# Case Study of Ideological and Political Teaching Design about Technology of Front End Development

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#### Abstract

Ideological and political teaching is the focus of higher education in China. Cultivating college students with socialist core values is an important social function of higher education. How to integrate ideological and political elements into the curriculum is a problem that college teachers are trying to explore. This paper will make an attempt combined with the course of front-end development technology. Select a teaching content from the course, design relevant ideological and political elements, and well complete the teaching of the course. The effect is good.

#### Keywords

Ideological and Political Teaching; Technology of Front End Development; JavaScript.

#### **1. Introduction**

Ideological and political teaching is the focus of higher education in China. Cultivating college students with socialist core values is an important social function of higher education. How to integrate ideological and political elements into the curriculum is a problem that college teachers are trying to explore. This paper will make an attempt combined with the course of front-end development technology.

The course of front-end development technology is a professional compulsory course for software engineering majors. Through the study of this course, students can understand the development history and future direction of front-end web pages. Students can master the front-end web page production related technologies and lay a solid foundation for the development of various enterprises, portals and e-commerce websites.

## 2. Case Introduction

The teaching goal of this course is to enable students to use JavaScript to make animation. In terms of teaching materials, relevant ideological and political elements are designed. Ideological and political elements include the use of video clips of the animated cartoon " Uproar In Heaven", as well as pictures of the people of Lin County digging the red flag canal. Through the integration of these ideological and political elements, let students be proud of China's excellent cultural works and learn the revolutionary struggle spirit of the people of Lin county.

#### 3. Case Implementation

This course is mainly divided into four stages, including course introduction, basic animation principle, JavaScript animation principle and programming implementation.

#### **3.1. Course Introduction**

The current front-end page needs to pay attention to good user experience, which is the only way to attract users to stay on your system for a long time. Animation is a good way to improve

the user experience. Show students the home pages of Taobao, Jingdong and Anyang normal university websites, and let students observe the animation effect on the page and understand the characteristics of the front-end animation effect. Here, we can encourage students to learn more professional related technologies, develop competitive software products, improve the competitiveness of Chinese software in the world market and help realize the great Chinese dream.

# **3.2. Basic Animation Principles**

Animation is actually formed by fast and continuous playback of still pictures. Our eyes have the characteristic of "visual persistence". That is after seeing a picture or an object, they will not disappear in 0.34 seconds. Using this feature of our eyes to play the next picture before one picture disappears will give people a smooth visual change effect. That is animation.

When explaining this part, play the clip of "Uproar In Heaven" for about 10 seconds. The movie is shown in Figure 1.



Figure 1. Uproar in Heaven

The teacher introduced to the students the artistic achievements of "havoc in heaven". This film won the best film award of the 22nd London International Film Festival and the special short film award of the 13th karlovi fali International Film Festival in Czechoslovakia. We should be proud of our works of art with Chinese characteristics. Such artistic achievements are the result of the hard work of the old artists. It took three years from 1961 to 1964 to complete the production, and 7000-10000 original paintings were needed for 10 minutes of animation. The teacher called on the students to learn from the hard-working spirit of old artists who are not afraid of hardship.

## 3.3. JavaScript Animation Principle

This part mainly teaches technical knowledge. The principle of JavaScript animation is to change the positioning of web page elements every very short time. It can be divided into the following steps.

(1) Gets the current offset of the element.

- (2) Calculate the new offset according to the distance the element needs to move.
- (3) Modify the offset of the element.

Repeat the above three steps with the timer.

When the teacher demonstrates to the students, the pictures of the people of Lin County digging the red flag canal are used to demonstrate the principle of JavaScript animation. Here, PowerPoint animation is used for demonstration, as shown in Figure 2.

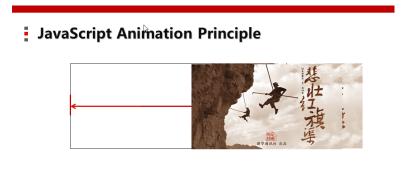


Figure 2. Digging the Red Flag Canal

The construction of the red flag canal project started in February 1960 and the supporting works of the branch canal were fully completed in July 1969, which lasted nearly ten years. The project has leveled 1250 mountains, erected 151 aqueducts, dug 211 tunnels, built 12408 buildings, excavated 22.25 million cubic meters of earth and stone, and the total length of the main canal of the red flag canal is 70.6 kilometers. This is a huge project. More than 40 million workers have worked hard for nearly 10 years.

Teachers and students introduce the world-wide pioneering work of the red flag canal. The spirit of the people of Lin County who dare to fight against the sky is the spiritual treasure of our Chinese nation. In today's era of great changes that have not been seen in a century, each of us should learn the struggle spirit of the people of Lin County and make our own contributions to the realization of the great Chinese dream.

## 3.4. Programming Implementation

The next step is to use JavaScript programming to realize animation. First, let the students think by themselves, and then let the students program. The teacher found some problems by checking the students' code.

Generally speaking, students are not so careful in programming. Students always don't pay attention to some details, such as line feed, indentation and so on. Here, the teacher should explain to the students the importance of detail. Craftsman spirit is very important. Only with craftsman spirit can we develop perfect software products.

# 4. Teaching Effectiveness

Through the implementation of Ideological and political education in this course and the observation of teaching effect, it is found that the teaching effect is good. On the one hand, it not only completes the teaching goal of professional knowledge learning, but also cultivates students' outlook on life and values. Through the selection of teaching materials, carry out ideological and political education for students, call on students to have the spirit of hard work, the spirit of daring to struggle, and cultivate the spirit of craftsman on the road of learning professional knowledge in the university stage. Every student should work hard to learn

professional knowledge and contribute his strength to the realization of the great Chinese dream.

# 5. Conclusion

Through the ideological and political teaching of this course, we have actively explored the reform of Ideological and political teaching under the background of new ideological and political education. My feeling is that indeed, our teaching effect can achieve double harvest. That is to achieve the teaching objectives of the course itself and improve students' Ideological and political understanding.

In the future teaching, how to integrate the ideological and political elements of the curriculum into all links of teaching, including teaching objectives, teaching resources, teaching design and teaching effect evaluation, is the direction that needs to be worked hard.

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