Design and Implementation of College Ideological and Political Network Education Platform Based on PHP

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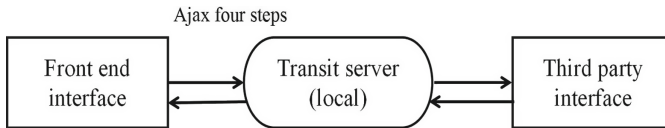1179247441@qq.com

Abstract. Ideological and political education in colleges and universities is an important policy and long-term strategy of higher education in China. With the deepening of information technology in the world, ideological and political network education in colleges and universities is imperative. Based on Web technology, the author uses PHP as scripting language, introduces ThinkPHP framework, and uses think-orm ORM class library extension, think-oracle Oracle driver extension, think-soar SQL statement optimization extension, etc. to realize data support with MySQL. The platform solves the top-level design problems and practical teaching problems of ideological and political education in colleges and universities, and contributes to the cultivation of students with political thoughts and cultural awareness.

Keywords: Web technology · PHP · Ideological and political education · online education

1 Introduction

Ideological and political education is an important channel for colleges and universities to realize "moral cultivation and all-round education". College students are in the critical period of forming their world outlook, outlook on life and values. Colleges and universities shoulder the important task of cultivating students as socialist builders with moral ideals and political consciousness. However, at present, ideological and political education relies more on the traditional classroom teaching of "classroom-centered, teacher-centered, textbook-centered". Students passively accept the indoctrination teaching of ideological and political content, and they are not interested in and pay enough attention to the ideological and political content. The actual effect of ideological and political education is not optimistic.

To sum up, the author thinks that we should build a network platform for ideological and political education in colleges and universities. This paper establishes a systematic framework around four links: ideological and political teaching thought, ideological and political teaching design, ideological and political education practice and teaching effect evaluation. And the way of network teaching is used to meet the "network" learning and

Fig. 1. ThinkPHP work flow chart

living habits of contemporary college students, and the ideological and political content is gradually infiltrated into college students' daily life, so as to become high-quality talents with thoughts, consciousness and culture in the new era [1].

2   Key Technologies

2.1   PHP

As a popular Web application development language, PHP combines the characteristics of C language, Java and Perl and creates its own grammar. It can directly embed programs into HTML for execution, and its execution efficiency is much higher than CGI's, and it can encrypt and optimize code running to improve the running speed, which is more suitable for the design and development of dynamic pages [2].

2.2   ThinkPHP

ThinkPHP is an object-oriented PHP development framework, transplanted from the Struts framework of Java. It inherits TagLib (tag library) of Strust, and adopts the front-end separation mode. The workflow is shown in Fig. 1. Combining with the database framework ORM and conforming to the architecture concept of MVC, ThinkPHP can be used on multiple platforms (windows/Unix/Linux/Mac OS, etc.) and supports multiple databases (MySql, PgSQL, Sqlite, etc.) [3].

2.3   Development Environment

In view of the construction of ideological and political network education platform in colleges and universities under ThinkPHP framework, the overall open environment configuration is as follows: linux environment is selected for the system, Apache server is selected for the Web server, PHP is selected as the development language. The version selected in this paper is ThinkPHP6.0.12. MySQL5.5 is selected as the database. The selection of some versions depends on the compatibility and stability of system functions [4].

3   Function Realization

3.1   Student Side

On the student side, there are two functional modules: "autonomous learning" and "social practice".

```
<div class="panel panel-default">
        <div class="panel-heading"><h2> chat room</h2><span
style="color:green;display.none;,">(Current online:<span
id="length">O</span>people)</span> </div>
        <div class="panel-body" id="body" style="height:400px;overflow-y:auto,">
        </div>
    </div>
    <div class="input-group">
        <input type="text" class="form-control" id="in" placeholder="What do you
want to say?"
aria-describedby="basic-addon2">
        <span class="input-group-addon" id="basic-addon2"
style="cursor:pointer,">send
    </span>
```

Fig. 2. Code of group chat room (part)

Under the "autonomous learning" module, students can choose different teaching resources according to their individual needs and preferences. There are "open classes for ideological and political education" and high-quality online video courses on and off campus. There is an "e-library", which covers real-time updated e-textbooks and other e-books related to ideological and political education. There is an "online test bank", which not only has objective questions aimed at classroom knowledge, but also has expanded subjective questions [5]. The ranking of resources in "Ideological and Political Open Class" and "Electronic Library" involves heat calculation, that is, the demand degree and quality of resources are determined according to the click volume of students. The calculation formula used here is shown in Formula 1.

$$H = \frac{W + 1}{(T + 1)^G} \tag{1}$$

Among them, H is the heat of various resources; W is the numerical expression of content quality, in this case, click volume; I is the initial quality of the new content; G Gravity, or the speed at which this resource is no longer popular. The greater the gravity, the faster a content is refreshed; T is time [6].

Under the "social practice" module, students can join various "new practice projects" and view the general situation of the practice projects, including the time, place and submission requirements of practice reports [7]. After joining the practice project, students can automatically join the corresponding "group chat room", including teachers and students, and can discuss and communicate on the practice project. The "group chat room" mainly uses php swoole, and the code is shown in Fig. 2.

3.2 Teacher Side

The teacher's port is divided into four functional modules: "resource supervision", "teaching design", "practice guidance" and "multiple evaluation".

Under the "resource supervision" module, the system will provide teachers with the statistics of the latest resource downloads (see Table 1 for details), and teachers can judge which aspects of students' recent knowledge needs are great, so as to upload resources in a targeted manner [8].

Table 1. Top three in resource heat(Unit: person-time)

Title	Resource type	Click volume	Liked amount	Download volume
Red hundred years	Electronic book	8506	3890	462
Ideological and political lesson 1	Video class	6636	912	210
Great hundred years	Video class	5046	1132	302

Under the "teaching design" module, teachers can record and upload micro-lesson videos within 10 min. From the design of micro-lesson video uploading to transcoding, php-ffmpeg is mainly used here.

Under the "practice guidance" module, teachers can supervise and tutor students' practice, and they can publish and organize practical activities related to ideological and political education, such as questionnaires, online essay writing and short video contests [9].

Under the "multiple evaluation" module, teachers can integrate students' self-evaluation, mutual evaluation among students and mutual evaluation between teachers and students, so as to enhance the authenticity and effectiveness of the evaluation of ideological and political teaching effect in colleges and universities [10].

4   Conclusions

The network platform of ideological and political education in colleges and universities can complement the traditional teaching mode, and it has made positive improvements in teaching mode, teaching resources, teaching means and evaluation system. The mode of network education is more in line with the study habits of contemporary college students, and can gradually infiltrate ideological and political education into all aspects of college students' daily life and study. It helps contemporary college students to quickly grow into qualified and all-round talents under the requirements of socialist core values. It also provides innovative practice for colleges and universities to effectively promote the implementation of the educational policy of "cultivating people with moral integrity and educating people in an all-round way". In the future practice, we will continue to deepen the practice of ideological and political network education mode, maximize the role of network teaching in ideological and political education, and make contributions to improving the ideological and moral quality of college students and promoting their all-round development.

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