

Application of Multimedia Technology in the English Teaching of College Students Majoring in Art

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Abstract: College students majoring in art are an important part of college students, and the research on their educational management methods has also received more and more attention from society and schools. Their English proficiency not only affects their overall development. The purpose of this paper is to study the application of multimedia technology in the English teaching of art majors. The concept of multimedia technology and courseware and the related resources of college English multimedia-assisted teaching are studied. Then, carry out investigation and research to explore the current situation of English learning adaptability of non-English major students in the multimedia technology environment, and find out the problems of English learning adaptability. A questionnaire survey was conducted on the current situation of English learning adaptability with 250 first-year students majoring in art in a university as the survey objects. Then, using SPSS data statistics software to carry out descriptive statistics on the collected quantitative data, among the four dimensions of the experimental results, the average values of the two dimensions of learning attitude and teacher's teaching adaptation are between 3.5 and 4.5 points, indicating the fitness better.

1. Introduction

In English education research, art students are an important direction of English education. Secondly, the cultural level, art foundation and educational quality of college students majoring in art are unbalanced [1-2]. This characteristic is mainly manifested in that the cultural quality of art students is relatively low compared to students of other majors, and the foundation of art is uneven. Some students choose the path of fine arts because of their personal hobbies, and have accumulated basic knowledge of fine arts for several years before university [3]. However, many art students are forced to choose art majors and paths due to poor performance in cultural courses and it is difficult to enter the university through the ordinary college entrance examination. The cultural level and art foundation they show are also different [4]. And the development requirements of college students' English education quality do not match. Therefore, it is more urgent to carry out the research and practice of the English education work of art college students in view of the imbalance between the professional quality and English cultural level of art college students [5].

In English teaching, aids such as multimedia play an important role, and Sulaiman S conducted

an empirical evaluation of how Malaysian tertiary and college lecturers from non-creative design fields can design effective multimedia teaching aids to address these challenges. Although the research sample is limited, it has a wide range of important reference and guiding significance for other local and international fields and related multimedia platforms. The results of this study suggest that there is a need to re-address the issues that instructors understand when designing multimedia teaching aids in order to maintain an effective teaching process [6]. Marii O examines the creation of multimedia models and traditional teaching for fourth grades (10-11 years). The study included a sample of 142 students divided into two groups: E (experimental) and C (control). Students in group C were taught in the traditional way, and students in group E were taught using created multimedia models. At higher cognitive levels (analytics), students did better on retests than on posttests. In the application of fourth grade geographic content, multimedia teaching (MT) should be given priority over traditional teaching (TT) [7]. It is necessary for us to make full use of modern educational technology in the teaching and autonomous learning of college English, to make the English teaching model more systematic and the English learning model more individualized, and to gradually improve the level of English teaching and learning with the help of multimedia networks [8-9].

This paper only puts forward some ideas on the appropriate application of multimedia in the English classroom teaching of art students. Through the method of questionnaire survey and research, select art students as the research objects, and study whether the integration of multimedia technology and English teaching can promote the efficiency and effect of English teaching. It has great advantages, which greatly improves the enthusiasm of students in English learning and improves the efficiency of English teaching.

2. Research on the Application of Multimedia Technology in the English Teaching of College Students Majoring in Art

2.1 Multimedia Technology and Courseware

Multimedia technology is a comprehensive media system integrating text, sound, graphics, animation, video and other media. Its various composite functions rely on electronic computers to realize, so it is also called computer multimedia technology. Multimedia technology has three elements: digital multimedia information, integrated processing, and human-computer interaction [10-11].

Courseware is a relatively complete teaching assistant teaching software for one or several knowledge points. According to the application platform, it can be divided into online courseware and stand-alone courseware. The multimedia courseware described in this paper refers to the use of multimedia technology, comprehensive use of text, sound, graphics, animation and other forms to record, store, reproduce, Instructional media for interactive delivery of educational information [12].

2.2 College English Multimedia Assisted Teaching Resources

(1) Fast reading training software

Ace Reader Pro is an English reading software that can help learners to carry out reading self-assessment, improve reading speed, correct reading errors, and provide visual motor training in the form of games [13]. In the process of using Ace Reader Pro for the first time, the system will automatically record the user's speech speed, intonation and pronunciation. When using it again, the system will automatically generate a speed that is twice as fast as the original speed. Gradually improve their reading speed in the environment. As long as the Ace Reader Pro software is installed

on the mobile learning terminal, self-learning can be carried out at any time [14].

(2) Application of reading courseware

MCALL is a courseware with hypertext link function, which is a historical change in English learning. It surpasses the traditional linear mode of books and teachers' explanations, and makes it possible for learners to learn English reading independently [15]. Use MCALL reading courseware to practice English reading, which greatly improves the efficiency of English learning. When encountering unfamiliar vocabulary or grammar, you no longer need to look up the English dictionary, just click the hypertext link, because this hypertext link can connect any word or sentence to the dictionary and grammar; in addition, the MCALL reading courseware provides a controllable speed of sound, learners can adjust the speed of sound according to their own English learning level, plus video animations that match the sound, learners' English reading can be learned in a vivid and realistic language environment [16].

(3) Application of translation software

In English translation learning, you often encounter some difficult words or sentences. At this time, you need translation software to help. The most commonly used is Google translation software. Google software supports translation between more than 50 languages, bidirectional translation between English and Chinese, including translation of vocabulary, short sentences, long difficult sentences and even web page translation, just need to input the content to be translated and select the appropriate translation language [17].

(4) Writing practice on personal homepage

There are many kinds of blog clients, such as Sina, Tencent, Sohu, etc. Users can post logs on their own Weibo homepage, and can also see the diaries of friends [18]. Using Blog for English writing is instant and easy to revise. Since the articles are arranged in time order, it is convenient to consult. The Internet has the characteristics of fastness and connectivity. Publishing an English diary on the Blog is convenient for teachers to comment on the article, and students can revise it in time, making Blog writing a form of "writing, commenting, revising, writing, commenting, and revising again and again". The process of a virtuous circle is very helpful for improving the writing level of students.

3. Investigation and Research on the Application of Multimedia Technology in the English Teaching of Fine Arts College Students

3.1 Data Collection

This research selects art students from 5 classes of college English courses in a university as the survey objects. A total of 250 questionnaires are distributed, and 250 questionnaires are effectively recovered, with an effective recovery rate of 100%. A questionnaire survey was conducted on the adaptability of English learning in the environment of multimedia technology, and quantitative data were collected to investigate the current situation and adaptability problems of art students in English learning, so as to promote students to better adapt to college English learning.

3.2 Data Preprocessing

The reliability test of the survey scale in this study is mainly realized by analyzing its internal consistency coefficient (also known as Cronbach's alpha value). We used the data statistical analysis software SPSS24.0 to test the reliability of the scale, and found that the overall internal consistency coefficient of the scale was 0.828 (generally, a scale with ideal reliability has an internal consistency coefficient greater than or equal to 0.8). It shows that the scale has high internal consistency and the overall reliability of the scale is good. The t-test formula used in this paper is as

follows:

$$t = \frac{\bar{X} - \mu}{\frac{\sigma X}{\sqrt{n}}} \quad (1)$$

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{(n_1 - 1)S_1^2 + (n_2 - 1)S_2^2}{n_1 + n_2 - 2} \left(\frac{1}{n_1} + \frac{1}{n_2}\right)}} \quad (2)$$

Among them, formula (1) is a single population test, s is the sample standard deviation, and n is the number of samples. Equation (2) is a double population test.

4. Analysis and Research on the Application of Multimedia Technology in the English Teaching of College Students Majoring in Art

4.1 English Learning Adaptability

Descriptive statistics were performed on the survey data of the four dimensions of the scale, and the results are shown in Table 1.

Table 1: The total scale and descriptive statistics of each dimension

four dimensions	Mean (M)	Standard Deviation (SD)	sort
learning attitude	4.23	0.628	1
Adapt to resources and platforms	3.37	0.618	3
Adapting to teacher teaching	3.57	0.616	2
Self-directed learning strategies	3.28	0.672	4

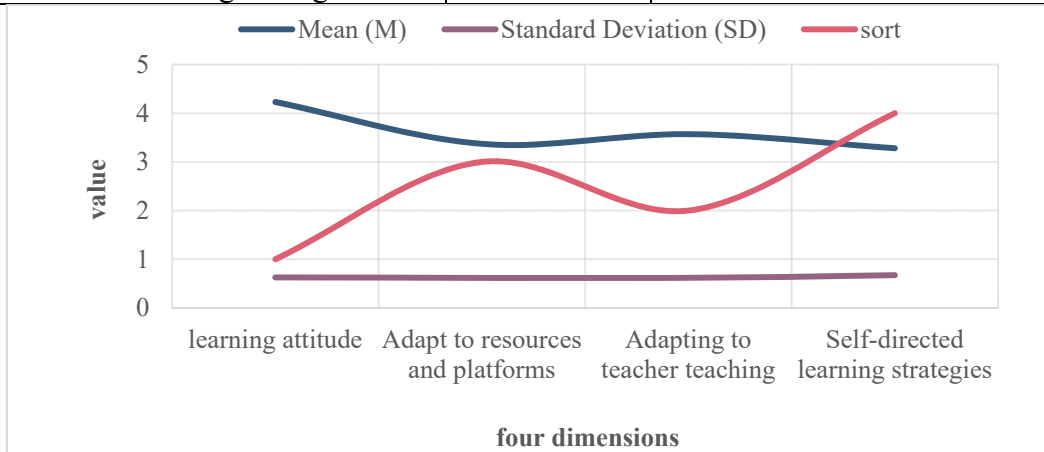


Figure 1: The four dimensions of English learning adaptability of art majors

The mean value of each dimension of the scale from high to low is: learning attitude (M=4.23)>adapting to teacher teaching (M=3.57)>adapting to resources and platforms (M=3.37)>autonomous learning strategy (M=3.28), in which learning The mean of attitude is the highest, and the mean of self-learning strategy is the lowest, as shown in Figure 1. From the perspective of adaptability, the two dimensions of mean learning attitude and adaptability to teacher teaching are between 3.5 and 4.5 points. Students showed basic adaptation, but averages below 3.5 on the resource and platform adaptation dimensions. Shows general adaptation. It can be seen that

the students' attitude towards English learning is relatively positive, and they have basically adapted to college English teaching, as well as the resources and platforms of college English learning, and have certain English self-learning strategies.

4.2 Resource and Platform Adaptation

The average value of the dimension of adaptation to resources and platforms is 3.37 points, and students are generally adapted to the learning resources and platforms of college English. From this, the three sub-dimensions of resource and platform adaptation are descriptive statistics, and the students' adaptability to English learning resources, English learning platforms and English learning activities is further understood. The results are shown in Figure 2.

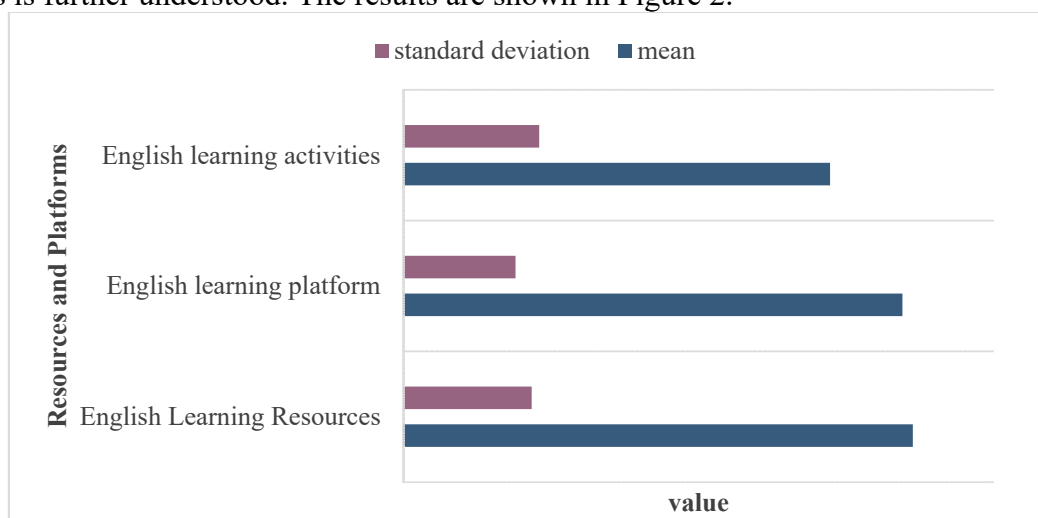


Figure 2: Descriptive statistics for three sub-dimensions of resource and platform adaptation

From the average point of view, the average of English learning resources (M=3.45) and English learning platforms (M=3.38) is between 3-4 points. Students are basically accustomed to learning resources and college English learning platforms, and English learning activities (M=2.89) are lower than 3 points, indicating that students are not suitable for college English learning activities.

Regarding the questions in the questionnaire, only 78% of the students clearly stated that "you can quickly obtain English learning resources (including listening, speaking, reading, writing, translation, etc.) that are beneficial to them online", which indicates that students are adapting to Internet-based English learning resources. English language. Learning resources, methods that can effectively use information resources. 84% of students explicitly stated that they can actively "interact with teachers and classmates through the online English learning platform", indicating that they are comfortable with online discussion, online interaction and communication. In addition, 92% of students clearly stated that they can "actively participate in some extracurricular activities that can improve their English level (such as English corners, lectures related to English learning, etc.)", which shows that a considerable number of students are adapting to the second English class in the university.

5. Conclusions

Students can help each other, learn from each other, cooperate with each other in the process of learning, and make full use of the multimedia auxiliary platform, which not only helps them master basic language knowledge, but also improves their ability to use language flexibly. This is the inheritance and development of traditional English language teaching, showing the strong vitality of

multimedia-assisted teaching. Through experiments, we have the following findings and conclusions: Multimedia-assisted teaching provides inexhaustible and inexhaustible valuable resources for language teaching, and learners can extract useful information anytime and anywhere according to their actual needs. In addition, through the integration of text, pictures, audio and video, etc., and the perfect combination of these positive factors with vocabulary, language points, grammar, example sentences, etc. with multimedia, it gives full play to the effects of color, sound, video animation, etc. on students' learning. Inspire and attract. The research in this paper is carried out on the basis of questionnaires, so the data mainly express the subjective judgments of the subjects, rather than the actual behaviors. In addition, the statements used to measure the students' learning autonomy in the questionnaire may be incomplete and comprehensive, so the validity of this study may be weakened.

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