


Construction of College English Ideological and Political Assistant Teaching System Based on Web Technology

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Abstract: At present, there are some problems in colleges and universities, such as insufficient emphasis on ideological and political courses, less ideological and political teaching content and lack of teaching resources. In view of these situations, this paper builds a college English ideological and political course assistance system with Windows 10.0 as the operating system, C# as the programming language, Visual Studio 2019 as the bottom development tool, SQL server database to store system data, and aspx function pages under the function modules, so as to improve the detailed functions of each module of the system. Finally, MVC hierarchical model is adopted to improve the system. The purpose of this system is to combine college English with ideological and political education, to achieve the organic unity of instrumental and humanistic language education, to further improve the teaching system, to enrich teaching resources, to innovate teaching methods, and to cultivate all-round comprehensive foreign language talents.

1 INTRODUCTION

With the development of the Internet era and the progress of science and technology, the exchange of ideas between countries has become closer and closer, and various western thoughts have flooded into our country, which has played a certain impact on our traditional spiritual civilization and threatened our national ideology. (Xia, 2019) While contemporary college students are in a critical period of thinking development, colleges and universities, as educational implementation bases, should give students active guidance, offer ideological and political courses that meet the actual needs, and cultivate all-round socialist builders and successors. Combining the current background of the times with the teaching characteristics of ideological and political education in curriculum, we should organically integrate college English with ideological and political education in curriculum, clarify the value of the times, deeply understand the basic connotation of ideological and political education in curriculum, and promote the practical exploration of ideological and political education in curriculum at multiple levels. In college English

teaching, we need to do the following. First, we should establish the fundamental educational goal of ideological and political education in college English course. Secondly, we should guide college students to explore western culture with a critical eye. Finally, students need to strengthen the national self-confidence of college students by studying ideological and political education in college English courses. However, at present, there are still the following problems in carrying out ideological and political education. Firstly, at present, colleges and universities pay insufficient attention to ideological and political education, and the ideological and political education only stays on the surface of knowledge, ignoring the educational function of ideological and political education. Secondly, the teaching resources of ideological and political education are relatively old, and the teaching form is relatively single, which leads to students' low interest and poor learning effectiveness. Finally, the teaching system needs to be improved, the assessment methods are relatively solid, and the offline open-book examination alone can't accurately assess students' comprehensive

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level, which is not conducive to students' cognitive development.

Based on the above problems, this paper constructs a web-based ideological and political assistant teaching system for college English courses. The construction of the auxiliary teaching system mentioned in this article mainly uses Windows 10.0 as the operating system, Visual Studio 2019 as the bottom development tool, C# as the programming language, and another aspx function page under the function modules, so as to improve the detailed functions of the system modules, and then complete the hierarchical design according to MVC mode to improve the system. In terms of data storage, the system adopts SQL server database for management, so as to save query time and improve operation efficiency. The system selects IIS 11.0 version of web server, which makes the platform construction more efficient and safe.

2 INTRODUCTION OF KEY TECHNOLOGIES

2.1 Web Technology

Web is a very large-scale distributed system running on the Internet. That is, every data information exchange of users needs the cooperation between the client and the server. Web technology is the general name of all technologies that support Web operation. The five elements of Web technology are HTML,

HTTP, URL, Web browser and Web server. HTML defines the presentation format of hypertext documents, HTTP solves the problem of communication between the client browser and the server, and URL solves the problem of naming and addressing identification of documents. (Ding, 2005) These three technologies are collectively called the three major construction technologies of the Web. According to the functional attributes, it can be divided into two categories, namely client-side technology and server-side technology.

2.2 B/S Structure

B/S structure is a browser/server structure, which needs to be deployed on the server side. Other software needed to access the website and run on the client side only needs to adopt the browser. In the B/S framework, users express their needs at the client and input corresponding parameters, and then rely on the network to access the server. First, the logic layer solves the user's needs, then the data needs are transmitted to the database, and the specific content is executed by the server. Finally, the business logic layer accepts this kind of feedback information, thus generating a web page that meets the user's needs. It can be seen that the logic of client and server in B/S structure is more concise and clear, and data processing can be more efficient. The specific process of B/S operation is shown in Figure 1.



Figure 1: B/S operation flow chart

2.3 Asp.Net

ASP.NET is a kind of Web development platform, which provides an overall programming framework for the subsequent development of the platform, is the infrastructure used for development, and also provides various required services for web programs. ASP.NET relies on HTTP protocol, and uses HTTP commands to set up two-way communication between browser and server. (Wang, 2019) ASP.Net can also realize caching, which updates the performance of some applications, and then caches frequently used pages of users and stores them in temporary locations, which can

retrieve these pages more quickly and give better feedback to users.

2.4 MVC

MVC is one of the programming modes in ASP.NET, and it is a special mode for creating Web applications. MVC layering helps to manage complicated program applications, and programmers can pay attention to one aspect for a long time. Besides, MVC layering can also focus on view design without relying on logical business, making it easier to test program applications. The construction of this platform takes MVC pattern as the whole

framework structure, and the development and creation are based on component-based layered development technology. Distributed multi-layer technology is an important development technology to create this platform. Using this technology can effectively realize the functions of the traditional pattern, and it has certain advantages in scalability and maintainability of the platform.

2.5 Development Process

According to the introduction of the above related technical content, we can complete the configuration and deployment of the development process of the ideological and political assistant teaching system of college English course based on Web technology. In order to improve the function of college English course ideological and political assistant teaching system, this system will be constructed by using ASP.NET and other related technologies. The bottom development tool is Visual Studio 2019, and the operating system is based on Windows 10.0. Choose IIS version 10.0 for the web server to improve the operation ability of the server. Select SQL server 2019 as the data storage tool.

During the research and development of the platform, first, choose Visual Studio 2019 tool in the menu, create the required project in the File section under the file, and select ASP.NET Web in the application. Then, after the configuration attributes and paths of the newly created project are preset, click Next, select MVC in the pop-up window and name it, and you can create the MVC project in ASP.NET to carry out the follow-up compilation of the college English course ideological and political assistant teaching system. After the specific functional modules are configured, simulation testing is required. After there is no error, publish the generated website to IIS, then create a new website project in IIS, select the advanced settings in the management website page, and select the physical path. After the basic configuration is completed, the college English course ideological and political assistant teaching system can be constructed. In the process of designing and realizing the specific functions of the system, the overall functional system of the system will be built according to the procedures of login, use and exit. For example, when users log in for the first time, they need to use User Add.aspx to add user pages. If they want to use the courseware sharing function of teachers after logging in, they need to use coursewareadd.aspx to add and upload new courseware. The uploaded courseware can be

queried in their personal space. (Hao, 2021) Click on the upper right corner to exit after using it. Through the description of the above key technologies, we have roughly planned the overall framework of the auxiliary teaching system, and made clear the feasibility of establishing the auxiliary teaching system for ideological and political education in college English courses.

3 SYSTEM REQUIREMENTS ANALYSIS

In May, 2020, the Ministry of Education issued the Guiding Outline of Ideological and Political Construction in Colleges and Universities, which clearly stated that it is necessary to "comprehensively promote ideological and political construction in colleges and universities, give full play to the educational role of each course, and improve the quality of talent cultivation in colleges and universities". The construction of new liberal arts aims to promote the exchange and integration of various subjects in colleges and universities, so as to innovate traditional knowledge and form theoretical ideas in line with the new era. In the construction of new liberal arts, it is also proposed to focus on the shaping of foreign language professionals, so as to enhance China's discourse expression ability in the international community and strengthen China's cultural soft power. As a public basic course in colleges and universities, college English should give full play to its own advantages and actively integrate into innovation. Taking college English as the carrier, this system organically integrates the instrumental function of improving students' comprehensive English ability with the humanistic function of cultivating students' political thoughts, so that students can become compound foreign language talents with feelings of home and country and international vision.

The Web-based auxiliary teaching system for ideological and political education in college English courses aims at cultivating students' political thinking ability and English application ability. When users use the system for the first time, they first need to complete the user registration according to the relevant guidance given by the page, and then they can log in to the system for subsequent operations. This system divides users into two types: students and teachers. In the student side, it is mainly divided into the following modules: autonomous learning module, practical course

exchange module and online testing module. With the help of these modules, students can start autonomous learning. Different from ordinary linear learning, students can choose learning content according to their own needs and interests, which greatly mobilizes their learning enthusiasm. On the teacher side, teachers' functions are more inclined to collect and upload online teaching resources, and organize and guide teaching activities. It can also be divided into three parts: resource management module, online Q&A module and comprehensive evaluation module. The construction of auxiliary teaching system has alleviated the teaching pressure of teachers to a certain extent and improved the ideological and political teaching system of college English course. It also systematically integrates the specific requirements of socialist core values, China's excellent traditional culture, revolutionary culture, advanced socialist culture, Socialism with Chinese characteristics's achievements and other contents into the daily teaching of college English, strengthens the connection between all links in the whole teaching process, and forms a comprehensive, dynamic and systematic closed loop of college English ideological and political education.

4 FUNCTION REALIZATION

4.1 Teacher Side

4.1.1 Resource Upload Module

In order to accomplish the fundamental task of ideological and political education, teachers should give sufficient impetus. First of all, in terms of instructional design, the integration of Chinese traditional culture and English courses should be appropriately increased. For example, Unit4 Festivals in the new edition of Advanced College English Audio-visual and Speaking Course II mainly introduces foreign festivals, Mud Festival and Tomato Festival, and teachers can insert Chinese traditional festivals such as Spring Festival and Water-Splashing Festival in courseware design for comparative study. (Yang, 2020) Then, from the perspective of teaching methods, teachers can make use of the richness and convenience of network resources to innovate the existing teaching methods, for example, teaching in the form of dialogue in reading, and dividing students into two groups according to the teaching content, so as to experience the author's feelings in deduction, and then guide students to expand what they have

learned, and combine the content in the article with the actual life to achieve the purpose of combining learning with thinking. Finally, teachers upload courseware to the system for students to learn, and students can adjust their learning progress according to their own learning situation to cultivate their self-learning ability. The resource upload code is shown in Figure 2.

```
string Path = "movie" + "\\" + System.IO.Path.GetFileName(FileUpload1.FileName);
int Size = FileUpload1.PostedFile.ContentLength;
string Type = FileUpload1.PostedFile.ContentType;
SqlConnection conn = new SqlConnection("data source=.;initial
catalog=QualityCourse, Integrated Security=True,user id=sa,password=sa"),
    SqlCommand comm = new SqlCommand("insert into [Source]
    (SourceName,SourceSort, SourcePath, SourceType)
values(@SourceName, @SourceSort,@SourcePath,@SourceType)", conn);
comm.CommandType = CommandType.Text;
comm.Parameters.Add("@SourceName", SqlDbType.VarChar, 100).Value = mingzi. Text;
comm.Parameters.Add("@SourceSort", SqlDbType.Int).Value = 3;
comm.Parameters.Add("@SourcePath", SqlDbType.VarChar, 100).Value = Path;
comm.Parameters.Add("@SourceType", SqlDbType.VarChar, 50).Value = Type;
```

Figure 2: Courseware resources upload code

4.1.2 Online Q&A Module

The ideological and political course itself has a certain significance of the times, and it keeps developing with the passage of time, so it is still difficult and complicated to understand. It is inevitable that students will have doubts in the process of practice and study. Using this system, teachers can get in touch with students in time and discuss solutions to problems together.

4.1.3 Comprehensive Evaluation Module

Because the combination of college English and ideological and political education can't comprehensively evaluate students' learning process and results in a single way, this system changes the evaluation methods, and combines the process evaluation with the summative evaluation to form a multidimensional evaluation method, so as to meet the actual teaching needs and pay attention to the internalization and extension of ideological and political education in college English courses. The establishment of this module not only improves the authenticity and effectiveness of the evaluation of ideological and political education in college English courses, but also gradually improves the overall evaluation system of ideological and political education in college English courses.

4.2 Student Side

4.2.1 Self-Directed Learning Module

The purpose of this module is to cultivate students' self-study ability, and students can conduct non-linear free learning according to their own needs. Students need to register when logging in to this system for the first time. Students can complete the registration according to the instructions in the page, and then they can start the follow-up activities after logging in. Visitors who have not logged in can only browse the extracurricular extension module, but cannot implement specific operations. The autonomous learning module can be divided into the following three parts in detail: basic knowledge learning, professional ability training and extracurricular expansion. In the basic knowledge learning module, compulsory textbooks are the main learning content. Students can adjust their learning progress according to their actual learning situation, and they can also learn with the help of courseware materials uploaded by teachers. The implementation code is shown in Figure 3. In the module of professional ability training, ideological and moral education is interspersed with the training of students' listening, speaking, reading and writing abilities. Most of the learning contents are interwoven with domestic and foreign cultures, which enhances students' cultural self-confidence in a subtle way. The extended module includes the English version of the party and government report, the world current affairs guide, etc. Learning this module can not only improve students' professional knowledge and ability, but also enrich students' current affairs thinking and broaden their international horizons.

```
function show - div(menu)
{ var Imgname;
if(documnant.all.item(menu).style.display = 'none')
{ documnt.all.item(menu).style.display = 'block' ;
Imgname = "images/Img"+menu+"-gif
D document.all.item("Img"+menu).src = Imgname;
else .
{ document.all.item(menu).style}display = 'none " ;
Imgname = " images/Img"+menu+"-1. gif
documuent.all. ietm("Img"+menu).src = Imgname; .
< script language = " JavaScript">
</ scripts
```

Figure 3: Video playback code

4.2.2 Practical Course Communication Module

Teaching for college students should be put into practice, and students' learning achievements should be tested by practice. In this module, students can actively participate in all kinds of ideological and political education activities organized by teachers, and rely on science and technology to complete all kinds of expanding practice, so as to deepen their learning and understanding of ideological and political content in college English courses. Students can post offline homework practice results, reading experience or learning sentiment to the personal center for other users to comment on. Students' confusion in practice can be communicated with teachers in time with the help of online communication function, which improves the efficiency of problem solving.

4.2.3 Online Test Module

This system also has a question bank function, in which students can choose chapters and knowledge points according to the self-examination and self-test module in the question bank, and adjust the difficulty of the test paper according to their own learning level. After the selection, the system will automatically generate a self-test paper. Students can use this system to improve themselves and have a clearer understanding of their learning level. After submitting the test paper, the system will automatically correct it, mark the wrong questions and feed them back to the students' personal center to generate a collection. The students' self-test scores will also be automatically ranked, and the score curves will be generated, and each test will be analyzed, so that students can know their weaknesses in time and consolidate them. Students' final grades are comprehensively evaluated by their practical academic grades, their usual grades and their online test scores, so as to promote their all-round development.

5 CONCLUSIONS

As a key part of the reform of ideological and political education in colleges and universities, curriculum ideological and political education must attract the attention of the public. However, how to improve the ideological and moral cultivation of college students and cultivate their good moral character still needs further exploration. In view of

how to cultivate comprehensive applied talents with all-round development under the background of new liberal arts, it is impossible to solve the problem only by relying on individual course teaching. The auxiliary teaching system of ideological and political education for college English courses based on web technology in this paper integrates ideological and political education into English teaching, and innovates the single teaching method. It can improve students' ideological accomplishment while cultivating their English level, so that students can become applied foreign language talents with both ability and political integrity. In the follow-up research, we will further expand the extensibility and applicability of the system, and make the system function more perfect.

REFERENCES

- Ding Gang, Yan Hui (2005). Design of WEB-based Distance Teaching System [J]. Journal of Anhui Institute of Architecture & Industry(Natural Science). (03).
- Hao Shuo, Mi Mengfan (2021). Exploration and Practice of the Construction of "Internet Plus" Teaching System [J]. Journal of North China Institute of Aerospace Engineering. (01).
- Wang Chengxia, Yuan Jun'e (2019). Research on Dynamic Systematic Design and Practice of College English Course Ideological and Political Education [J]. Education Forum.12.
- Xia Wenhong, He Fang (2019). The Mission of College English Curriculum Ideological and Political Education [J]. People's Tribune.10.
- Yang Yang, Pang Weiwei, Ni Zhigang (2020). Exploration and Practice of Ideological and Political Education in College English Course under OBE Concept [J]. Journal of North China Institute of Aerospace Engineering.06.