



# Design and Implementation of Network Teaching Platform of Ideological and Political Education in Colleges and Universities Based on Laravel Framework

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**Abstract.** Under the Web technology, the network teaching platform of ideological and political education in colleges and universities based on Laravel framework uses PHP as script language and MySQL to realize data support, which is powerful and simple in operation and maintenance. This platform solves the problems existing in the ideological and political education in colleges and universities from curriculum design to teaching practice. It not only integrates ideological and political education into campus life, but also tries to connect with social life, establishes a long-term mechanism to cultivate students' political ideals and cultural consciousness, and transports socialist builders with both ability and political integrity for the society.

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

## 1 Introduction

Ideological and political education is an important policy and long-term strategy of our country. As an important scene of ideological and political education in colleges and universities, it shoulders the task of ideological and political education before students enter the society, and trains students to become talents with all-round development of morality, intelligence, physique and beauty. At present, however, there are still many problems in ideological and political education at school: first, the organization and management planning of ideological and political education are not clear enough, and the continuity of ideological and political education is poor [1]. Secondly, ideological and political education relies more on classroom teaching, and teaching is divorced from specific examples in practice, resulting in students' superficial understanding of ideological and political education content [2]. Finally, the teaching mode of ideological and political education course is outdated, and the teaching methods can't keep pace with the times, which makes the teaching and learning of ideological and political content unsatisfactory.

**Table 1.** Comparison of advantages and disadvantages of PHP mainstream frameworks

	Advantage	Disadvantage
Laravel	It integrates various design patterns, Ioc containers and dependency injection, supports composer, and realizes richer extensions.	The development work is tedious
Yii	Lightweight, good cache, strong load capacity, high execution performance and fast running speed.	Complex configuration
ThinkPHP	Simple development and strong compatibility.	More bug

To sum up, the author thinks that we should design and develop an online platform for ideological and political education in colleges and universities, build a new ecology of ideological and political education, improve teaching efficiency and effectiveness, and make students “really learn, really understand and really use” the ideological and political education content, so as to become a high-quality talent with knowledge, skills and morality in socialist construction.

## 2 Key Technologies

### 2.1 Laravel

Laravel is a development framework based on PHPweb, which adopts a single-entry mode. All requests must start through a single entry, so as to realize unified parameter filtering. The main advantage of this is that it is easy to manage. Laravel also adopts MVC layered thinking, which separates the user’s input, output and logic, and facilitates collaborative development and later maintenance. Table 1 shows the advantages and disadvantages of PHP mainstream frameworks [4].

### 2.2 Development Environment

In view of the construction of ideological and political network education platform in colleges and universities under Laravel framework, the overall open environment configuration choices are as follows: Windows environment is selected for the system, Apache is selected for the Web server, PHP7.3 is selected for the development language, Composer is selected for the installer of Laravel, and Laravel framework needs to be downloaded from the official website. The version selected in this paper is Laravel5.8.

### 3 Function Realization

#### 3.1 Student Side

When students enter the ideological and political education platform in colleges and universities, they will see two login buttons: the student side and the teacher side. Click the “student side” to register and log in. After entering the student terminal system, they will see three options in the top menu bar: “Study”, “Practice” and “Communication”.

##### a. Study.

The “study” module is divided into three categories: “Open Class”, “Library” and “Test Bank”. Click on the “study”, and students will see the list of courses and basic information. They can choose different video classes to watch online or download them and watch them offline. The system will automatically generate the playing situation of each course to reflect the course quality. At present, the top five courses in the comprehensive situation of the platform are shown in Fig. 1. Click on “Library” and students will see electronic textbooks updated in real time. There are other books related to ideological and political education. Entering the “Test Bank”, students can choose the corresponding question bank of different courses. There are more subjective questions in the question bank, students can deepen their understanding of ideological and political content [5].

(1) Click rate: the number of clicks/total number of platform users, which reflects the course demand; (2) Play rate: the number of times played/clicked, which reflects the accuracy of course search; (3) Broadcast completion rate: the number of broadcast

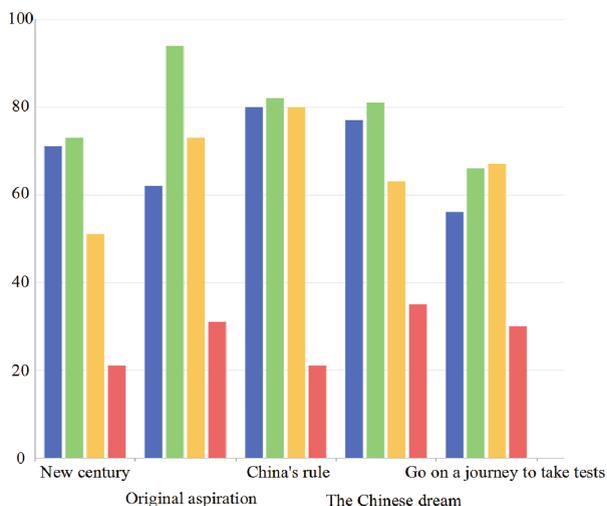


Fig. 1. Statistical chart of course playing

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P{FONT-FAMILY: normal; FONT-SIZE: 9pt; LINE-HEIGHT: 14pt}
DIV {FONT-FAMILY: normal; FONT-SIZE: 9pt; LINE-HEIGHT: 14pt}
include "linkfox.inc.php";
include "info.inc.php";
?>
$stem=$HTTP_COOKIE_VARS[FlyFoxNet];//Take the COOKIE information
$stemp=explode("$stem");
$scokiem=$stemp[0];
$useinfo=cuser($scokiem,$action);
if ($useinfo[2]=="Tourist") $useinfo[2]=1;
?>

```

**Fig. 2.** "Communication" module code (part)

times/broadcast times, which reflects the attraction of the course; (4) Download rate: download times/broadcast times, reflecting the overall quality of the course.

### b. Practice.

Under the "Practice" module, there are two page buttons: "Practice Project" and "Practice Report" in the sidebar. Enter the "Practice Project" page, students will see the list of projects, and students can join the project, and after completing the practice, upload the practice report in the "Practice Report" page, which can be text, atlas or short video [6].

### c. Communication.

In the "Communication" module, students can exchange their learning experiences, send text messages and upload pictures, publish topic discussions or join existing hot topics. Students can also @ teacher, ask the teacher for advice on the problems encountered in their study and practice [7]. This part mainly uses php swoole, and the code is shown in Fig. 2.

## 3.2 Teacher Side

The main function of teachers is resource management. Teachers can choose high-quality and up-to-date ideological and political video lessons, ideological and political textbooks and other related books to upload and manage. When uploading, it is necessary to set keywords [8]. The formula in this paper is shown in Formula 1.

$$KI = (K \times 0.25) + (T \times 0.1) + (C \times 0.2) + (D \times 0.2) + (S \times 0.5) + (M \times 0.2) \quad (1)$$

KI (Keyword Index): a parameter for judging the search popularity of this resource; K (Keywords): 5 keywords set by teachers when uploading; T (Title): Teacher Upload is the title of the editor; C (Click relevance): the rate at which students click on this resource when searching for this keyword; D (User download rate): the rate at which users download this resource when searching for this keyword; S (Content scoring): the rating of this resource; M (Manual extra points): Teachers can freely adjust the display ranking according to their needs [9].

## 4 Conclusion

The network platform of ideological and political education in colleges and universities can supplement the traditional teaching mode, solve many problems of ideological and political education from organization to landing, and optimize the management mode of ideological and political education. Through rich and flexible teaching activities, the platform improves students' interest in learning, helps to form a strong atmosphere of ideological and political learning, and enables students to grow into "knowledgeable, capable and accomplished" youth in the new era under the subtle influence. 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 [10].

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