method is the main method used in the middle and early stages of case library construction. Due to the fact that the main users of the case library are university students, it is necessary to select a portion of students for oral and written communication, to see if the case library can effectively solve the problems that students face during learning, and to appropriately adopt the suggestions it provides.

# (3) Experience summary method

The ultimate goal of the case library is to improve students' computer network skills and enhance their ideological and political level. So after the construction of the case library is completed and tried for a period of time, teachers and students will be asked to make evaluations and suggestions through online questionnaire surveys, carefully consider and summarize their existing problems, and improve the case library.

#### **5. Conclusions**

The paper studies the significance, content, key issues, innovative points, and research methods of The undergraduate computer network teaching case library based on curriculum ideological and political education. The undergraduate computer network teaching case library based on curriculum ideological and political education enables students to have a deep understanding of computer network knowledge, stimulate their autonomy in learning, improve their computer network skills, and enhance their ideological and political level. Through this case library, we aim to cultivate new era college students who possess both network professional skills and high levels of ideological and political education.

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