

College English Teaching Reform Program under the Multimodal Environment in the Era of Big Data Education

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Abstract: College English multimodal teaching mode is an important trend in college English teaching reform. The purpose of college English teaching is to cultivate students' English ability in listening, speaking, reading and writing. With the rapid development of society and the continuous innovation of college English teaching concepts and models, the use of multimodal theory to guide the reform of college English teaching has entered people's field of vision. According to the multi-modal classroom teaching experiment of 45 non-English major students in a semester, the multi-modal one-semester of the experimental class is taken from the three aspects of the college English proficiency test, the student PPT presentation report and the questionnaire survey. The state teaching model has been empirically studied. The results show that compared with the traditional teaching mode, the college English multi-modal teaching mode can not only improve students' English self-learning ability and multi-disciplinary reading ability, but also greatly improve students' English language application ability and learning motivation. The use of multimodal theory teaching mode to mobilize students' multiple sensory coordination and cooperation can achieve the purpose of enhancing English learning and improving English ability. This paper will apply the multimodal theory to the specific situation of college English teaching, and carry out the reform analysis of college English teaching from the perspective of multimodal theory.

1. Introduction

The multimodal theory of college English teaching is increasingly applied in teaching research. It emphasizes the comprehensive use of multiple modalities to achieve the purpose of stimulating students' learning enthusiasm and improving teaching quality, and has been favored by many educators. Multimodal theory requires teachers to use rich and innovative teaching resources in the teaching process to create a vocal and visual language context, fully mobilizing students' visual modality, auditory modality, olfactory modality, taste modality and tactile modality. To enable students to learn English in an environment of multi-modal organic cooperation, thereby enhancing students' English language communication skills and achieving the best teaching results. English is one of the most widely used languages in the world today. [1]Our nation attaches great importance to English education and has offered English courses since primary school. However, it has always been a problem that plagues many teachers as how to effectively improve the level of English teaching and students' English skills. The ultimate goal of English teaching is to develop students' communicative competence in English and the ability to use language comprehensively. In language communication and comprehensive application, most of the meaning of discourse is not expressed by the language itself, but can be reflected in physical characteristics, phonetic features and various external environmental conditions. Physical characteristics mainly include gestures, expressions, movements, etc. synchronized with words. Speech features are expressed as speech, intonation, speech rate, etc., while external environmental conditions refer to devices that rely on various sound, light, and electricity to communicate. Semantics. Under such a premise, the purpose of achieving language communication is not only the role of a single modality, but the common organic cooperation of multiple modalities. [2]Multimodality refers to the use of auditory, visual, tactile and other sensations, through language, image, sound, motion and other means and symbolic resources to communicate. In the traditional teaching mode, multimodal discourse theory is only used as an edge means to assist in the teaching of communicative competence. Obviously, the

essence of multimodal theory can not reflected. Multimodal theory advocates the use of multiple modal cooperation, association and complementarity in the teaching process to achieve the purpose of correctly interpreting language and improving the level of English communication. In college English teaching, it is necessary to apply multi-modal theory completely, construct a multimedia and three-dimensional teaching mode, and express the book knowledge situation through pictures and sounds, and mobilize the students' multiple sensory systems to work together in the learning process. [3]This will enable students to better understand textual knowledge and enhance their communicative competence at the same time. The feasibility of multimodal theory can be fully demonstrated in the reform of college English teaching.

2. Construction of college English multimodal teaching mode

Based on the theory of multimodal discourse, this paper combines the college English level of the research object and constructs the multi-modal teaching mode of college English from three aspects:

- (1) The first is the important role of teachers' multimodal discourse in the practice of multimodal teaching in English;
- (2) The second is the improvement of students' multi-reading ability in the practice of multi-modal teaching in college English;
- (3) The third is the evaluation criteria for college English multimodal teaching. The college English multimodal teaching model is shown in Figure 1.

Based on the teaching model, this paper conducts empirical research on college English multimodal teaching from three aspects: students' English proficiency, multi-disciplinary ability and self-learning ability to verify the validity of the model.[4]

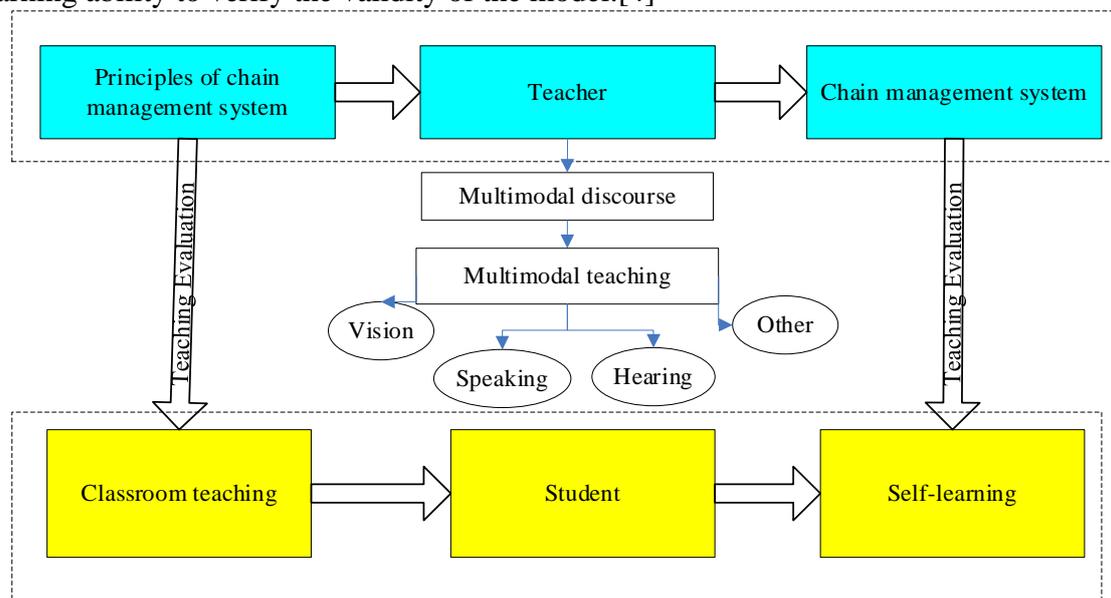


Figure 1 College English multimodal teaching mode

3. Empirical research on multi-modal teaching mode of college English

(1) Research questions

This study intends to address the following questions: Can the college English multimodal teaching model improve students' English proficiency, multi-literacy and motivation?

(2) Research objects

The research object was an ordinary class in the junior grade of a non-English major university of the Academy of Sciences. [5]The number of students in this class was 45. Through the implementation of different teaching methods in the same semester of the same experimental class, a paired sample t test is conducted on the English test scores and PPT report scores of the upper and

lower semester, and the final scores are displayed by the final exam scores (65%) and the student classroom PPT. (35%)

(3) Research tools

This study uses a combination of quantitative research and qualitative research. Quantitative research includes the college English proficiency test scores of the senior students, student PPT presentation report scores and questionnaire analysis to determine the multi-modality of college English teaching mode. The ability to read and the ability to use English. Qualitative research includes an examination of multi-modal college English teaching, and through the selection of some students in the experimental group to conduct in-depth interviews and qualitative analysis, to analyze students' feelings and views on multi-modal college English teaching mode. There are two sets of test papers, which are the final exam papers for the last semester and the next semester of the experimental class. The two sets of test papers are issued by the teacher on the basis of the course plan and content. The specific scoring criteria for student PPT presentations are mainly judged from PPT live presentations (40%), PPT presentations (30%), PPT production (20%), and group collaboration (10%). The PPT live lectures account for a large proportion of the judges. Through the PPT live lectures, students can use the visual modality to observe whether students can use the various modes such as costumes, facial expressions, gestures and gestures in the PPT presentation report to make the most use of PPT presentation report. Good results can also be used to measure students' English language proficiency through auditory modality. The PPT display content mainly refers to whether the presentation content is highlighted, detailed and appropriate, and the viewpoint is innovative. PPT production mainly refers to whether students can effectively use the multimodal symbols such as text, pictures, sound, video, color, etc. in the production of PPT to increase the ideological, logical, persuasive and appealing power of PPT presentation. Teamwork mainly refers to the division of labor and cooperation between the members of the group, and whether each member can explain the content of the responsibility in English. The Multimodal Teaching Questionnaire is designed by researchers with reference to relevant research. Students can choose the method related to learning motivation. After the survey, the results are counted by percentage.

(4) Research process

This experimental study is divided into two stages. In the first stage, the teacher adopts the traditional college English teaching mode, and all the students in the experimental class participate in the final exam of the first stage. In the second stage, the teacher adopts the teaching method of multi-modal teaching.[5] The teacher gives “clear guidance” to the students according to the characteristics of multi-modal teaching. The students conduct “scenario practice” according to the theme of this module, and pass the university English network. The teaching software of the autonomous learning system collects and organizes multimodal information and is exposed to a multicultural world of reading. The PPT presentation report is produced and drilled using visual modality, auditory modality, gesture modality and spatial modality. At the same time, students also appear in the learning process through their own social, cultural, ideology, and values knowledge systems.[6] The social and c” of the produced PPT is carried out through team cooperation. Through multi-modal teaching, students have better applied multi-modal symbols for dramatic performances such as drama performance, English film dubbing, English speech and English debate, so that students can use a variety of modalities to transform their practice. Used in different contexts to generate new meanings. The researchers conducted a paired sample t test on the scores of the English proficiency test at the end of the first and second phases of the experimental class and the English PPT presentation to determine the differences in the multimodal teaching model in the college English learning. At the end of the experiment, some experimental students were randomly selected to conduct in-depth interviews with the multi-modal college English classroom teaching mode. The interviews focused on multiple reading abilities and English proficiency.

4. The results analysis

(1) English proficiency test

By using the social science statistical software SPSS19.0 to collect the collected data, the study

used the statistical method of the paired sample test to compare the English level test scores between the first and second stages of the experimental class, the following is the paired sample statistics of the English level ability test scores.[7]

Table 1 Paired sample statistics of the English level ability test scores

	Mean	N	Standard deviation	Mean standard error	Correlation coefficient	P-value
Pre-experiment test scores	65.14	45	10.80	1.61	0.970	<0.005
Post-experiment test scores	71.90	45	8.95	1.34		

From the paired sample statistic Table 1, the average value of the first stage is 65.14, and the average of the second stage is 72.90. From the average point of view, the second stage of the experimental class is better than the first stage. The correlation coefficient is 0.970, indicating that the second phase of the experimental group is strongly correlated with the first phase, so it can be used for “paired sample testing”. According to the above data, the results of the first stage of the experiment and the results of the second stage of the experiment are significantly different. Therefore, it can be considered that after the experiment of accepting the multi-modal teaching mode of college English, the English level of the experimental class has been improved in the second stage.

(2) English PPT presentation report

The English PPT presentation report is scored according to the scoring standard displayed by the PPT. The same experimental class has performed a group-based English PPT demonstration in the last semester and the next semester. The number of students in the experimental class is 45, which is divided into 9 groups. a total of 9 groups of results. The following is the specific data of the paired sample statistics for the English PPT presentation.[8]

Table 2 Paired sample statistics of the English PPT presentation report

	Mean	N	Standard deviation	Mean standard error	Correlation coefficient	P-value
Pre-experiment PPT scores	73.22	45	3.60	1.19	0.865	<0.005
Post-experiment PPT scores	79.23	45	3.23	1.13		

From the English PPT presentation report paired sample statistic 2, the average value of the first stage is 73.22, and the average of the second stage is 79.23. From the average point of view, the second stage PPT presentation of the experimental class is better than the first. The results of one stage are good. The correlation coefficient is 0.865. The test in this case is the difference between the PPT score of the second stage of multimodal teaching and the first stage of the PPT before the experiment. Therefore, it should be verified by a single side, that is, the value of both sides is divided by 2 The judgment is made smaller than the specified alpha value. The significant P value <0.005, according to the above data, indicates that the PPT scores in the first phase before the experiment differ from the ones in the second phase after the experiment. It can be considered that after the experiment of the college English multimodal teaching model, the experiment class students have made qualitative progress in the second stage of multi-literacy.

5. Conclusion

According to the experimental results, with the application of the college English multimodal teaching mode, the scores of the English test scores in the first phase of the experimental class and the results of the English PPT presentation report show a marked difference from the scores of the second phase English test scores and the English PPT presentation report after the experiment. Moreover, in the second stage of the English test scores and the English PPT presentation report, the

results of the experimental class were better than the ones of the first stage.

The results of this study show that the effectiveness of the college English multimodal teaching model has been verified in actual English teaching practice. The college English multimodal teaching mode has changed the rigid, monotonous and boring teaching atmosphere of traditional language teaching. In the classroom, non-verbal symbols other than language have been introduced, and non-verbal forms of multimodal symbols such as images, videos and music have been integrated. It has provided a new impetus for the development of multimodal teaching and created a new language teaching model in the era of educational information.

At the same time, for the deficiencies in the research, such as the number of samples used in the experimental research is too small and the period is relatively short, I hope that more researchers will be revised and improved in the future teaching practice to promote college English teaching. Despite that efforts have been made to carry out the study, there are still some limitations in the present study due to insufficient time and resources. First, the scope of subjects is limited. There are only 45 participants in the present study. Compared with the large number of English language learners in China, the participants in this experiment are on a small scale. Besides, the subjects chosen to join the experiment are from the same major in the same college, they may not represent all the non-English major students. Therefore, the results are tentative. Based on the limitations of this paper, a more comprehensive survey is needed. The sample size for the study is suggested to be enlarged and get students from different majors involved in the study, so that the results could be more convincing. Furthermore, future researchers need to carry out longitudinal research.

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