Innovative English Teaching Modes
Based on Higher Education Informatization

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Abstract
Information teaching modes are with limited application and low informatization degree in the teaching process of English major. This paper researches on innovative English teaching modes based on higher education informatization. First of all, this paper analyzes the necessity of applying information-based teaching methods to English major in our country. Then, it studies the present status of English information teaching in colleges and teachers' information teaching innovation ability through an empirical research. Finally, it puts forward a series of innovative English teaching methods based on higher education informatization. The results show that the innovative English information teaching methods can effectively improve students' learning effects and teachers' information teaching abilities, providing useful reference for the improvement of English information teaching innovation level in colleges and universities in China.

Keywords
Information Technology • English Information Teaching • Teaching Mode Innovation • Higher Education

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The development of informational education mode not only provides a new development direction for original teaching modes and methods, but also plays a very important role in improving the efficiency of daily teaching. There are different views on the definition of education informatization in academic circles. Based on the modern information technology, the education informatization is to optimize teaching resources and improve teaching modes. Therefore, building and improving students' information literacy is an important goal and development direction in the informational education mode (Ding, Cheng & Gao, 2015). In terms of the core purpose, the education informatization, as an inevitable trend of information society development, plays a crucial role in effectively integrating education resources and promoting the informatization of traditional teaching modes by the application of information technology (Liu & Ya, 2013). In addition to the theoretical support for education informatization, it has an influence on English teaching. Based on the investigation of most college English teachers, the research shows that (Yu, 2018; Fang, 2016) currently teachers' information teaching abilities include not only the application level, but also a whole understanding on information theories in the process of college English teaching. The acquired education information resources are processed and filtered. The valuable information resources are used in the teaching process to achieve maximum benefits.

Information teaching modes are with limited application and low informatization degree in the teaching process of English major. This paper researches on innovative English teaching modes based on higher education informatization. First of all, this paper analyzes the necessity of applying information-based teaching methods to English major in our country. Then, it studies the present status of English information teaching in colleges and teachers' information teaching innovation ability through an empirical research. Finally, it puts forward a series of innovative English teaching methods based on higher education informatization.

Necessity of English Information Teaching in China

Throughout the application of information technology in college teaching, it mainly focuses on the audio-visual combination to express education information resources and transmit teaching contents vividly. The use of information technology can effectively promote students’ enthusiasm, improve the active atmosphere of classroom teaching, broaden students’ horizons, and enrich teaching contents. At present, it is necessary to carry out information-based teaching modes in college English teaching in China.

Firstly, the information technology can be used to re-optimize the English teaching environment and stimulate students' interest in learning English. As an important factor to effectively improve learning efficiency, cultivating students' interest in English learning will play a positive role in the establishment of a strong learning atmosphere and the cultivation of independent learning ability. In the actual teaching process, college English teachers can use the multimedia technology to enrich teaching contents and transfer the emotion and culture contained in relevant courses to students, so that students will have further interest in learning English vocabulary or sentences.
Secondly, the application of information technology can effectively promote students’ learning and deepen their memory of learning contents. In the process of human learning, the acquired external contents and knowledge are often transmitted to the brain through external senses, so as to obtain the final knowledge.

Therefore, the multimedia information technology can provide students with more diversified sensory stimuli in the college English teaching process. Related studies show that multi-sensory learning has a positive effect on the learning efficiency and results in the teaching process. The information technology can fully mobilize students’ sensory ability in the process of English teaching, changing the traditional single teaching mode to a multi-sensory English information teaching mode.

**Analysis of Current Situation and Innovation Ability of English Information Teaching in Colleges and Universities**

College English teachers play a key role in promoting the English information teaching. Teachers’ application and understanding level of informatization are crucial to promote the English information teaching. At the same time, information-based teaching modes are carried out in the English teaching process in colleges and universities. Teaching effects need to be obtained.

In order to get a better understanding of the above results, this paper analyzes the current English teachers’ information teaching ability and actual effects of information teaching modes on the basis of the investigation. To ensure the final results are widely representative, 100 English teachers from five universities are selected as the research objects, and the types of universities are divided into comprehensive and normal universities. A hundred questionnaires are issued in total and 98 valid questionnaires are recovered, with a 98% effective rate. In addition, five English teachers are selected for face-to-face interviews to have a better understanding on the current situation and problems faced by English teachers in the process of information teaching.

After the data statistics and analysis, the investigated English teachers are divided into expert teachers, key teachers, and young teachers in accordance with the teaching experience to have a comprehensive analysis on the application and understanding level of informatization in the process of teaching.

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Statistics of Cognitive Ability of College English Teachers in Information Teaching</th>
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<tr>
<td></td>
<td>N</td>
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<td>---------</td>
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<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Expert teachers</td>
<td>24</td>
</tr>
<tr>
<td>Key teachers</td>
<td>58</td>
</tr>
<tr>
<td>Young teachers</td>
<td>16</td>
</tr>
</tbody>
</table>

From Table 1, it can be seen that the cognitive ability of expert teachers in information teaching is relatively high, with an average value of 21.8766, while that of young teachers is relatively low, only 17.1246. After analyzing the teaching experience of expert teachers, it is found that the teaching age of expert teachers is
generally more than 15 years. Their sound knowledge structure and abundant practical experience in teaching English can effectively combine the daily English teaching with information-based teaching methods.

But it should be pointed out that there are big differences in cognitive ability among expert teachers. Even with a relatively rich experience in teaching practice, teachers have different cognition and understanding in information teaching. This result is mainly reflected on the standard deviation of cognitive ability of college English teachers in information teaching. It can be seen that the average discrete degree of expert teachers is the largest, reflecting their differences in cognitive ability.

In addition to the analysis of cognitive ability of English teachers in information teaching, the characteristics of English teachers in teaching practice are also studied to better understand the higher education informatization. The statistics are also used to research the innovative knowledge ability of English teachers in information teaching, including expert teachers, key teachers, and young teachers.

It can be seen from Table 2 the innovative knowledge ability of young teachers is higher than that of key and expert teachers with the help of information technology, with an average score of 20.0562. While the innovative knowledge ability of expert teachers is the lowest. The reason is that young teachers’ teaching age is usually within three years with more professional and systematic information teaching skills and techniques. Therefore, they can fully apply the information technology in the teaching process to process and edit teaching resources. At the same time, young teachers are generally open to accept new things and innovative with higher practical ability and advanced thinking concepts, showing obvious advantages in the innovative knowledge ability of college English teaching.

Table 2

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Standard error</th>
<th>Confidence Interval of Mean 95%</th>
<th>Minimum value</th>
<th>Maximum value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>lower limit</td>
<td>Upper limit</td>
<td></td>
</tr>
<tr>
<td>Expert teachers</td>
<td>24</td>
<td>18.4510</td>
<td>1.2354</td>
<td>.27689</td>
<td>17.6854</td>
<td>18.8964</td>
<td>18.00</td>
</tr>
<tr>
<td>Key teachers</td>
<td>58</td>
<td>17.0865</td>
<td>1.38743</td>
<td>.18634</td>
<td>17.0023</td>
<td>17.5490</td>
<td>16.00</td>
</tr>
<tr>
<td>Young teachers</td>
<td>16</td>
<td>20.0562</td>
<td>1.15342</td>
<td>.23432</td>
<td>18.6480</td>
<td>19.8740</td>
<td>19.00</td>
</tr>
</tbody>
</table>

On the other hand, the average discrete degree of young teachers is small according to the standard deviation, indicating the universality and balance of innovative knowledge ability of young teachers in information teaching. The teaching mode innovation with the aid of information technology has become the common feature of young teachers in colleges and universities.

Innovative English Teaching Strategies based on Higher Education Informatization

Building a more Efficient and Convenient Communication Mechanism for Teachers

Based on the investigation, it is found that teachers in colleges and universities including young teachers, key teachers and expert teachers have some advantages and disadvantages in English information teaching. It requires promoting the communication and interaction to make use of different advantages and utilize the
positive role of information technology in English teaching. For the teaching practice, the quality and information of information-based teaching modes can be obtained by a variety of channels. College teachers are encouraged to discuss the innovation and development of English information teaching through resource sharing and innovation reviews, as well as to strengthen communication and exchanges about the information technology using techniques in the daily teaching, realizing mutual learning, mutual aid and mutual improvement.

**Strengthening the Proportion of Information Application Assessment in English Teacher Recruitment**

At present, the information application assessment has already been considered in the college English teacher recruitment, but the assessment contents are more traditional on the whole. Therefore, it is necessary to increase the assessment of information application ability in college English teacher recruitment, so as to enhance the ability and proficiency of college English teachers in using information technology in the daily English teaching.

**Creating a Learning Atmosphere to Obtain more High-quality Teaching Resources by means of Informatization**

In the daily teaching process, the most important teaching resources come from the daily accumulation and relevant textbooks. With the constant changes of the times, college English teachers are required to provide students with more updated professional English knowledge in the teaching process especially considering the social demand for application-oriented English talents. Thus, college English teachers should establish a more comprehensive information teaching mode to guide students to conduct research-based and cooperative learning in the process of English teaching by using high-quality education resources and application-oriented software. A teaching situation close to the times is also constructed through the modern information technology to optimize and improve English teaching effects.

**Conclusion**

With the advent of the information age, the information technology has been applied in all aspects of the society, including traditional English teaching modes, which have been changing with the influence of informatization. Under the informatization background, college English teachers need to make full use of information technology to obtain more high-quality online teaching resources and build a more efficient and convenient learning platform for students. In addition, college English teachers also need to shift their role from traditional face-to-face lecturers to interactive assistants in the daily teaching, and continuously promote the college English teaching into a digital era, so as to establish new English teaching modes that give full play to students' autonomous learning ability and personal interests.
References


