Feasibility Analysis of Online and Offline Combination in College English Classroom Based on Big Data

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Abstract: The arrival of big data era has brought revolutionary challenges to traditional English classroom teaching. Therefore, based on large data, this paper will analyze the feasibility of online and offline combination in College English classroom. With the rapid development of the “Internet +” era, its application in the education industry is becoming more and more extensive. After studying big data, this paper analyzes the opportunities and challenges brought by online and offline mixed teaching. The results show that the establishment of “online+offline” hybrid learning mode can improve students' interest in English learning and enrich the teaching content. Therefore, it is necessary to deepen the core concept of the integration and development of information technology and English classroom teaching reform to promote the integrated development of English classroom teaching to in-class and out-of-class, online and offline.

1. Introduction

The era of big data has developed with the development of computer technology and the Internet. It not only affects all aspects of our life, but also deeply affects the development of education [1]. Based on the construction of high-quality educational resources and information-based learning environment, we will promote the in-depth integration of information technology with education and teaching, with the innovation of learning methods and educational models as the core “[2]. The design and development of a situational online video teaching mode that supports a variety of learning methods. At the same time, in the “internet plus” era, teachers are required to keep pace with the times and become teachers of the times. Teachers of the times demand teaching reform of the times-combined teaching [3]. Maker does not necessarily have to create materialized products, and a novel and interesting classroom is also the creation of spiritual products [4]. “Internet +” is rapidly changing our lives. The rapid advancement of Internet technology and cloud computing and Internet of Things under big data are widely used in education, communications, transportation and medical services. Its extensiveness, practicality, authenticity and convenience have a huge impact on our work, life, study and education [5]. It can be said that “big data” is another subversive technological change in the IT industry after cloud computing and Internet of Things. By exchanging, integrating and analyzing big data, new knowledge, new wisdom and new value can be discovered.

With the era of big data and cloud technology, the US Internet data center defines “big data” as a new technology architecture that captures value from large-capacity data through high-speed capture, discovery, and analysis [6]. It changes our educational thinking, ideas, methods and forms, and re-establishes the educational evaluation model. This plan lays the theoretical foundation for the “online + offline” hybrid teaching. Its characteristics are reflected in the following aspects: the teaching time is short, generally around 15 minutes [7]. The teaching content is small, the knowledge points are concentrated, summarized, the goals are clear, and the pertinence is strong. The resource capacity is small and it is easy to download and learn. Resources constitute a “situational” case that is concrete, true, classic, interesting and innovative [8]. As educators often say, “the development characteristics of the new era call for the teaching methods and means of the new era”, college English teaching in the era of big data must conform to the social development and realize the transformation from “teaching” to “learning” [9]. The booming global customer creation movement provides a new opportunity for educational innovation and reform. customer
creation education adheres to the educational concept of “open innovation and inquiry experience” and integrates information technology [10]. Combined teaching based on big data, massive open online course and flip classroom are widely used in English teaching in schools at all levels and types at home and abroad. Smart English teaching turns school classroom into smart campus and smart classroom.

2. Big Data Background

2.1 The Concept of Big Data

Big data refers to the massive, high-growth rate and diversified information assets with stronger decision-making, insight and process optimization capabilities under the development of the Internet and information technology. The rapid development of computer technology and the wide application of the Internet in the education industry have led to the emergence of advanced modern teaching technology. Compared with the situation of students' passive learning under the traditional teaching mode, the inverted classroom pays more attention to pre-class learning. If college English teaching is to be truly personalized and diversified, attention must be paid to the needs of “learning”. At the same time, teachers should actively use modern methods and means to promote teaching. The new education model with “Creating Middle School” as the main learning method and the purpose of cultivating various innovative talents has developed rapidly in today's big data era. College English teaching mode, curriculum setting, teaching resources, team building and other aspects are facing new challenges based on network and information technology. “College English combined teaching mode - combined with the application of teaching in the flip classroom” is such a teaching reform and experiment in the era of big data. The concept of “big data” is proposed to eliminate the need for random analysis (sampling survey), but to analyze and process all data and apply it to practice. This kind of logical relationship is the driving force behind our analysis of problems and solutions.

In recent years, the number of studies related to this research project is increasing. This shows that the research project is being paid attention to by many scholars. Figure 1 is the quantitative trend of related research in recent years.

![Figure 1 Trends in the number of literature studies](image)

In the college English classroom teaching, the formative assessment has a significant positive correlation between the student's college English learning and the final written test results as shown in Table 1.

<table>
<thead>
<tr>
<th>Class</th>
<th>Usual grades</th>
<th>Final score</th>
<th>Pearsin</th>
<th>Sig (two sides)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Standard deviation</td>
<td>Mean</td>
<td>Standard deviation</td>
</tr>
<tr>
<td>Experimental class</td>
<td>79.55</td>
<td>3.548</td>
<td>71.69</td>
<td>2.154</td>
</tr>
<tr>
<td>Control class</td>
<td>85.69</td>
<td>5.695</td>
<td>64.58</td>
<td>4.698</td>
</tr>
</tbody>
</table>
2.2 Education in the context of big data

Education in the era of big data should pay close attention to the essential functions of education. It is necessary to regard educating people as the fundamental task of the school and to regard the quality of educational talents as an eternal theme. Teachers do not explain in class, but make short and precise teaching videos. Students enter the class to prepare for difficulties and doubts, and then communicate and discuss with teachers in class. In the era of big data, teachers can use the modern information technology and the “flip classroom” mixed teaching model to create a combination of teaching. This mixed teaching mode not only allows students to have more opportunities to use the language. Taking the author's school as an example, college English teaching has been reduced from 124 hours to 64 hours to 56 hours. In terms of class type, listening and speaking classes have been deleted, and the content of listening and speaking classes has been selected and arranged in intensive reading teaching, and an independent learning platform has been added. The class hours of college English teaching present addition and subtraction. College English teaching hours are reduced, the number of hours is reduced, the teaching term is reduced, the English curriculum and hours are changed from basic to professional, and English has no right to speak. English learning resources are extremely rich, and learning methods and approaches vary from person to person. Highlight the all-round development of human beings, bring the cultivation of quality and comprehensive ability into the top-level design of talent cultivation, and strive to build a whole-course and all-round quality education system integrating inside and outside the class and inside and outside the school.

3. Opportunities and Challenges Brought by Online and Offline Mixed Teaching

3.1 The Concept of Online and Offline Mixed Teaching

“Online” teaching mainly refers to the application of network teaching platform. Education will no longer be a subject of social science and moral conscience inherited by ideas and experiences, but will become a real empirical science. It can not only realize students' learning subjectivity, strengthen students' in-depth understanding, mastery and consolidation of the content, and create more opportunities to practice oral English. The development of the big data era is an important guarantee for the promotion of integrated teaching. Teachers and students are two factors that affect the development of integrated teaching from the perspective of teaching. Taking the surveyed schools as an example, the British teaching and research section of our school has completed a complete online teaching system for tourism English, business English and hotel English in one year. Based on the analysis of the questionnaire data, the teaching plan for the first stage was drawn up. Because the classes are held together, some students think that they can't spot check themselves in the class, and they often have to recite them suddenly before the class starts. Students can apply what they have learned to actual production and life, transform knowledge into abilities, and make learning more purposeful and motivating. Most of the college English teachers do not have professional photography and other techniques, and their ability to use video recording video is also common. How to arrange the classroom teaching content reasonably and properly is also the focus of the teachers. Each unit involves pre-class introduction, key knowledge explanation, real-life application of knowledge, and post-class knowledge of knowledge. The knowledge is comprehensive and difficult.

Because it is impossible to compare the increase of the total score before and after the experimental class and the control class, only the relative increase of the experimental class and the control class before and after the experiment can be compared. The magnitude of the increase in individual scores is shown in Table 2.
Table 2 compares the individual scores of the experimental class and the control class before and after the experiment

<table>
<thead>
<tr>
<th>Projects</th>
<th>Composition</th>
<th>Hearing</th>
<th>Choose and fill in the blanks</th>
<th>Paragraph matching</th>
<th>Read carefully</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difference before experiment</td>
<td>-0.50</td>
<td>-1.68</td>
<td>-0.24</td>
<td>-0.49</td>
<td>2.68</td>
<td>2.57</td>
</tr>
<tr>
<td>Difference after experiment</td>
<td>0.54</td>
<td>0.58</td>
<td>0.54</td>
<td>0.57</td>
<td>0.00</td>
<td>1.17</td>
</tr>
<tr>
<td>Difference before and after experiment</td>
<td>0.94</td>
<td>4.3</td>
<td>0.659</td>
<td>0.58</td>
<td>0.48</td>
<td>-1.68</td>
</tr>
</tbody>
</table>

3.2 Opportunities and Challenges Brought by Mixed Teaching

“offline” teaching has two meanings. One is the traditional classroom and the other is the practical place for practical training. First of all, the widespread application of information technology in the era of big data has had a great impact on traditional teacher work. This immutability has prevented teachers from changing their ideas and educational methods. When faced with the advent of big data, they will be at a loss. At present, the university has been able to ensure the stable operation of various teaching software in the computer room construction, and the computer configuration, multimedia and network facilities have been quite perfect. Can cultivate students' autonomous learning ability. The mixed teaching of college English can be based on the most advanced modern information technology. Using multimedia teaching methods to provide external stimuli with graphic and audio images, the classroom becomes more realistic and fulfilling. Add a group task PK link, set reasonable scoring standards, select the best team, and enhance students' sense of competition. Due to the influence of students' choice of majors, student selection courses, student selection of teachers, student selection of teaching materials and informational teaching, students carry computers into the classroom and learn. Teachers do not even have to do courseware, and do not have to correct their assignments. Instead, they have professional group courses. system. In the era of big data, how to organize college English teaching, how to take on the new roles and tasks of college English teachers, how to improve their network and information technology application capabilities and data analysis capabilities.

4. Conclusion

Under the Internet era, the development of the college English mixed teaching model will greatly enhance the motivation and efficiency of students' learning. At the same time, it also has a certain role in supervising the professionalism and ability of teachers. It is an indispensable teaching method in English teaching in the modern era. As an educator, we only have to change our minds, have the ability to judge, adapt and keep moving forward. The characteristics of college English teachers in China and the characteristics of college students' learning can well meet the human resource requirements of implementing the inverted classroom teaching mode based on combined teaching. In this context, college English teachers should actively learn and master the corresponding teaching teaching theories and teaching models. Promoting college English teaching can keep up with the development of the times, making the college English course a course that students really like. The learner-centered creative education shows us that under the background of college English, the enthusiasm of students to participate in the classroom is continuously improving. According to the characteristics of the subject, we should set up reasonable guest creation projects and optimize the curriculum system in depth, which can improve students' English learning skills as well as their information literacy. Encourage students to take part in all kinds of oral English, English songs, English speeches, English writing, English drama, English evening
parties, English debates and other competitions to improve students' English skills.

References


