Design of English Autonomous Learning Platform Based on Computer Technology

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Abstract. In recent years, our country has set great goals for the future development direction of English teaching. Some business people will put forward some opinions on this and improve the needs of internationalization. They believe that English should be the future development direction of college English teaching in our country. On the other hand, from the humanistic characteristics of language and the important field of education and teaching, it is proposed that by understanding English teaching as a platform for autonomous English learning, they can develop synchronously and achieve the advantage of future development. According to the teaching requirements of college students' English courses, it is indicated that increasing students' autonomous learning ability is the most important goal in the English teaching process, and for this reason, primary and middle school students are encouraged to learn English independently, combined with computer technology. In today's society, many computer technologies are promoting the development of various aspects, of course, English teaching is no exception, giving great progress in teaching reform and promoting the development of teaching purposes. For students, they mainly focus on learning, and now they need to use computer technology and English teaching to combine teaching theory, which is newer and more practical than traditional teaching methods, and can make students realize Its own value in learning enables students to find joy in learning, challenge learning and promote teacher leadership. Using computer technology to cultivate students' autonomous learning ability with the characteristics of students as the center, using ASP technology to design a B/S mode autonomous English learning platform, and carry out relevant design for the designed platform [1].

Keywords: Computer technology · independent learning platform · English teaching · design

1 Introduction

At present, many researches will combine computer technology and English self-learning. For the English self-learning platform based on computer technology, this platform is mainly to provide students with the convenience of learning and to better allow students to learn in an advantageous environment. A language environment for autonomous learning is the top priority of students' learning, and learning in a good environment will be more active. The realization of this goal is the current research focus.

The platform changes the traditional method of education, which used to be passive learning, and now the development of computers and the vastness of learning resources allow students to have independence on a larger platform. However, students lack autonomy and effective supervision when using the platform for autonomous learning. This article focuses on the development of relevant systems, combined with relevant learning effects and development experience, and based on computer technology, to design a platform for English autonomous learning [2].

2   Design of English Self-learning Platform

2.1   The Structure of the Platform System

In terms of the system structure, the design of the platform adopts the B/S three-layer structure, which consists of three structural layers, namely, the presentation layer, the business layer, and the data layer. See Fig. 1.

It can be seen from Fig. 1 that the presentation layer can represent the application layer and can be selected for the page, and the Microsoft technology used in this platform comes from the browser. The business layer is to realize the function of the application program, which is an important part of the system. The platform also adopts the server proposed by the Apache software. The data layer is used to manage the data, mainly to process the request application of other layers. But compared with C/S, of course, the B/S structure is more convenient, and its corresponding cost is not high. More development and development items with Visual studio Net2010 as the development platform. See Fig. 2 [3].

2.2   Design of Platform Functions

The English self-learning platform is aimed at the administrator of the system with the user, whether it is a teacher or a student, will supervise. Therefore, the design of the platform can be divided into three parts. Different parts have different functions, and the same parts have different functions. After valid identity authentication, you can choose
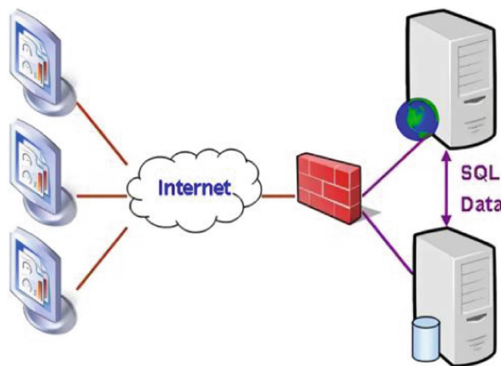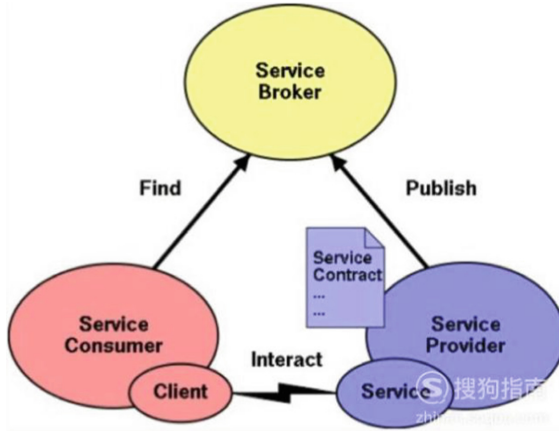

Fig. 1. B/S structure diagram

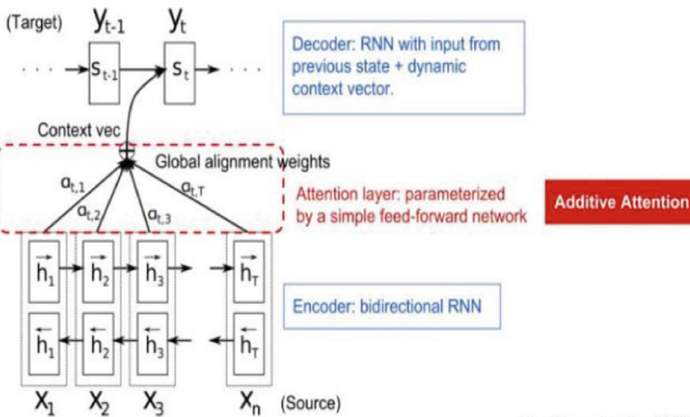**Fig. 2.** The difference between B/S structure and C/S structure

Fig. 3. Schematic diagram of system management module

to perform some identity authentication, and can independently carry out corresponding functional operations and platform design through their respective permissions [6].

1) System management module

The system management module is mainly used for the aftermath of the self-learning platform in the future, mainly providing effective functions such as stable operation and data protection and security, as shown in Fig. 3 [7].

The specific management work includes personal information, corresponding allocation of information resources uploaded by teachers, and corresponding operation functions for resources, such as common modification, writing, etc. The system management functions for students are mainly: There are choices between systems, supervised releases, and more [4].
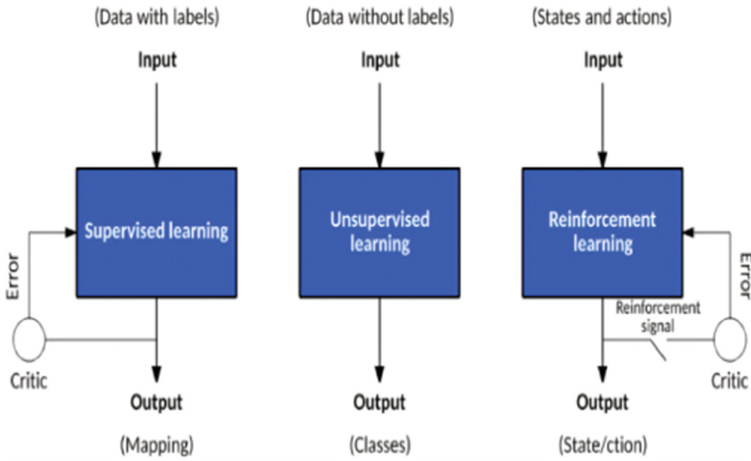
Fig. 4. The self-learning module of the system

2) Teaching Management Module

The teaching management module is based on the classroom, the students listen carefully, the teacher outputs his teaching knowledge, and the students can apply what they have learned. After-school exercises and online discussions for completed courses, teachers can communicate online, assign corresponding homework and modify teaching materials, etc. It includes PPT textbooks, videos, audios and other materials that students need in class. For different teaching resources, they can review questions online and publish links to exams. Students can complete the corresponding content quickly and with high quality according to the content assigned by the teacher. The published test materials require students to read and write carefully. The intelligent statistical information is for convenient statistics of test scores, and to monitor students' learning more clearly [5].

3) Self-directed learning module

The independent learning module means that you can't wait for the teacher to urge you when you are studying the course. You need to give priority to previewing before class, and you can also achieve the freedom to log in to the website, and then carry out the course study of English, and finally complete the after-school exercises assigned by the teacher [8]. After completing the test, support students to retrieve answers, consolidate the content of learning and other autonomous learning situations, and conduct corresponding learning of the content they have learned independently, and do not hesitate to have the courage to learn independently, as shown in Fig. 4.

3   Multimedia Technology

The English self-learning platform belongs to the curriculum learning system and supports the basic content of teaching with multimedia technology. The platform needs to support a variety of file formats to complete the text content. Teachers view it through the online resource library, and students view it through the interface browsing courses,

etc. This platform adopts ControlWeb, which contains many multimedia technologies, which is convenient for better learning on the network platform [9]. Take Realplayer as an example, there are many multimedia embedding specific ways as follows:

Use the <OBJECT> tag to embed the Realplayer AetiveX control into the self-learning platform to realize playback control. The main codes include:

```
<OBJECT id="Exobudl".
WIDTH: 235px; POSITION: relative; TOP: 0px;
HEIGHT: 196px" classid" classsid: CFCDAA03-8BE4>
<PARAM NAME="ExtentXValue"6218">
<PARAM NAME="ExtentYValue"5286">
<PARAM NAME "AUTOSTRAValue "0">
<PARAM NAME "SRC" Value="<%=RIPfile %
»
<PARAM NAME "cONTROL.Value" iMAGE
Window, controlpanel ">
<PARAM NAME "LL0OP" Value "1">
<PARAM NAME "NUMI0OPValue"0">
</object>
```

Using </OBJECT> can be used to mark the player, realize the audition window, and temporarily store the playlist in the server. This technology has strong applicability in self-learning platforms and will enhance the experience of using the platform. Students can browse the interface through this technology, download the corresponding audio and video content and so on. The use of multimedia computer technology can well use the statement of windows authentication, through the MD5 encryption algorithm in the teaching of teachers, students' information, and then prevent students from being attacked by SQL on the network. Use the security of the system to connect the information of the database together, and then ensure the security of the access database [10].

4   The Effect of Platform Application

In order to make the English self-learning platform based on computer technology better show good results, this paper firstly takes college students as the research object, and starts through the school. The first time is used before the platform, and the second time is used after the platform. Carry out the corresponding data processing.

(1) The students who are willing to study independently online will gradually improve. At first, only 6% of the students have improved their English proficiency from 80%. This fully shows that the function and ability of the platform can be improved by leaps and bounds in a short period of time. To achieve students' outstanding learning effect of English [11].

(2) From the perspective of teachers' teaching, the content of English courses has increased from 15% to 30%. This survey shows that the English self-learning platform can stimulate students' love of learning.

(3) From the perspective of teachers, the number of students' autonomous learning has gradually increased during the course of teaching, from 3% at the beginning

to 56%, which can indicate that the English autonomous learning platform will be influenced by teachers, and as for learning better [12].

5 Conclusion

This paper is mainly a learning platform developed by researching computer technology. This platform adopts the combination of B/S three-tier structure and asp.net technology, which can conduct independent learning on the basis of learning, and solve the problem of lack of parental supervision. Lack of their own initiative, so there will be a lot of missed problems in learning, these problems will lead to low learning efficiency of students. To promote and enhance the autonomy of learning, it is necessary to have enthusiasm for learning and to clarify the effectiveness of the autonomous learning platform. The platform embodies that it is mainly student-oriented, and also provides an autonomous open platform with an excellent platform for learning. Students can independently carry out their favorite learning content, the diversity of platforms, and control their own learning rhythm [13].

The platform can also play a dominant role in teachers, teachers provide class resources, and can have their own learning ability with sufficient English proficiency [14]. In addition, it can also supervise students' autonomous ability. By supervising students' test scores and corresponding class situations, using the self-directed learning platform can play an important role in the future learning process [15].

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