



# Study on Multiple Interactive College English Teaching Model in Digital-Based Settings

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**Abstract.** When the information technology, which is centered on digital-based settings, was used to be an aid for the teaching practice of college English, the traditional College English Teaching Models have faced a series of significant changes. Meanwhile, numerous bafflements and challenges have appeared. This research tries to find some solutions to these bafflements and challenges by supporting a Multiple Interactive College English Teaching Model (MICETM) in DBS. Therefore, the research put forward a new English teaching model for non-English major undergraduates, in which teachers play the role of guidance and students the center. Last but not least, our research offers a new perspective in today's reform of college English teaching models.

**Keywords:** Multiple Interaction · College English · Teaching Models · Digital-Based Settings

## 1 Introduction

### 1.1 Background of the Research

This research is mainly related to the multiple interactive college English teaching model (MICETM) under the digital-based settings (DBS). The teaching model was first proposed by American scholars such as Bruce Joyce, Marsha Weil, and Emily Calchoun. Bruce's book "Teaching Model" systematically introduces more than 20 teaching modes.

As early as the 1980s, China opened its door to other parts of the world and is willing to communicate in political, economic and educational aspects. For the academy, we have made numerous necessary changes and reforms [2]. In 1990s, modern information technology has walked into everyone's daily life. And teachers were gradually exploring the possibilities to introduce and then integrate it into China's college English teaching practice. We hope the information technology could bring some transformations to the teaching model [3].

There are a lot of teaching models in the history of College English. But only two models are of great significance: the traditional classroom teaching model (TCTM) and the multiple interactive teaching model (MITM). The former is teacher-centered and the latter is student-centered.

In the TCTM, teachers definitely dominate the teaching. They are the authority, the center in the classroom. Compared with the MITM, the traditional one shows many shortcomings: 1. The teacher-student relationship is unfair. In this unbalanced relationship, teachers make orders. What students should do is follow what the teachers ask. They don't need to have their own thinking about their learning. In this case, students' enthusiasm and creativity won't be inspired. What they could do is to follow the teacher's requirement. 2. Teachers won't feel worried about the choice of the teaching methods because we only have one to organize our teaching. In traditional college English teaching, the teaching form we apply is based on classroom teaching. 3. The differences in students' personality are ignored. 4. The teaching of language skills are separated and decomposed which prevents students from developing their comprehensive ability to use foreign languages.

Therefore, we are under urgent need to make transformations to our teaching model. MITM is a very popular and mature one which is widely accepted around the world and it is a good choice for our teaching reform. The application of MITM, we believe, could help solve the weaknesses of TCTM. Compared with the TCTM, the MITM has more than one teaching methods. It organizes diversified tasks and activities to make the teaching vivid and attractive [1].

## 1.2 Research Problem and Methodology

Translation is one of five skills trained by college English. It is a relatively more difficult part for Chinese students who are not good at doing translations. The translation instruction practice of college English used to take teachers as the center. The traditional translation teaching follows is: first, teachers give students the materials to translate. Then students do their best to give teachers a good version of translation. Finally, teachers score and grade students' translation. After going through the whole translation process, the drawbacks are obvious: 1. Students don't have a chance to fulfill their creativity in the learning because it is teacher-centered. If students' role is fully weakened, we could inspire them to learn actively; 2. After the translation, teachers are responsible for pointing out the mistakes and errors made by students which will destroy their self-confidence in translation 3. Without the aid of DBS, teachers are not able to give proper guidance and assistance when students complete the translation exercises provided by the teacher after class. That is why they tend to have a perfunctory habit.

In order to eliminate the above drawbacks, there are two research questions in this experiment: First, if the teaching has changed to a task-driven teaching model, can students' learning enthusiasm be promoted? If the teaching model is transferred to an interactive one with students as the center, can their translation ability be enhanced? Then, can students' self-regulated learning strategies be cultivated under the study of translation skills? Can their social strategic abilities be formed through the translation training between teachers and students?

For effective solutions to the above questions, the research methods we used are as follows: analysis of the relevant literature, reasoning in the deductive way and argument logically. We also adopt the experimental teaching empirical research. In addition, the qualitative and quantitative research are applied. The SPSS is used to analyze the numbers and the raw data in the survey.

### 1.3 The Significance of the Research

This research is guided by the theories of constructivism and self-regulated learning. It constructs a MICETM, designs the operating procedures of teaching, carrying out experimental teaching. The thesis will draw an overall conclusion about how the interactive learning activities under the DBS improve effectiveness of college English teaching. After the research, we found that there are some significant innovations, and also the practical value is really appreciated [4].

This thesis is based on the original instruction practice and the teaching experiences. For further and deep research, this thesis designs a conceptual model of MICETM under the DBS to be the guidance of instruction practice.

The thesis draws a model operation program diagram. In the diagram, a real English learning context is built. All the three factors of learning: students, teachers and computers interactive closely with each other. Furthermore, the class activities and after-class tasks are used together. The online context and offline settings are combined. These methods could help to accomplish the interactions. The diagram is intuitive and direct through which we could clearly see the central process of the teaching design of MICETM.

## 2 Materials and Methods

### 2.1 Research Objectives

In this study, all students in classes 1 and 2 of our school's 2019 economics majors were chosen as subjects. Class 2 which is picked as the experimental group (EG) at random. For the students in ECM, teachers emphasize the skill teaching. And practice more on the mastering of the skills. Also, more group activities and translation homework are assigned to the students to forge their translation ability. Class 1 is a control group (CG), using conventional methods for teaching, and does not emphasize the cultivation of translation ability.

### 2.2 Research Plan

From the very start of the semester, the EG and CG students will receive a questionnaire. The survey is about their learning habits. And then they will take a test to check their translation ability. The students of the EG will go into several groups. They will get trainings on translation skills. Teachers assign homework for students to train corresponding translation skills in and out of class. The experiment will take advantage of the teaching platforms the campus network provides. The platforms provide the possibilities for more interactions between teachers and students. In the middle-term test and final term test, we will give students a list of questions to check if they have changes on their learning strategies and how they use their translation skills. At the end of the semester, an exam aiming to check the translation ability will be given to both EG and the CG. Then the scores of the exam is compared comprehensively.

### **2.3 Research Tools**

There are three kinds of research tools used in this experiment teaching: 1. Questionnaire survey of college English translation teaching. Questionnaire I is used before the experiment, and questionnaire II is used after the experiment. 2. Translation proficiency test questions. There are two sets of translation proficiency test questions, namely pre-test and post-test.

### **2.4 Research Procedures**

This experimental teaching starts in September 2019 and ends in January 2020, lasting 16 weeks. In week one, students in the EG and the CG get a questionnaire. It is about to investigate the overall situation of the translation teaching. Then they will take part in an exam on their translation ability. Afterwards, the teachers will discuss with the students in the EG how they are going to design their translation teaching. It is from the second week that the EG students will receive in and out of class translation training activities. In January 2020, the two classes will be surveyed again on translation teaching, and then the translation proficiency test will be conducted.

### **2.5 Demonstration of Examples**

#### **2.5.1 Teacher-Student Interaction Before Translation**

The selection and arrangement of translation practice materials need to be closely related to the specific English level of the students. Only under this very specific and fixed circumstance can the quality of translation teaching be changed to a better and hopeful direction. Therefore, the teaching content of the first class focuses on the discussion and decision of the theme of the translation materials for this term [5]. Then group the students to find suitable translation materials. The students first perform translation, and then communicate and argue with teachers and other students to double-check the correctness of their understanding of the original materials. In this way, they could prove the property of their translations, methods, strategies and the processing of the language. The teacher will spend much time on the explanation of the important and difficult points.

#### **2.5.2 Teacher-Student Interaction and Student-Student Interaction During Translation**

The emphasis of the communicative and interactive behaviors between teachers and student should be put in the first place by teachers when do the translation teaching. Before class, students are asked to find a suitable article according to the direction of their group's topic selection and translate the source text. Each student first translates the material by himself, and discusses with other members of the group when encountering difficult problems, and finds the best translation. Then the best translation representing the translation ability of the group will be showed and discussed in the next period with other learners.

### 2.5.3 Comprehensive Evaluations

After the students have completed the translation, they will show the translation of their group to the class, introducing the language points they are not certain how to translate in the process, and share with other students about the skills and strategies they have adopted and used when did the translation. Next step is: the teacher asked other students in the class to provide translations for sentences that the group considered improperly translated. Then the teacher and all students discuss whether these translations are handled properly. Through mutual evaluation of translations, teachers should lead the translation practice by translation theories. Under this circumstance, students can get a better understanding of the translation theoretical knowledge, judge what methods are proper for the specific situation.

## 3 Results

### 3.1 Result of the Survey on the Learning Strategies at the Beginning of the Term and the End of the Term

From the results of the questionnaire, whether it is the EG or the CG, the average time spent on English learning at the beginning of the school year is almost the same (about 150 min). Both the students in EG and CG haven't cultivated a habit to do self-regulated learning as well as been used to cooperative learning. When the translation experiment practice comes to an end, it is time for the students to show their performance. It is delighted to see that more than 80% of the students in the EG found it very useful and necessary. And they find it necessary to learn by collaborating with other members of the group to finish the task with high efficiency.

### 3.2 Test Result of Translation Ability

In order to get an overall and precise result of the effectiveness of the translation teaching model, teachers give students two proficiency tests as mentioned above. After collecting the papers, teachers try to check how the papers display from four perspectives. From Fig. 1, we could get a general understanding of students' total score of the pre-test and post-test. And the data in Fig. 2 shows clearly the score of the phrase translation from Chinese to English. From Fig. 3, we could check the students' ability to translate Chinese sentences into English ones. Figure 4 displays the students' level to translate the Chinese paragraph to English paragraph. After examining the four figures, we will get a general idea of the students' achievements after the translation teaching model reform.

Judging from the total score in Fig. 1, the mean value of the CG has not changed significantly from 50.1 to 51.2, while the mean value of the EG has risen from 58.5 to 69.5. This shows that compared with the CG, the translation level of students in the EG is risen. From the third Figure and fourth Figure, the sentence and paragraph translation results show great progresses the EG students have made. But we couldn't ignore a truth that the data in Fig. 2 show that for the Chinese-to-English translation, the results of the CG did not rise but fell. On the contrary, we are not surprised to find that the EG students made great improvements. This proves the effectiveness of the independent study and cooperative communication within the group for a whole semester.

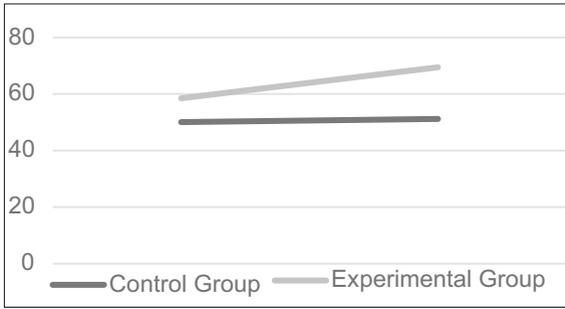


Fig. 1. The total score of pre-test and post-test.

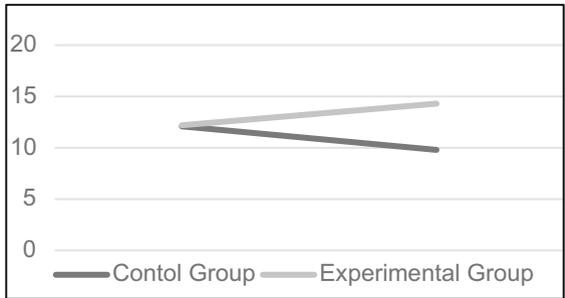


Fig. 2. The score of phrase translation.

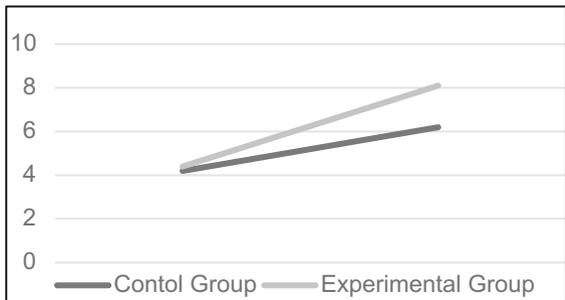
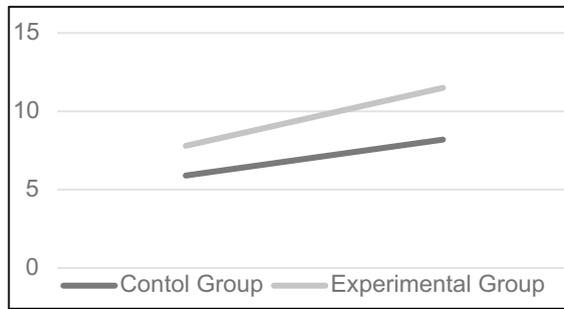


Fig. 3. The score of sentence translation.

### 3.3 Translation Experiment Teaching Research Conclusion

The task-driven interactive teaching is proved to be effective and useful. Through it, students' inherent enthusiasm to learn is inspired. They also realize the importance and necessity to practice their cooperation with others [8]. The application of DBS makes it possible to improve students' resource search ability, judgment and analysis ability, and material integration ability. In order to fast grasp the students' attention in class, teachers spend much time designing the activities before the students really go into the



**Fig. 4.** The score of paragraph translation.

step of translation. Students discuss with other students in the translation process is vital to forge their abilities. And the evaluation part is vital to teachers and students.

## 4 Conclusion

### 4.1 The Enlightenment of This Research on College English Teaching

The MICETM in the technology environment has advantages over the non-information technology environment teaching model. However, there are also limitations on certain information technology requirements, software/hardware environment, etc. [6]. Therefore, in teaching practice, we should scientifically make use of the advantages of the multiple interactive teaching model. Specifically, it is necessary to consider the following principles:

#### 4.1.1 Our Study Should Have Clear Goals and Be Led by Questions

The purpose to have a clear learning goal is very obvious. It can enlighten students to think what they are going to learn. And students should be aware of what values or benefits learning will provides them, which is a very strong inspiration to urge them to learn. Students should fulfill the leaning goals by themselves in the learning process. Teachers only plays the role of guidance and assistant but not dominate the process.

#### 4.1.2 Trigger Students to Think Through Intricate Tasks

Teaching requirements ask teachers to think carefully about how to make an intricate design of the learning tasks which fits students' psychological and physical characteristics. For a cognitive learning activity which is very complicated for students to understand, teachers have better choose a comparatively loosely structured teaching model which is good to urge students to independently explore [9].

#### 4.1.3 Teamwork and Brainstorming

The shortcoming of the traditional teaching model lies in that teachers have only one single teaching design for all the students of different levels. In order to avoid the

disadvantage, the MICETM under the technology environment fulfill the teaching tasks in the form of “group collaboration” [7]. The group or team means that we organize the students in the form of group or team. In the team or group work, they could be closely organized together to achieve one final goal.

#### **4.1.4 Timely Summary, Emphasis on Evaluation**

Teaching summary is to generalize and summarize what you have learned, and incorporate it into the cognitive structure of students as an organic knowledge system. The summary should highlight the logical content connections that students learned, the important learning points and difficulties.

### **4.2 Insufficiency of This Study**

#### **4.2.1 Research Scope**

The research on the MICETM under the DBS is only a case study of Shandong Youth University for Political Science. Due to the uneven development between regions and the different foundations of students’ foreign language learning, some of the programs in this study may not be suitable for other schools.

#### **4.2.2 Research Depth**

Exploratory experimental research usually requires detailed observations and a deep and careful thinking about the experimental objects. In this research, we have to confess that we didn’t control well the number of students in the EG. It is a little large, which is not conducive to a more detailed and in-depth observation of the research case. In addition, the time involved in this experimental teaching research is limited (4 months). The changes in students’ learning attitudes, concepts, thinking abilities and language skills may not be obvious.

#### **4.2.3 Research Content**

The description of translation skills teaching application model needs to be further improved and expanded; more flexible and specific teaching application models need to be further explored to enrich teaching practice.

The structure and definition of the conceptual model of the multi-interactive teaching model need to be fixed in some points to be perfect. When it is improved, it can be applied in a wide range.

### **4.3 Future Prospects for Further Work**

In order to compensate the constraints and shortcomings of the research, further research work can be concentrated on the following aspects.

The further research should focus on the discussion about how to make a foreign teaching design with the aid of technology settings. The design must follow the principles of foreign teaching. And the school and students are important factors when making

the design. We won't abandon the traditional classroom foreign language teaching completely. What we need to do is to make the combination to make advantage of the two teaching models.

Under the guidance of the conceptual model, we could have an in-depth understanding of the characteristics of MICETM under the DBS. On this basis, what we should do for the next step is describe precisely the mechanism of the teaching model.

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