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Survey and Analysis of English Flipped Classroom Based on the Integration of Special and Popular Education Resources

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ABSTRACT

With the continuous development of educational technology, English flipped classrooms, as a new teaching model, have been widely applied in education. Due to physical conditions or other reasons, students in special education schools have poor adaptability to traditional teaching models. Therefore, applying English flipped classrooms in special education schools is of great significance. This article explores the needs and feedback of students towards English-flipped classrooms in the context of special education, as well as the impact of resource integration on the effectiveness of English-flipped classrooms, based on a survey analysis of English-flipped classrooms integrated with special education resources. A questionnaire survey analysed the role of English-flipped classrooms in students' learning interest, learning efficiency, and English oral expression ability, and suggestions for optimizing English-flipped classrooms were proposed.

Keywords: *Business English, English For Special Purpose, Teaching Resources, Integration, Platform*

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1. Introduction

The emergence and rise of business English in China can't be separated from the changes in the environment at home and abroad [1]. In the early 1980s, due to China's reform and opening up and the formulation and implementation of relevant policies, Chinese society began to contact foreign countries comprehensively. Moreover, the large-scale emergence of foreign trade has led to the demand for professional language talents. As an international common language, English talents are naturally in short supply [2]. At the beginning of the new century, the wave of economic globalization had a huge impact on China when China successfully joined the WTO, and the demand for business English talents was more urgent. In this context, China's major colleges and universities have begun to offer a variety of English majors for special purposes, of which business English has accounted for a very high proportion [3].

Business English is the most important language of education in China. The state and society have invested considerable energy and resources [4]. Coupled with

the rapid development of information technology represented by computers, a huge impact and conflict are formed in all education, including business English. In the present social environment, the defects and shortcomings of the traditional Chinese education model are gradually exposed, so China has begun to reform education from all aspects [5]. Against this background, this paper puts forward an empirical analysis of the integration of English education resources based on ESP vision, thus hoping to provide some reference for business English education reform and resource integration.

2. State of the Art

ESP is an acronym of the English vocabulary of "English for Specific Purpose"; it refers to the English that is used for specific majors or disciplines [6]. There are not many types of ESP. According to the category, it can be divided into three categories: science and technology English, social science English and business economics English, or academic English and professional English, such two categories [7]. For the study of ESP, the foreign start time is relatively early. In the 1960s, scholar Halliday first proposed the concept of ESP. After decades of development, under the promotion of other disciplines represented by linguistics, ESP has formed a complete system and theoretical basis [8]. The architecture of the whole ESP study is basically composed of "learn what" and "how to learn". In addition, it also contains curriculum, dictionary research, design and compilation, etc. [9].

Compared with foreign research, China's research in this area is slightly later, and it also has a clear background of the times [10]. The reform and opening up of the last century has led to a gradual increase in international trade in China, and the corresponding demand for professional English talents has grown, and the professional English talent education has gradually flourished [11]. In this context, the education sector has begun to conduct preliminary exploration and research on the ESP, and some references and advice have been provided for China's ESP education. With the deepening of the research on ESP in China's education sector, the study of ESP in Chinese academia has begun to mature [12].

3. Methodology

3.1. Design of Flipped Classroom Model under ESP Vision

Today, using information technology to teach in colleges and universities has been very common. Coupled with the reform of the university education model, the reform of teaching methods in colleges and universities is also promoted. This paper based on the empirical analysis of the integration of English education resources based on ESP vision, a kind of teaching resource integration platform based on ESP vision that takes the flipped classroom as the main body is designed. In addition to that, the platform provides teaching for students, then students can also use the platform for learning materials inquiries, classroom troubleshooting and other services. Because it is to take the flipped classroom as the main body of the platform, the focus part is explained here. The first is to explain the flipped classroom. Its emergence is inextricably linked to information technology, and it is a new type of teaching model that can achieve cooperation, communication and interaction between teachers and students in the classroom by using network technology and computer technology [13]. Unlike the traditional teaching mode in which the teachers teach and students do the homework, this teaching model regards students as the principal part of teaching activities; the classroom teaching objectives are completed by interacting, communicating and collaborating with teachers [14]. It is precisely because this teaching model takes students as the main body of teaching activities that students' learning initiative is effectively improved. Thus, its application scope in teaching activities at all stages is also relatively extensive [15]. Figure 1 shows the currently very common flipped classroom education in China.

Because the system designed is an ESP course, then its teaching must comply with the characteristics of ESP. According to the characteristics of ESP, the flipped classroom in the design teaching platform in this paper is divided into four areas: the teaching preparation stage. This stage is mainly the preparation of teaching resources. However, in this platform, the preparation of teaching resources can be carried out according to the characteristics of ESP. As English is used for special purposes, ESP's teaching objectives must be very clear. For example, knowledge, skills, professional feelings and many other goals must be clearly reflected in the teaching video. According to the different teaching objectives of ESP, teachers can make different teaching video resources and

store them in the platform database. Students can rely on the platform's account and password to use related videos of the classroom from the database to conduct autonomous learning before class. The second aspect is the learning stage. This stage is mainly the stage of student learning. Students retrieve the classroom teaching resources from the database to carry out independent learning through the account password or learn through the organization of teachers. The teaching resources include a variety of videos, exercises and ESP-related information stored in the database. Students can initially complete the teaching objectives by studying ESP data. The third aspect is the application evaluation phase. The completion of this phase is based on the learning stage; that is, the students complete the initial teaching objectives of the flipped classroom. The stage is that students arrange and sort out the knowledge under the coordination of teachers so as to complete the internalization of ESP knowledge. Then, the explanation and analysis are carried out to the part that students can't understand or the understanding of knowledge points has some deviation, and the further enhancement of the knowledge level is completed. The fourth aspect is the scenario simulation phase. As professional English with very strong practicability, ESP must strengthen the knowledge connection, and then it can grasp the knowledge well. Therefore, the scene simulation stage is especially added in designing the ESP flipped classroom in this paper. The implementation of this phase can be completed in class or after class. For example, business English can simulate a business negotiation on a platform, thereby prompting students to internalise relevant business English knowledge and skills, as shown in Figure 2.

Figure 1. Application and extensive of the flipped classroom in current educational reform

The above is the flipped classroom flow devised by ESP features. Through the teaching of the flipped classroom, students complete the internalization of the knowledge at the whole stage of the course, and they can fully master the knowledge of ESP from the aspects of theoretical knowledge, skill knowledge, professional emotional knowledge, etc., which is of great help to the student's employment. After the integration of teaching resources, the platform conducts the construction around the entire flipped classroom. Then, the network resources, teachers, students and ESP-related resources are integrated by using the flipped classroom. The major colleges and universities can not only use this platform to cultivate the school ESP professionals but also use the network platform to cultivate the staff in demand in the community to meet the needs of the community on the ESP talents. Then, the school's teaching resources are further used to avoid wasting teaching resources.

3.2. Design of Teaching Resource Integration Platform Based on ESP Vision

This study uses the flipped classroom to design the teaching resources integration platform. The main purpose is to integrate the network resources, college teachers, social needs, students, and other teaching resources so as to meet the needs of society for ESP professionals while avoiding the waste of school teaching resources. Because the platform's users are mainly teachers and students, the platform must meet the interface of human nature, progressiveness, practicality,

standardization, openness, extendibility, irrelevance, and many other conditions. Under the situation of meeting the above conditions, the problems that the system is not compatible, difficult to expand, difficult to use, and many other issues during the platform use can be avoided. Then, under these requirements, the teaching resources integration platform based on ESP vision is designed. The functional structure of the whole platform is shown in Figure 3.

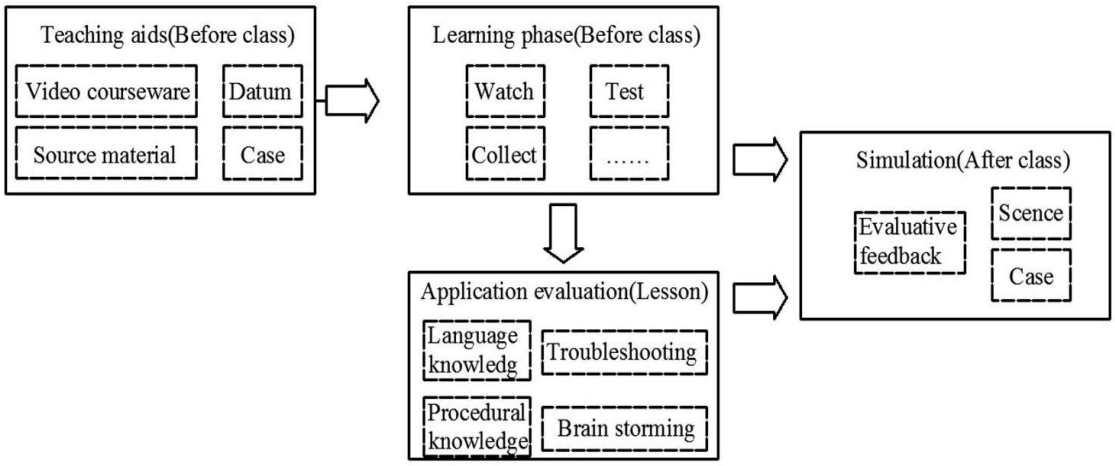

Figure 2. ESP flipped classroom process

All the resource integration platform functions are carried out by focusing on the teaching resources. The platform function is divided into two large parts, a total of five functions: management and resource. The management part includes personal management and platform management, such two functions. Personal management is mainly for users to manage their own information, resources and so on, while platform management is mainly used for platform managers to manage the platform, such as platform maintenance, user management, role management and platform-related data backup. Then, the resource part includes resource management, statistics, and browsing, which are the three main functions. Resource management includes publishing, review, edition, comment and recommendation. People who participate in resource management are too many, which can be either platform managers teachers or students. The main participants can complete most of the resource management on the platform through these platforms. For example, teachers

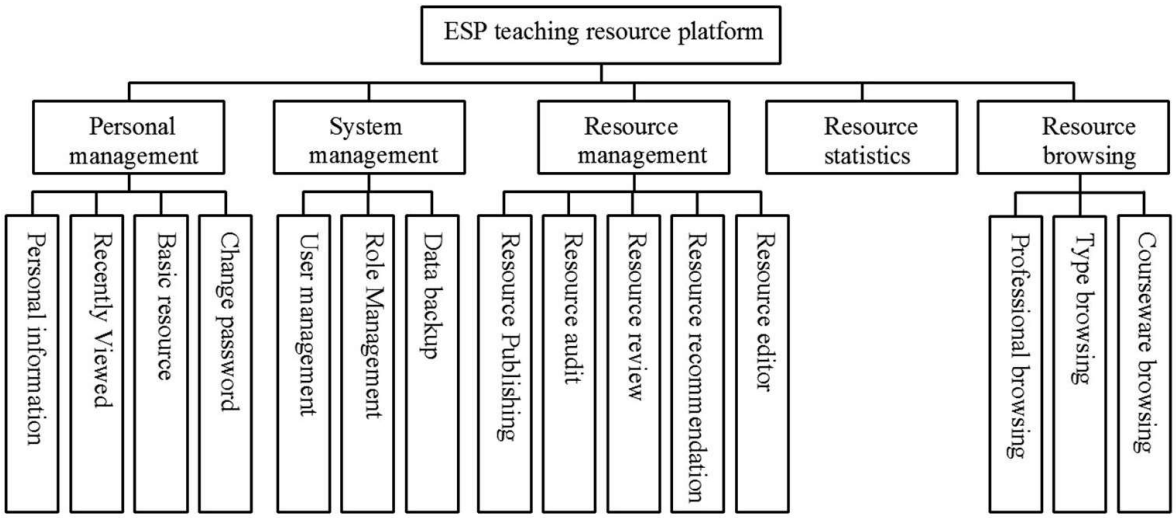

Figure 3. ESP teaching resource platform function diagram

can publish, edit, comment or recommend resources, and students can do the same. The resource browsing function is a relatively important function of the whole platform. If the first three functions are more or less affiliated with the platform, then the resource browsing completely belongs to the main function of the platform. The flipped classroom, resource browsing and other online education are carried out in this functional area. In this functional area, ESP teaching resources, including business English, science English and social science English, are provided. Teachers and students can select the ESP teaching resources that they want to browse in the browser area according to their own needs.

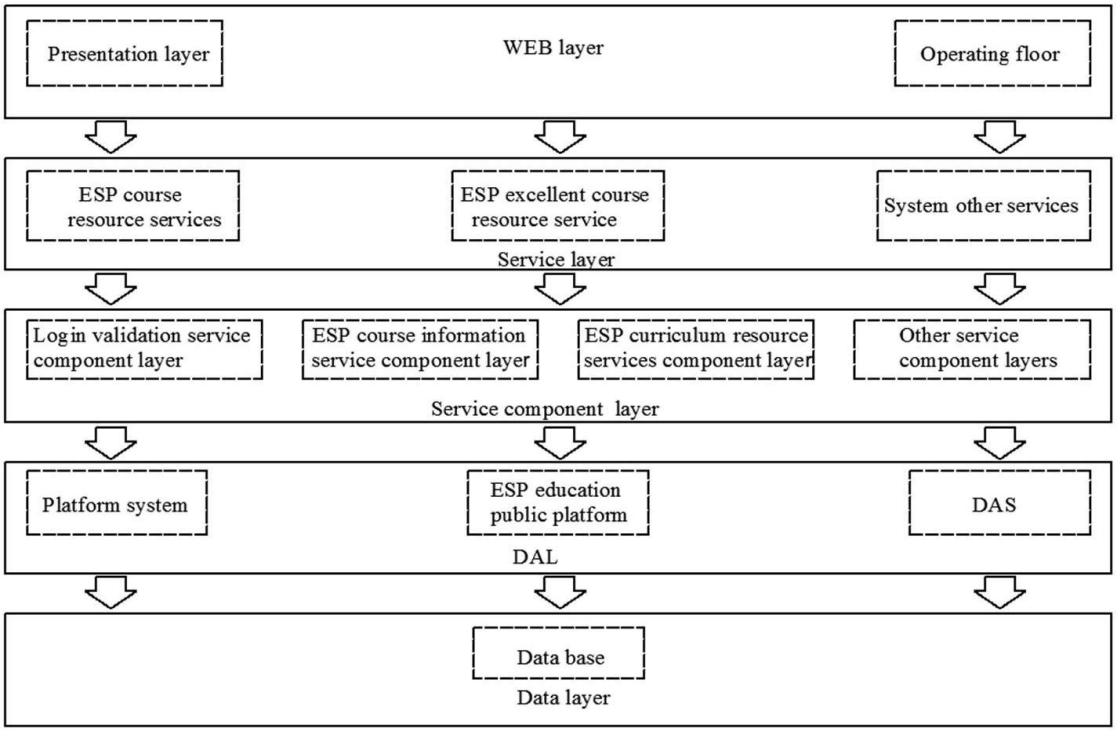

Figure 4. ESP teaching resource platform system

After determining the main functions of the entire resource integration platform, it is necessary to make the architecture for the platform. The architecture of the resource integration platform system in this paper adopts the principle of SOA service architecture. Therefore, the architecture process follows the principles of SOA service architecture. The platform system is divided into five levels: the WEB layer, service layer, service component layer, data access layer and data layer. The WEB layer is an interactive interface used for the interaction between users, as well as users and platforms. All of the user's activities are implemented through the WEB layer. The MVC framework designs the entire WEB layer, which Servlet JSP / HTML then achieves. The service layer is mainly used to implement the platform logic encapsulation; the service components are formed after the service component encapsulation. The entire service layer includes ESP course resources, ESP class service and other services; the main function of the service component layer is to refine the service module, thus providing users with more detailed services, including landing verification, ESP course information, ESP class and other services such four component layers. The function of the data access layer is mainly to provide an interactive platform for service component layers and databases. The database is the bottom of the entire platform; its main function is to store various ESP course-related resource data and provide a platform with the data used for human interaction, as shown in Figure 4.

4. Result Analysis and Discussion

After completing the design and architecture of the ESP teaching resource integration platform, this paper adopts the related computer software to realize the entire teaching resource integration

platform. Figure 5 shows the platform login interface. From the figure, it can be seen that the entire interface is very simple. Users can log in to the platform only through the user name and password, then select the relevant ESP teaching resources to study independently or participate in the ESP flipped classroom organized by teachers by their own needs. However, ordinary users can only enter the resource platform by the user name and password to distinguish. However, teachers and platform managers can access the system by swiping cards and then carrying out resource publishing, change, remote ESP teaching, uploading teaching resources, and other activities. In addition to that, the system faces college students; the outside personnel who are interested in ESP can also log in to the platform to learn by way of registration.

Figure 5. ESP teaching resource integration platform login interface

After achieving the ESP teaching resource platform through a month of Business English major probation at the C College of Higher Education, this paper conducted a simple questionnaire survey so as to test the effect of the English teaching resources platform based on ESP vision. The objects of the questionnaire were mainly students and teachers. 520 questionnaires were given out, 478 were recovered, and 426 were valid questionnaires. The recovery rate was 91.92%, and the effective rate was 89.12%. Then, after the computer software arrangement, Figure 6 and Figure 7 were obtained. Figure 6 shows a survey of platform satisfaction degrees. It can be seen from the Figure that the number of people who were satisfied with the ability of platform integration teaching resources accounted for 84.37%; the proportion of the people who felt that the ability of platform integration ESP teaching resources was general was 9.74%; the proportion of unsatisfied people was 5.89%. During the survey, many people surveyed said that the platform that integrated the business English teaching resources was surprising. As the platform's main body, the flipped classroom teaching method interested teachers and students. The teaching methods adopted by the schools in the past were monotonous traditional teaching methods. Even if the teaching adopted the multimedia classroom to teach, there was still no way out of the traditional teaching methods, and students were very bored in the process of learning business English. Most teachers and students said that compared to the previous way of finding teaching resources through the library and network platform, the platform integration teaching resources were more convenient; students could find different categories and different stages of education resources only by logging in to the teaching platform.

Figure 7 shows the investigation of the shortcomings of the ESP teaching resources integration platform. This paper summarized the shortcomings during the platform trial period from the questionnaire results. In addition to the platform's problems because of the technical problems, there are three more obvious problems. The first is the platform theme – the problem of unclear

curriculum objectives of the flipped classroom during the teaching period. Teachers and students are too focused on business English reading and translation, while the cultivation to students' comprehensive ability is still lacking. For business English, such a very practical ESP, the deviation of teaching objectives will lose the role and significance of ESP. The second is that the teaching materials used lack pertinence, and there is a large deviation between the teaching materials and business English practical and professional characteristics. The third is the lack of curriculum evaluation and testing means. These three problems are the three biggest issues, except the platform technical issues. The emergence of these three problems shows that although the integration of teaching resources can be achieved technically, the teaching concept still closely follows the technical level of development. Thus, the correct use of ESP teaching resources can be ensured.

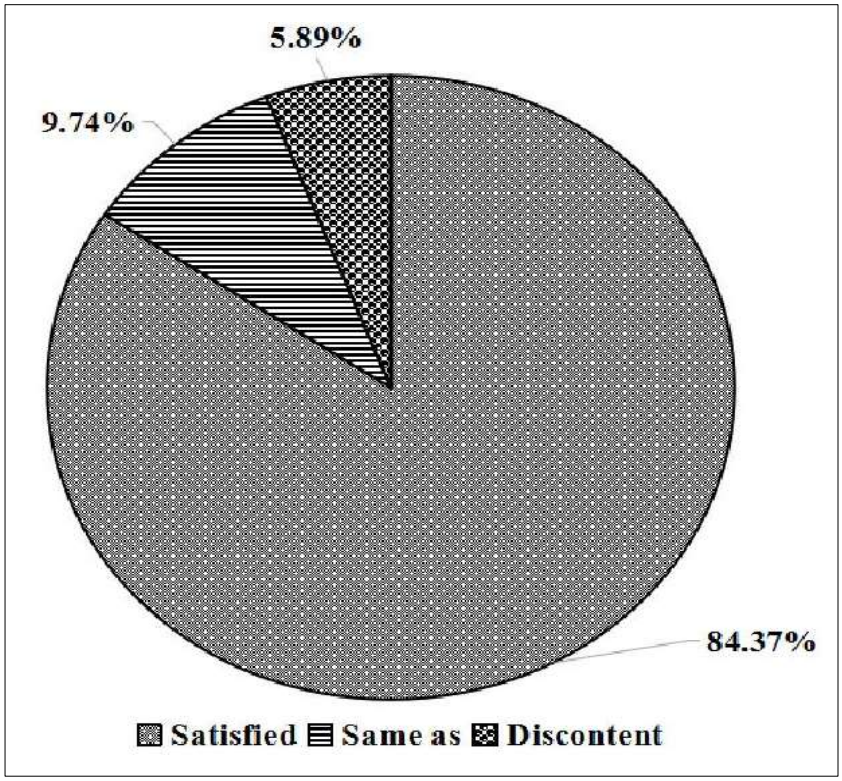

Figure 6. ESP teaching resource integration Platform satisfaction survey

5. Conclusions

In the increasingly deepening economic globalization today, the demand for English for special purposes is increasing, especially as a global trade universal professional English, the demand for business English talents is more ardent. So, the personnel cultivation of English for special purposes has become the country's top priority. Against this background, this paper puts forward an empirical analysis of the integration of English education resources based on ESP vision. According to the use of the flipped classroom as the main body, an ESP teaching resources integration platform around the flipped classroom was established. A questionnaire survey was then conducted after a trial in C College. The survey results show that over 80% of teachers and students are pleasantly surprised and satisfied with the resource integration platform. This result not only proves the success of this kind of teaching resource integration platform design but also proves that the ESP teaching resource integration platform is not common, indicating that there is still a lot of space for integrating English teaching resources in our country. In addition, the questionnaire also proves that the teaching thoughts and ideas need to be improved while integrating teaching resources. Otherwise, the integration of resources will be meaningless.

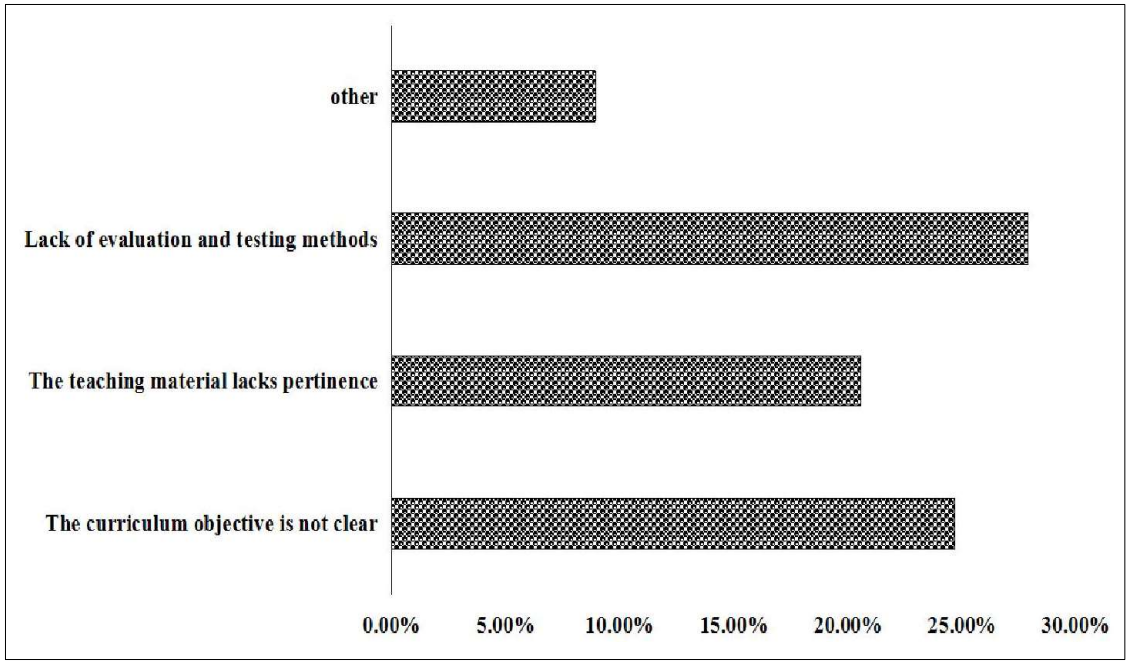

Figure 7. Survey of non-technical issues on the ESP platform

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