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Task-Based Flipped Classroom in Chinese College EFL Teaching: An Empirical Study in Oral English Course

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Abstract

As a new teaching model, the flipped classroom inverts the sequence of imparting knowledge and internalizing knowledge. On the basis of flipped classroom concept and previous empirical research, the present study is intended to construct task-based college EFL flipped classroom model and put it into Chinese college oral English teaching practice. The design of the study involves contrastive experiments, questionnaires and in-depth interview. The results suggest that the task-based flipped classroom teaching model has a remarkably better effect on boosting students' communicative competence of English.

Keywords: flipped classroom; task-based; college EFL teaching

1. Introduction

Today, we live in an information technology driven environment with rapid changes in technology tools. With these rapid technological changes, the art of teaching in today's classrooms has also changed dramatically because students' learning approaches are different than those of the previous generation (Brunsell & Horejsi, 2013). With the increasing use of information technology in Chinese colleges, Chinese college EFL teaching is undergoing tremendous changes with regard to teaching concepts, teaching objectives, teaching approach etc. It is currently confronting such tough challenges as the reduction of credits as well as class hours. The traditional teaching approach can barely cater for students' needs and has to be reformed. The core of the reform lies in the innovation of teaching models. It has become the major concern of most researchers and educators how to enhance college students' linguistic and communicative competence through transforming teaching models in an information technology environment. In order to address this issue, researchers both home and abroad have conducted a number of studies, among which flipped classroom has gained widespread attention.

As its popularity is growing rapidly in America, the flipped classroom has so far produced satisfactory learning outcomes. After being introduced into China, the flipped classroom has also aroused considerable attention from numerous Chinese educators and researchers as it can meet the urgent need for the technology-enhanced learning in today's learning environment (Zhang, Wang & Zhang, 2012). This brand-new teaching concept and teaching model have brought vigor and vitality to Chinese college EFL education. As flipped classroom is spread to Chinese universities, it has been an urgent issue how to construct a flipped classroom model appropriate to Chinese college students and how to put it into teaching practice. Therefore, we designed a task-based flipped classroom teaching model and meanwhile explored its effects on college EFL teaching in an attempt to provide implications for the implementation of flipped classroom in Chinese college EFL education.

2. Literature Review

2.1 The Concept of Flipped Classroom

Flipped classroom dates back to two rural Coloroda high school chemistry teachers Jonathan Bergmann and Aaron Sams, who drew nationwide attention for uploading the videos that combined lectures and PPT. In 2011, the Khan Academy started to provide a powerful resources support for the widespread application of flipped classroom, after which it gradually gains global popularity.

As an increasingly popular new teaching concept, the flipped classroom has been defined from diverse perspectives in

recent years. Strayer (2012) defined it as a pedagogical approach that "moves the lecture outside the classroom and uses learning activities to move practice with the concepts inside the classroom". To be more specific, in contrast to the traditional classroom, the flipped classroom model requires students to watch prerecorded lecture videos or power points beforehand and then "class becomes the place to work through problems, advanced concepts, and engage in collaborative learning." (Tucker 2012) Likewise, a Chinese researcher (Zhong, 2013) defined it as a brand-new teaching model in which teachers and students work together to complete homework, solve problems and engage in a series of collaborative and interactive activities. To summarize, the flipped classroom teaching model is characterized by the application of modern education technology, the inversion of teaching procedures and optimization of knowledge internalization. Therefore, the flipped classroom, incorporated with information technology, is considered to be the key to student-centered autonomous learning and collaborative learning.

2.2 The Empirical Research of Flipped Classroom

As it is being widely used worldwide, the empirical research of flipped classroom is growing in number, many of which is designed to explore its effect on students' learning. Strayer (2012) verified the positive effect of flipped classroom on the enhancement of students' cooperation and innovation capability. Enfield (2013) conducted an empirical research of an interactive flipped classroom model. The results suggest that flipped classroom contributes to the improvement of students' confidence and autonomous learning ability. Milman (2012), Millard (2012) and Westermann (2014) have all reported the positive effect of flipped classroom model on the improvement of students' learning as it can apparently enhance students' engagement and motivation in class discussion and interaction. Flipped classroom is being applied in increasingly more disciplines, which reinforces the need to explore what flipped classroom model will enhance student learning more effectively. Therefore, the study of flipped classroom teaching model has come under the spotlight.

The flipped classroom teaching model was initially constructed by the American scholar Gerstein (2011), who classified flipped classroom into four stages as follows: experiential learning, concept exploration, meaning construction and presentation plus application. Kim, Khera & Getman (2014) from Southern California University proposed three different flipped classroom models respectively for engineering, social studies and humanities after conducting the interdisciplinary empirical studies among undergraduates.

The empirical research of flipped classroom model has also sprung up in China in recent years, some of which has given rise to influential findings. Chinese scholars Zhang et al. (2012) managed to construct flipped classroom teaching frame based on the existing research of flipped classroom and his own teaching practice. Drawing on Bloom's Taxonomy of Learning, another Chinese researcher Zhong (2013) innovates a Taiji-style flipped classroom model by integrating Chinese Taiji thought into flipped classroom concept. As flipped classroom is being widely used in Chinese college EFL education, the present study is intended to construct a college EFL teaching model.

3. Task-Based College EFL Flipped Classroom Teaching Model

3.1 Theoretical Background

Chinese college EFL teaching guidelines published by Chinese Education Ministry in 2015 specify that the major objective of Chinese EFL education is to improve students' integrated English language competence, in particular, listening and speaking skills, so that they can conduct effective communication in the future work and social interaction. Thus, how to improve EFL learners' communicative competence of English remains one of the core issues that Chinese researchers have been mainly concerned with for years.

The improvement of English communicative competence involves the internalization of adequate input and large amounts of output. On one hand, the importance of input cannot be overemphasized for it is the foundation of output as well as of receptive linguistic knowledge. The successful completion of output tasks will not be fulfilled without repeated revision of input, which takes large amounts of time. On the other hand, according to Swain's 'Comprehensible Output Hypothesis', second language learners will only develop their language competence fully through meaningful use of the language (Johnson 1995). The college EFL classroom is thus meant to focus on output, i.e. to create an optimal environment in which they can fulfill communicative tasks by putting what they have learned into actual use. However, the current EFL education is confronted with the decrease of class hours. Accordingly, traditional EFL class can barely guarantee adequate input and output, resulting in the constant failure of our teaching objectives.

Therefore, the current study is designed to explore the application of flipped classroom model and its effect on college EFL learners' oral communicative competence. The most remarkable characteristic of flipped classroom is that it can strike a good balance between input and output. Watching videos and power points before class can undoubtedly guarantee learners adequate comprehension, intake and internalization of the input because they can set their own pace of study in accordance with their personal needs and situation. On the other hand, due to the autonomous learning of the input before class, the time for communication, interaction and cooperation in class will substantially rise.

3.2 The Design of Task-Based College EFL Flipped Classroom Teaching Model

It is not until recently that flipped classroom has been applied in Chinese college EFL pedagogical practice and research. Researchers attempted to construct and apply different types of flipped classroom models, e.g. the flipped classroom based on Mooc (Hu 2014), the project-driven flipped classroom based on electronic files (Xu 2014), the flipped classroom based on SPOC(Wang, 2016) etc. Drawing upon previous studies, the author designed the task-based college EFL flipped classroom teaching model by incorporating task-based teaching approach in accordance with the current teaching objectives of EFL education at Chinese universities.

The task-based teaching approach is incorporated into our model for the following three considerations: (1) It is a teaching approach selecting teaching content in accordance with learners' needs; (2) It intensifies the process of communication through classroom interaction; (3) It strengthens the link between classroom learning and autonomous learning. In this task-driven flipped classroom model, learners are highly motivated to fulfill various communicative tasks and solve various problems, thus considerably improving their communicative competence of English. As is illustrated in Figure 1, the task-based flipped classroom teaching model in college oral English teaching is divided into three phases including pre-class, in-class and after-class.

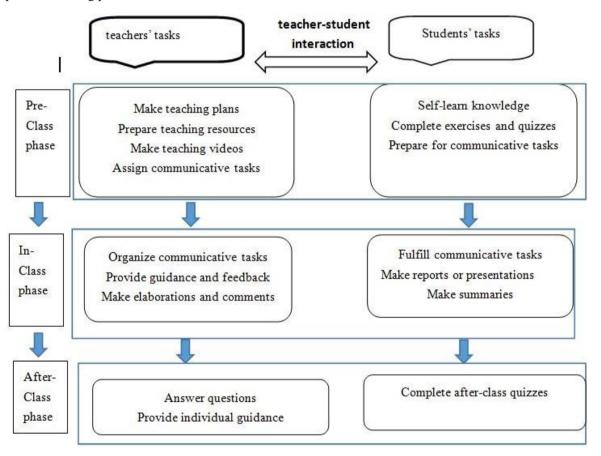


Figure 1. The task-based college EFL flipped classroom teaching model

3.2.1 Pre-class Autonomous Learning

The pre-class phase is an autonomous learning process for students. In order to motivate students to become more engaged, the teacher needs to provide the teaching resources including videos and power points as well as the specific teaching plans. Chen (2014) suggests that teaching resources should be divided into two categories catering for learners of different levels ,i.e. the basic resources and the extended resources. It is the core task for teachers to make videos, which should be brief, focused and illuminating.

Take oral English course for example. The teacher presents linguistic and cultural knowledge via videos and power points. Low-level students review and practise repeatedly until they have fully master them while the high-level students gain access to more knowledge by links to some extended resources. Furthermore, since students acquire knowledge before class, the practice time for oral English in class is extended to the largest extent, where sufficient in-class communication is guaranteed.

Autonomous learning before class can make a crucial difference to learning outcomes in the new teaching model. On the part of teachers, they need to provide various learning resources, maintain regular interaction with students and monitor students' learning process. On the part of students, they are required to do things as follows: familiarize themselves with learning tasks, self-learn knowledge at their own pace, prepare for communicative tasks. Meanwhile, they should also keep teachers informed of the problems and puzzles they have encountered so that teachers remain aware of the difficult parts in every unit.

3.2.2 In-class Communication and Interaction

In the flipped classroom, the emphasis of class has been transferred from imparting knowledge to applying knowledge. The task-based flipped classroom oral English teaching model is designed to achieve a better internalization of linguistic cross-cultural knowledge and the enhancement of communicative language competence through constant interaction and communication. The in-class phase is classified into three sub-phases: knowledge internalization, task implementation & task reporting.

Knowledge internalizaion. Students have internalized knowledge to some extent after the autonomous learning before class. In class, students work together to consolidate their command of language and cross-cultural knowledge under the teacher's guidance. Meanwhile, the teacher needs to focus on those common issues emerging from students' autonomous learning process.

Task implementation. After preparing the assigned communicative tasks before class, students' primary job in class is to work in small groups to accomplish them by communicating and cooperating with each other. On the basis of task type and difficulty level, each group leader takes responsibility for the division of labor and ensures that every member contributes to the communicative process, through which students can put the knowledge they've acquired beforehand into genuine practice under the teacher's guidance.

Learning outcomes reporting. After completing the task, students need to make a report, which is a critical sub-phase to foster their confidence and develop their communicative competence. The report can be done in different forms, including presentation, role-play, debate, short drama, contest etc. It is noted that the teacher still plays a leading role in class. As an organizer and guider of classroom activities, the teacher is required to closely monitor every group and provide differentiated guidance as well as to adopt a variety of classroom organization strategies. He should engage in classroom activities and provide feedback whenever necessary. Moreover, at the final phase, the teacher needs to propose a solution to those common issues emerging in class and also evaluate students' overall performance from different perspectives.

3.2.3 After-class Teacher-Student Communication

After class, students are required to review their lessons by completing some quizzes so as to consolidate their command of knowledge. During the revision, students might need to seek help from their teachers whenever they encounter various puzzles or difficulties. Therefore, the teacher and students ought to maintain regular communication through teaching platform or online social media where the teacher can provide timely individualized guidance for students.

4. Methods

4.1 Research Purpose and Questions

The purpose of this study was to examine the effectiveness and feasibility of flipping a college oral English course designed when compared to the traditional classroom approach. There are two research questions we sought answers to:

- (1) How do college students' achievements in terms of English oral communicative competence differ by instruction types (traditional versus flipped classroom)?
- (2) What are college students' perceptions about the flipped classroom model?

4.2 Subjects and Methods

The present study is intended to construct this cutting-edge flipped classroom teaching model and explore how it might impact college EFL teaching and learning. The subjects are non English major freshmen in a poly-technical university in eastern China. The two classes are both taught by the researcher with one class of 43 students being the experimental group and the other class of 41 students being the control group. In order to compare the communicative competence between two groups, the researcher held a pre-test in accordance with the criteria of IELTS oral test including fluency and coherence, lexical resource, grammatical range and accuracy and pronunciation. As is illustrated in table 1, there was no significant difference in terms of English competence between two groups in the pre-test (p=0.565>0.05).

The experimental group adopted the task-based flipped classroom model illustrated in Figure 1 whereas the control

group continued to use the traditional college EFL teaching model. Both groups took college oral English course. After the 15-week experiment was over, a post-test was conducted concerning students' English communicative competence using the same criteria as the pre-test. Two groups' performance was compared through quantitative data analysis in an attempt to examine the effect of this teaching model on students' English communicative competence. Meanwhile, a questionnaire survey was conducted to the experimental group in an attempt to explore students perceptions of the new model. Before administering the questionnaire, the researcher explained the concept of flipped classroom and teaching procedures of the task-based flipped classroom model Following the questionnaire survey, the researcher interviewed some students randomly selected from high-level, intermediate-level and low-level students in experimental group.

4.3 Data Analysis and Results

4.3.1 Students' Achievement

The form of pre-test and post-test is basically same, both consisting of pair work and short-answer questions. Centesimal system is adopted in both tests with the same degree of difficulty. While taking the tests, students' performance was recorded and saved. Two experienced teachers were invited to evaluate and grade their recordings in accordance with the criteria of China's national College English Test Band-6, which include accuracy, fluency, coherence, lexical range and appropriateness. The final score is the mean of two teachers' scores. After collecting the data, an independent sample T-test was carried out with regard to the scores of pre-test and post-test of both experimental group and control group. As is illustrated in Table 1, no significant difference was found between two classes' performance in pre-test. In the post-test, nevertheless, the improvement of experimental group's performance is remarkably higher than that of control group, leading to a significant difference between two groups.

Table 1. A comparison of average scores on two tests

Test occasion	n	Mean	SD	T-value	Sig.
Pretest					
Experimental group	43	80.34	10.16	-2.926	.565
Control group	41	79.27	9.82		
Post-test					
Experimental group	43	83.95	10.32	-3.046	.026
Control group	41	80.83	10.05		

4.3.2 Students' Perceptions of Flipped Classroom Teaching Model

In order to further examine the effect of this brand-new teaching model, a questionnaire was administered to all students of experimental group, followed by an in-depth interview with some students. It turns out that the results of both the questionnaire survey and interview suggests the high popularity of the current teaching model.

The questionnaire survey regarding students' perceptions of the new models adapted from the widely used instrument of Study Process Questionnaire (SPQ) developed by Biggs, Kember, and Leung (2001). It is primarily conducted from the perspective of their acceptance of both the overall model and three specific dimensions including model design, teaching approach, and teaching outcome. The students assessed their teachers across 12 items using a 5-point Likert scale, ranging from "completely disagree" (1) to "completely agree" (5). For the purposes of this study, the survey items were examined for reliability with a sufficient alpha level ranging from .72 to .85. The result of the questionnaire indicates that the flipped classroom teaching model gains popularity with students. Table 2 shows students' acceptance level of the overall course and three specific dimensions. According to the descriptive analysis of the data, students' acceptance level of the overall course reaches 4. 29(the full score is 5), which indicates that students generally accept the implementation of the teaching model. Strikingly, the acceptance level of teaching outcomes is the highest, up to 4.52, indicating that students commonly acknowledge the promoting effect of the teaching model. Furthermore, model design and teaching approach also receive a common recognition, respectively reaching 4.32 and 4.15. As a subversive teaching model, flipped classroom gains little resistance from students. Instead, the data of the present survey fully demonstrates students' widespread readiness to implement the innovative teaching model.

Table 2. Students' perceptions of flipped classroom teaching model

categories	acceptance level(means)	SD
overall course	4.29	0.72
model design	4.32	0.84
teaching approach	4.15	0.87
teaching outcome	4.52	0.79

The outcome also suggests that 72% of students explicitly express their preference for the flipped classroom while asked to state their preference between flipped classroom and traditional classroom. For the question 'Which teaching model benefits me more', the majority of students (85%) responded 'flipped classroom' to indicate that they have learned more from flipped classroom than from traditional classroom.

At the end of the questionnaire, students are advised to raise a few suggestions and feedback. The suggestions raised by interviewees fall into three categories as follows: (1) Teachers should keep committed to making more fascinating teaching videos so as to stimulate students better. (2) Teachers and students should interact with each other more frequently via more channels including autonomous learning platforms and social networks. (3) Teachers and universities need to render students a constant guidance with regard to how to search for suitable resources for their EFL learning. (4) Teachers are expected to provide timely and comprehensive feedback in class while students are performing and reporting their tasks.

Consistent with the questionnaire, the interview likewise indicates the high popularity of flipped classroom with students. Among 15 interviewees, 13 students expressed their preference for flipped classroom teaching model and 10 students advocate its widespread application at Chinese universities and would recommend this course to other students. There are merely 4 students, nevertheless, expressed their concern that they wouldn't have sufficient time for autonomous learning before class.

5. Discussion and Conclusion

The flipped classroom model has become very popular in today's classroom both at home and abroad. In this empirical study, we aimed to investigate how integration of the flipped classroom model into a college oral English course affected students' oral communicative competence of English. This research has demonstrated the feasibility of the flipped classroom teaching model to facilitate college EFL learning in blended learning contexts, which indicates that flipped classroom is applicable to English teaching.

Students' quiz results in flipped classroom sections suggest that flipped classroom experiences with pre-class preparation resulted in better achievement in oral English compared to traditionally taught sections. The new teaching model is very effective in fostering learners' autonomous learning abilities as well as oral communicative competence of English. There are two reasons for the successful implementation of task-based college EFL flipped classroom teaching model. For one thing, it strikes a great balance between language input and output and thus helps to resolve learners' various input and output issues that have remained in traditional college EFL teaching for decades. For another, students were better able to prepare for the class meetings and had more opportunities to interact with the instructor and peers than during traditional lectures.

In addition, the high acceptance level of the teaching model showed students' enthusiasm for flipped classroom. The model design of flipped classroom and its teaching practice gained enormous popularity, indicating that flipped classroom model is a worthwhile attempt in current Chinese college EFL teaching reforms. The student responses showed that the flipped classroom model helped them prepare lessons better and enabled them to feel more confident in communicating in English. These findings can be seen to stem from the fact that students in the flipped classroom model have more freedom and flexibility to choose their preparation methods for the class (Fulton, 2012). Students may feel more confident and involved in the class and therefore improve their communicative competence of English by fulfilling various communicative tasks.

Given that the main objective of this study was to experiment with the flipped classroom model for Chinese college EFL learners, the findings are not meant to be generalized due to limited sample size. Rather, the study is primarily designed to construct a teaching model design related to the application of the flipped classroom and explore its efficacy on learners' communicative competence, thus providing some practical implications for current Chinese college EFL education reform.

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