The Combination of Production-Oriented Approach and Flipped Classroom Teaching Model: An Experimental Research in the Listening and Speaking Class in Chinese Senior High School*

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Abstract—The widespread adoption of a production-oriented approach (POA) in classroom instruction design has established its operability and effectiveness in foreign language teaching. This study constructs a teaching model combining POA and flipped classroom teaching model to enhance the oral production ability of high school students. The model was applied to oral English teaching in an experimental class, and a paired-sample t-test was conducted on the pretest and posttest scores of the class to validate the effect of the model. Then, an interview was conducted to survey students' attitudes toward spoken English. We observed significant improvement in students' oral English ability and their interests in spoken English. Furthermore, the application of the new teaching model transformed the traditional input-driven teaching into output-driven teaching, fully mobilizing students' subjective initiative in learning the English language.

Index Terms—production-oriented approach, flipped classroom, oral English teaching in senior high school

I. Introduction

To enhance the efficiency of English teaching in senior high school, Chinese studies have been investigating theories and methods of language teaching to augment students' language communicative competence. The production-oriented approach (POA), proposed by Wen (2015), is a teaching theory that advocates the combination of learning and application. At present, the POA theory has not only exerted a certain impact on academic circles but attained preliminary results in English teaching practice. Moreover, the POA theory emphasizes the link between input learning and output application, and each teaching phase focuses on what students can learn, reflecting the significance of the new teaching model.

In recent years, micro-video has become very popular with the rapid progress of the Internet, making it feasible to use micro-video in college English instruction. The newly revised *English Curriculum Standard for Senior High School* in 2017 stipulated that it is crucial to apply mobile Internet technology to cultivate students' listening and speaking abilities and intercultural communicative competence. Besides, English instruction should make full use of information technology to promote the integration of teaching and technology. This study applies the POA theory to oral English teaching in senior high school, as it is suitable for the training of students' listening and speaking abilities. Of note, this research is designed specifically to determine the impact of the POA-based teaching model on students' oral English proficiency and students' attitudes.

II. THEORETICAL FRAMEWORK

A. Framework of the POA Theory

POA is a language teaching theory proposed by Wen (2015). The predecessors of the POA theory are "output-driven hypothesis" and "output-driven and input-enabling hypothesis" (Wen, 2014). Traditionally, the theory has been taken as a multifaceted concept comprising three components—teaching principles with the function of ideological guidance, teaching hypotheses that support the teaching processes, and teaching processes that reflect the teaching principles and

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teaching hypotheses.

The teaching principles comprise the learning-centered principle, learning-using integration principle, and whole-person education principle (Wen, 2015), and these principles highlight that teaching activities should focus on the implementation of teaching objectives. The teaching hypotheses are output-driven hypothesis, input-enabled hypothesis, and selective-learning hypothesis. The teaching processes cover three core phases, namely, motivating, enabling, and assessing. Figure 1 shows the framework.

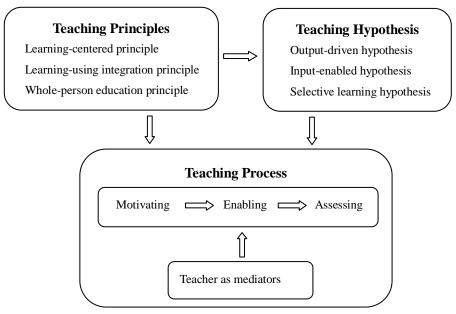


Figure 1 The System of POA Theory

The POA theory system combines the curriculum theory and second language acquisition theory. Teachers should complete theme-related activities that fulfill the requirements of the curriculum theory, including formulating apt teaching objectives, selecting teaching materials that suit the teaching objectives, adopting teaching methods, and a reasonable evaluation system. In contrast, teachers should focus on whether the second language acquisition theory has been tested and applied reasonably at different stages.

B. Model Construction

In the traditional teaching model, teachers spend the most time teaching the related knowledge to obtain the best teaching results. Owing to the limited time, it is primarily teacher-centered where students have few opportunities to speak. Without consideration, students become passive in the receptive knowledge environment. The "teaching before learning" model in the flipped classroom (Gerstein, 2012) belongs to the transformation of the teaching model from "input-driven" language learning to "output-driven" language learning.

Wen (2017) highlighted that the POA advocates the close combination of input-learning and output-using, and that all language teaching activities closely correlate with the language using to attain the integration of learning and application. This aligns with the flipped classroom teaching model, where students and teachers focus on both learning and using language simultaneously, integrating and smoothly articulating each, thereby promoting the efficacy of output activities.

Students must complete listening materials on their own before class under the guidance of the POA. With adequate teacher guidance, they need to complete productive activities, and teachers check the results and provide in-time guidance. The "check" of the flipped classroom is the assessing phase of the POA.

To date, many scholars have used the POA theory and flipped classroom teaching model in English teaching. Zhang (2015) took curriculum design and teaching units as examples to demonstrate that the POA can be applied to writing courses in college. The experimental results revealed that the POA could help students to use the key points of writing, suggesting that the POA is feasible and effective in English teaching in China. Bi (2019) compared the similarities and differences in the design and application of teaching materials based on the POA and task-based approach; the study was designed specifically to address that the POA is in line with the characteristics and needs of English learners. Qiu (2017a) selected and transformed teaching materials based on the POA into enabling activities, presenting specific strategies that were proposed by Wen Qiufang for enabling design to examine the three criteria through illustrative examples. The proposal of these strategies made the design of enabling activities more feasible. Furthermore, Wu (2019), who designed the teaching model for listening and speaking, analyzed the network platform and the data obtained from questionnaires and tests, verifying the rationality of the teaching model process, which could enhance students' listening and speaking abilities.

The previous studies of the POA theory and flipped classroom teaching models exerted a certain impact on academia and improved English teaching. In addition, most previous studies either focused on teaching materials or relied on curriculum design. The traditional English teaching in senior high school neglected the cultivation of students' listening and speaking abilities. The POA theory can enter the level of practice only by using the flipped classroom teaching model and the modern educational network technology. The principal reason is that the enabling and assessing phases in the POA can be well combined with the flipped classroom teaching model.

Per the requirements of the newly revised *High School English Curriculum Standards* in 2017, the first step to this end is to devise criteria for assessment jointly among teachers and students, including content, structure, pronunciation, grammar, fluency and interaction. The assessment can be divided into three levels—excellent, good, and average. Students' oral scores can be recorded per the assessment standard. Second, students need to submit their tasks. A deadline and format must be clearly specified in advance so that students' submitted products are presented in a required format and handed in on time. Finally, the crucial step is collaborative assessment.

Referring to the construction process of other scholars, this study designs specifically to construct and adjust the POA-based flipped classroom teaching model. Of note, this is an output-driven teaching model. Figure 2 presents the teaching process.

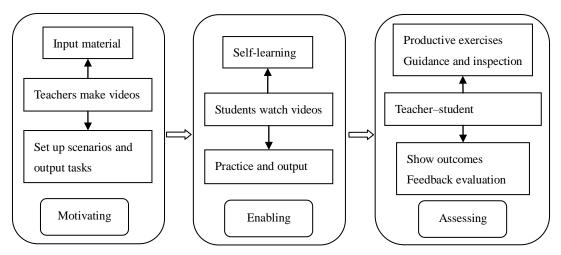


Figure 2 Flipped Classroom Teaching Process Based on POA.

C. Implementation Procedure

Based on the teaching process, both teachers and students prepare for class.

In the motivating phase, teachers ask students to watch micro-videos before class, presenting the corresponding communication scenarios and describing to-be-finished tasks. They select videos from network resources based on the teaching objectives and crucial points of this unit, or it will happen in the future.

In the enabling phase, students watch videos for selective learning and practice productive activities that are divided into mini-tasks. Teachers provide guidance and check results so that students can immediately apply the results of selective learning to the output tasks. Teachers must choose appropriate enabling materials, including content, language form, and discourse structure when they guide students.

In the assessing phase, students show results and communicate with partners or groups, and they can discuss more difficult questions. Here, teachers' role changes from narrators to valuators, and they evaluate students' accomplishments, whereas students' role changes from the knowledge receiver to the practitioner, and they give full play to their imagination and creativity. Teachers as the leader and students as the main body should complete the phase together.

D. Teaching Case

In this study, we selected "cultural relics" of Module 2 Unit 1, which is a compulsory English course in senior high school. The new teaching model will be used in listening and speaking class. The teaching objectives will be categorized into language ability, cultural awareness, thinking quality, and learning ability. First, students should be proficient in words and expressions of relevant cultural relics to improve oral accuracy and fluency. Second, students should have their own understanding of cultural relics, which will augment their cultural self-confidence. Third, students should have logical, critical, and innovative thinking, which is helpful to enhance their analytical and problem-solving abilities. Finally, students should strive to improve learning efficiency and autonomy and have good learning habits.

(a). Motivating Phase

Before class, students are categorized into four groups, and teachers provide them communication scenarios. The following is a case. A foreign friend wants to visit the local cultural relics in your hometown, and you are a volunteer in a local museum. The communication scenario is common in daily life. Teachers encourage students to try to accomplish the communicative task. At the time, students may encounter difficulties and realize what they lack in performing, which would stimulate their interest and motivation.

The teaching objectives of language ability is about new words and phrases (such as dynasty, belong, gift, fancy, style, wooden, reception, look into, belong to, at war, take part in/join in, think/speak highly of, and so on) and sentence patterns (e.g., I think highly of...; As far as I am concerned, I think ...; I would like to say...; Don't you agree/think that...; The relics about...with a long history...). The teacher presents a list of students' oral tasks.

- a) Are there any cultural relics worth protecting in your hometown?
- b) What are they? Give the reasons.
- c) Introduce a special cultural relic.
- d) Do you have any good suggestions about protecting cultural relics?

Teachers present the output tasks above and ask students to complete the following reading exercises of related words and sentences in the video.

(b). Enabling Phase

To attain productive activities, students should complete mini-tasks per the requirements, and teachers only provide guidance. The section specifies the arrangements for productive mini-tasks, including selection, transformation of input materials, and the design of output-driven activities. The teaching process is as follows:

Task 1: Cultural relics worth protecting in hometown

Teachers play a 5-min video about world-famous cultural relics, and students must retell the key information heard in the video, which is used to describe the cultural relics worth protecting. Students watch the video again, and the key expressions and language knowledge are given by the teacher. Then, they use the above information to describe cultural relics worth protecting in their hometown. Throughout the process, students finish tasks on their own and try to output while teachers assess their learning effects in time.

Students discuss cultural relics worth protecting in their hometown in groups. Examples of some sentence patterns are: As far as I am concerned, I think ...; I would like to say...; As I see it...; As we all know, ... and students use them to complete conversations about cultural relics in their hometown. Teachers give timely evaluations.

Task 2: Introduce a special cultural relic

Students discuss cultural relics in their hometown with partner and ask each other questions about where they plan to travel this year and whether there are cultural relics worth protecting in the local area. Teachers give timely assessments.

Task 3: Good suggestions about protecting cultural relics

Students are asked to read an article about the protection of cultural relics and give some suggestions for the protection of cultural relics. Students work in groups, and everyone has to prepare a 3-min presentation. Students find grammatical and phonetic errors when other students are speaking, and they correct their errors immediately. Then, one member of the group acts as a volunteer and others acts as tourists. After discussions between volunteer and tourists, students start voting and evaluating whether the volunteer gave satisfactory explanations to tourists.

After the teaching procedures are finished, students are asked to complete many activities under the teacher's guidance. Based on the new teaching model, students will also prepare presentations about cultural relics in their hometown.

(c). Assessing Phase

In the class, teachers and students should first summarize the common expressions of the protection of cultural relics. Then, teachers provide several related topics on cultural relics and students have role-play. Based on the students' performance, teachers can change groups to allow students to have speaking training. Considering the listening situation in different groups, teachers select several student representatives to show in turns. After students finished, teachers assess the productive activities after class, and students also evaluate each other's performance.

III. RESEARCH DESIGN

A. Problems, Subjects, and Instruments of the Research

This study will address the two following questions:

- (1) What are the effects of the POA-based flipped classroom teaching model on students' oral English proficiency in senior high school?
 - (2) What is the senior high school students' attitude toward POA-based flipped classroom teaching model?

The research combines quantitative and qualitative analyses. To execute the research smoothly, the thesis has modified the research procedures and methods several times to be the 16-week research for senior high school students under the guidance of research group and teachers. The students have reached the level of A2 or above per the *Common Reference Framework for European Languages* (Wen, 2015). We selected 50 students from a senior high school in central China as subjects. The experiment lasted 4 months (September 10, 2019 to January 10, 2020).

The three research instruments used were questionnaire, oral test, and interview. The interview aimed to obtain a more detailed and specific understanding of the application of the new teaching model in English instruction and know students' attitude toward the model. The questionnaire covered four aspects of students, namely, learning attitude, learning motivation, task completion and learning evaluation, and the effect on the new model. In the entire process of the experiment, pretest and posttest were conducted to know about the changes of students' oral scores.

B. Research Procedure, Data Collection, and Analysis

The research lasted 16 weeks, and its procedures were divided into three parts. First, students took an oral examination in the first 2 weeks. In the third week, teachers introduced the POA theory and flipped classroom teaching model. Students had a general understanding of the teaching method to raise awareness of the significance of the research. Second, students were taught using the POA-based flipped classroom teaching model for 3 months. Finally, posttest and questionnaire were conducted in the last 2 weeks. Notably, students had to be able to understand the criteria of the speaking rating scale, as well as the content of the oral test at the beginning. After the experiment, students selected randomly were interviewed after informing them that the interview will have no impact on their performance.

We collected quantitative data, which refers to questionnaires and tests, and qualitative data, which refers to interviews. The interview content was analyzed and compared, and the questionnaires were issued after the experiment. A pretest was conducted before and a posttest after the experiment. Meanwhile, relevant data were collected sufficiently. The oral English rating scale was adapted for senior high school students based on China Standards of English and the IELTS. All the research subjects and teachers were Chinese, so the rating scale was also Chinese to reduce the errors. Finally, the collected data were analyzed and presented by SPSS17.0, and a paired-sample *t*-test was used to detect the significant differences between the pretest and the posttest in the experimental class.

IV. RESULTS

This part illustrates the results of the collected data with tables and questionnaires, expressed as a percentage, the test was analyzed using SPSS (ver. 17), and the interview data were analyzed in the form of text.

A. Questionnaire

After the experiment, 50 questionnaires were distributed among students, all of which were collected and valid. Here are 15 questions in the questionnaire. Questions 1–5 were about the extent to which students attach importance to learning spoken English and relevant practice. Questions 6–10 focused on students' learning motivation and the completion of tasks. The last 5 questions were students' evaluations of the effectiveness of the teaching model.

Based on the results of the questionnaire, as for questions 1 and 2, 100% and 98% of students were interested in and liked the listening and speaking class, respectively. Regarding question 3, 93% of students supposed that productive activities about spoken English could promote learning, and even 64% of students strongly agreed with the opinion, indicating that spoken English learning is still significant. Question 4 was about the topics that are helpful for students' daily communication. About 73% of students agreed that the topic in the class was close to communication in real life. However, 36% of students still displayed an uncertain attitude toward this view, probably, because these students seldom communicated with others in English. Regarding question 5, about 89% of students were willing to spend extra time and energy in oral practice, clearly stating that they were willing to actively cooperate with each other to facilitate outputting.

Regarding question 6 (I can study independently before class and finish the task conscientiously), almost half of the students' opinion, they could learn and complete tasks independently in the teaching model. The POA theory shows that output can stimulate students' enthusiasm and curiosity in output learning than input; thus, they can learn to complete productive tasks actively. Regarding question 7 (the communicative task in class can stimulate my motivation and enthusiasm in English learning), 89% of students maintained that their motivation and enthusiasm were promoted by the real communicative activity in class, which is also a key step in the teaching process. Regarding question 8 (I can consult relevant materials that need to learn before class and I can practice on my own), compared with other questions, 34% held uncertain views about the question, which could be because teachers had not selected the enabling materials well, or students did not pay adequate attention to speaking, for example, the time was too limited to finish the heavy task. The selective-learning principle plays a vital role in the POA theory, which can cultivate students' ability of independence and creativity.

Regarding question 9 (the times of output in class has increased compared with the previous semester), 86% of students supposed that the new teaching model could improve the frequency of outputting. Question 10 (my classroom learning efficiency has improved this semester) was designed to study whether to attain new linguistic elements or skills through input activities must be linked seamlessly by using what has just been learned through the input in productive activities. Although the teaching model provided more opportunities for practice than before, 26% of students still stated that they did not make it clear that the teaching model could improve the efficiency of output, perhaps, because of the limited time available for output or because they were not yet familiar with the teaching method.

Regarding question 11 (I will solve the problems on my own in learning spoken English in the teaching model), 72% of students could problems in spoken English actively, and 16% were not sure whether they could solve the problems

actively. There are many causes for the phenomenon, for example, some tasks were still difficult for some students, and they needed a certain time to solve problems on their own, such as some difficult words and related expressions. Regarding question 12 (In this teaching model, I can actively participate in the discussion), most students were willing to discuss actively, but 22% thought they could not, of which 14% students strongly disagreed. During the practice, some students might have felt a certain degree of anxiety due to to-be-finished tasks; moreover, they were shy and did not want to express themselves in class. Regarding question 13, 86% of students supposed that their overall ability of spoken English improved, suggesting that the teaching model is effective. Regarding question 14, almost all students considered that they could develop good habits in learning, stating that students have a positive attitude toward oral English. Regarding the last question, students were fond of the teaching model. Thus, mode can arouse students' desire for learning so that they can overcome difficult tasks, having a clear focus on their learning.

The data provided above showed that students can cooperate actively to practice oral English after the implementation of the POA-based flipped classroom teaching model in the senior high school, and they were full of confidence in learning oral English. Moreover, their support and love for the teaching model showed that it can be applied to high school language instruction and aligns with students' current learning level.

B. Tests

The pretest aimed to evaluate students' real oral score before applying the teaching method. The paired-sample test analyzed the results, as shown in Table 1.

TABLE 1 GROUP STATISTICS OF PRETEST SCORES IN EC

GROOT STATISTICS OF TRETEST SCORES IN EC							
Mean N SD SEM							
EC pretest scores	66.50	50	7.031	0.994			

As shown in Table 1, the average score was 66.50 before applying the POA-based flipped classroom teaching model. The standard deviation (SD) of the class was 7.03, indicating that the level of students' oral English was uneven. To determine whether the performance had improved significantly after the experiment, the posttest results were obtained. Of note, all the posttest results covered five aspects: structure, content, pronunciation, grammar, and interaction relation

 $\label{eq:table 2} {\it Table 2}$ Paired-sample Statistics of Pretest and Posttest in EC

	Mean	N	SD	SEM
EC pretest scores	66.50	50	7.031	0.994
Posttest scores	78.64	50	5.965	0.843

Table 2 shows that the average score of oral English is 78.64 after one semester, which is significantly higher than that of pretest (66.50), demonstrating that students performed better in the posttest than pretest, and the oral score of students is significantly improved. The SD of the posttest is 5.965, and it is lower than that of the pretest, indicating that the oral English score of the posttest is closer to the average than the pretest, and the overall score is improved.

TABLE 3
PAIRED-SAMPLE CORRELATIONS OF PRETEST AND POSTTEST IN EC

TAIRED-SAWIFLE CORRELATIONS OF I RETEST AND I OST TEST IN EC						
	N	Correlation	Sig.			
EC pretest and posttest scores	50	0.655	0.000			

Table 3 shows that the correlation between the pretest and posttest values is high, which is 0.65. In addition, the sig value is 0.000, which is <0.05. Thus, a significant statistical difference was found between the pretest and the posttest. Besides, a linear relationship was observed between the two variables, indicating that the paired-sample test could be conducted.

TABLE 4
PAIRED DIFFERENCES OF PRETEST AND POSTTEST IN EC

EC	Mean	SD	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig (two-t
		Wican	Lower	Upper	ailed)			
Pretest scores Posttest scores	-12.140	5.484	0.775	-13.698	-10.581	-15.651	49	0.000

In Table 4, the mean difference is -12.140, SD is 5.484, and the standard error mean (SEM) is 0.775. Table 4 also shows that 0 is not within 95% confidence interval (CI) of the difference. A significant difference was found between the two variables, and the value of sig (two-tailed) was 0.000, which is <0.05, further proving that the difference of two variables is significant. These findings answer the first research question that it can improve students' oral English scores and efficiency.

Next, a paired-sample analysis of the oral English test was performed in each aspect to understand the specific impact of the new teaching model. Table 5 presents comparison of each aspect of the data more clearly.

Item	EC	N	Mean	SD	SEM
Structure & Content	Pretest scores	50	13.14	1.726	0.244
Structure & Content	Posttest scores	30	15.80	1.399	0.197
Eluonov	Pretest scores	50	13.26	1.723	0.243
Fluency	Posttest scores	30	15.80	1.355	0.191
December	Pretest scores	50	13.56	1.643	0.232
Pronunciation	Posttest scores	30	15.72	1.640	0.232
Сиотомом	Pretest scores	50	13.36	1.548	0.219
Grammar	Posttest scores	30	15.78	1.298	0.183
To de la de	Pretest scores	50	13.32	1.695	0.239
Interaction relation	Posttest scores	30	15.62	1.828	0.258

TABLE 5
GROUP STATISTICS OF PRETEST AND POSTTEST IN EC

Table 5 illustrates that there are five aspects of students' oral English test. After a semester of the experiment, the average performance of these five aspects improved. Meanwhile, Table 5 shows that the SD of the posttest is almost smaller compared with the pretest, indicating that students' oral score is getting closer to the average.

In addition, the score of structure and content improved, implying that students had a clearly logical thinking when speaking. Moreover, fluency improved greatly, showing that students had a good command of context. After a semester of practice, students' oral English also made great progress, and they were glad to talk with each other. However, the SD of interaction relation increased, stating some students could join the activities actively while others are not.

The paired-sample test showed that the students' oral English scores improved after applying the teaching method; that is, the teaching method could improve students' oral efficiency, making structure more complete, content richer, logic clearer, and spoken language more fluent when students are speaking.

 $\label{table 6} {\it PAIRED-SAMPLE CORRELATIONS OF PRETEST AND POSTTEST IN EC}$

EC	N	Correlation	Sig.
Structure & Content	50	0.603	0.000
Fluency	50	0.673	0.000
Pronunciation	50	0.778	0.000
Grammar	50	0.691	0.000
Interaction relation	50	0.593	0.000

Table 6 suggests a great correlation between the pretest and the posttest, and the correlation value is high in every part. In addition, Table 6 shows that the sig value of each part is 0.00, which is <0.05, indicating a linear correlation between the pretest and the posttest of oral English scores. Thus, the paired-sample test can be performed.

TABLE 7
PAIRED DIFFERENCES OF PRETEST AND POSTTEST IN EC

EC		Mean	SD	SEM	95% Cor Interval Differ Lower	of the	t	df	Sig. (two-tai led)
Structure & Content	Pretest-Po sttest	-2.660	1.422	0.201	-3.064	-2.255	-13.218	49	0.000
Fluency	Pretest-Po st-test	-2.540	1.459	0.206	-2.954	-2.125	-12.303	49	0.000
Pronunciation	Pretest-Po sttest	-2.160	1.094	0.154	-2.471	-1.848	-13.952	49	0.000
Grammar	Pretest-Po sttest	-2.420	1.263	0.178	-2.778	-2.061	-13.547	49	0.000
Interaction relation	Pretest-Po sttest	-2.300	1.593	0.225	-2.753	-1.846	-10.203	49	0.000

Table 7 shows that 0 is not within 95% CI of the difference of each part, highlighting a significant difference between the two variables. Moreover, the sig value of each item is 0.00, which is <0.05. All features demonstrate statistically significant changes. These findings suggest that students' oral performance improved significantly after the implementation of the new teaching model, which addressed the first research question.

C Interview

To determine students' attitude toward the teaching model, we recorded and analyzed the interview data. To guarantee students to talk freely, interviews were conducted in Chinese. A total of 6 students at three levels were randomly selected for interviews, including 5 questions. The interview data were as follows:

The first question was whether students liked the teaching model and the reasons for it. Five students stated that they liked it, while only one said that he didn't like the teaching model. Student 6 said, "I don't like the new teaching model because there are so many to-be-finished tasks before class which makes me tired and could not concentrate on oral English class." Meanwhile, 5 students revealed that the teaching model benefited them in several ways. First, students

understood and tried to complete the tasks before class so that they could know what they lacked, stimulating their interest in learning. Second, the topics discussed in class correlated with daily life, so they liked to participate in the discussion. With the help of other students, they could imitate or create several topic examples, making them feel relaxed and happy, thereby creating a real context for oral English learning. Third, the teacher presented different enabling materials to students at different levels, making students know about their tasks clearly.

Question 2 was about the biggest obstacle encountered in the process of oral English learning. Students 4 and 6 indicated that they were afraid of making mistakes when expressing their ideas, but the situation was much better after several lessons. Student 5 said, "Faced with these to-be-finished tasks, it is difficult to rely on myself to complete them without the help of teachers or dictionaries." Other students said that they encountered challenges in the learning process but they could solve them.

Question 3 was about which teaching step was the most helpful to students and the reason for it. On this issue, the views of each student differed markedly. Students with high levels of ability said, "I think the most helpful step is arranging output task before class and the teacher divided it into several small tasks, on the one hand, it can improve my autonomous learning ability, on the other hand, it can cultivate my creative thoughts." For middle-level students, the most helpful step was the enabling phase. Students considered that there were many topics close to life in the oral English practice, providing them with several real contexts. Low-level students could complete a series of tasks per the teachers' guidance, which enhanced their confidence in the process of English learning. Briefly, the process design of the teaching model was complete, and teachers considered students' learning ability in each step.

Question 4 was about students' attitudes toward the teaching model after a semester. Students 4 and 6 supposed that they had a sense of urgency in completing a series of small tasks assigned by their teacher, but they felt satisfied after completion, which improved their sense of self-identity. Students 1 and 5 thought that the topics and materials set by the teacher could make every listening and speaking class exciting and rich, which stimulated their interest and improved their self-confidence. Students 2 and 3 believed, "...in the process of completing tasks and peer communication, I speak out the words and sentence patterns related in micro-videos to achieve the learning purpose, and it can reduce the tension of face-to-face communication with teachers in class." Perhaps, all students displayed a positive attitude in the teaching model.

Question 5 was about the expectations for oral English learning in the future. As mentioned by Student 5, "I hope the teacher can provide more teaching materials or videos so that we can choose to complete a variety of communication tasks, which will be helpful for our oral communication in the future." In addition, Student 6 agreed that it would be better for the teacher to give them more examples. Others hoped that teachers could provide them with a good frame of reference so that they could complete their tasks better.

In a nutshell, we found that the POA-based flipped classroom teaching model was high after the interview won the students' approval. Students now had a positive attitude toward oral English and they were willing to learn oral English using the teaching model.

D. Effectiveness and Attitudes

(a). Effectiveness

The interview revealed that the POA-based flipped classroom teaching model could play a positive role in enhancing students' oral English efficiency. The teaching model improves students' oral ability, especially in structure, content, fluency, grammar, vocabulary, and interaction. The reasons for the effectiveness of the teaching method are summarized as follows:

First, under the guidance of teaching principles, such as "learning-centered principle" "learning-using integration principle," and "whole-person education principle," a new teaching model is formed by combining POA and flipped classroom. The learning-centered principle breaks the traditional idea that teachers play a dominant role in class. Although teachers have been given many titles, such as helpers, consultants, and leaders, their responsibilities have not been brought into full play. This study claims that the accomplishment of teaching goals and the learning efficiency of students in the classroom should be the focus on teachers' attention, which is also accentuated by the teaching concept of POA. Reportedly, POA insists on whole-person education, but it does not mean that the realization of humanistic objectives requires more time in the classroom (Wen, 2014). Teachers should be able to establish a correct outlook on life, spread Chinese culture, and cultivate students' spirit of collaboration when choosing input materials, also emphasized in oral English test; this also aligns with the concept of the flipped classroom teaching model. Under the teachers' guidance, students are allowed to explore independently and find the inherent laws by themselves. Both POA and flipped classroom teaching model focus on productivity and learning efficiency, and all these characteristics can enhance students' oral English scores.

Furthermore, each step of the teaching process is designed to augment students' oral English. In the motivating phase, teachers present tasks to students, which might be the scenario with the high communicative value that they will encounter in the future. It not only saves class time but also enters the enabling phase. When students try to communicate with others, they realize that their language competence is not adequate, and they want to learn or improve their oral English. Finally, teachers set teaching goals, which are divided into two categories: (i) communicative goal, which is to complete the communicative task of a certain topic; (ii) language goal, including the

word, phrase, or grammar knowledge all emphasized in the oral test. Above all, language goals should serve communicative goals. Students learn and explore by themselves before class, eventually achieving knowledge internalization under teachers' guidance. Mobile technology not only creates the possibility for students to repeat exercises independently but also gets rid of the limitation of time and space. To illustrate the internal relationship in various knowledge points in a few minutes, teachers must make each part of the listening learning content, and then present the textbook content in the form of modules. Moreover, the design can form a complete knowledge structure system, which is convenient to train the listening and speaking abilities.

In the enabling phase, input materials should be carefully selected by teachers to serve the topic. To complete the task, students primarily accomplish the content, and the form of the language and grammar, which are all emphasized in the oral test. Per the hypothesis of selective learning, each stage should have a learning focus. For example, this study emphasizes the content, as well as the practice of language expression, including words, phrases, and key sentence patterns in teaching cases. Regarding students in the experimental class, they finish their oral tasks and practices before class, which is a good start to the enabling phase. Thus, students have made significant progress in the aspect of vocabulary and structure in posttest.

In addition, assessment is one of the ways to promote teaching effectiveness. Teachers have two ways to evaluate students' learning: timely assessment and delayed assessment. Timely assessment is the evaluation of students' oral English learning effect in the selective learning and mini-productive task, which occurs in the enabling phase. It is best to adopt the way of teacher–student collaborative assessment in the classroom, which is also a type of assessment method in the POA theory. This way, teachers can have a comprehensive understanding of students' oral output in time, as well as summarize the issues encountered by students in practice. Thus, teachers can upgrade their teaching methods. Furthermore, students can not only receive feedback in time and analyze their limitations in-depth but also check deficiency.

In conclusion, teachers can not only realize the importance and advantages of the teaching model but also the teaching model enrich the oral English teaching in senior high school. In the process of teaching practice, students' oral ability in the experimental class can be improved by using the POA-based flipped classroom teaching model, which demonstrates that the teaching model is suitable for senior high school English instruction.

(b). Attitude

The questionnaire and interview findings revealed that students have a positive attitude toward oral English learning after the application of the new teaching model. Under teachers' continuous guidance, students gradually break their inner obstacles in classroom learning and can express their ideas in group cooperation, thereby gradually increasing students' enthusiasm for learning English. Consequently, the learning efficiency improves significantly. Based on the analysis of the interview and questionnaire, students' attitude toward oral English is summarized into the following aspects:

First, real communication scenes and relevant micro-videos are given, which can stimulate students' interest to learn English. Then, teachers select rich input materials suitable for students at different levels and can complete tasks without fear of difficulties. Most importantly, suitable materials can stimulate students' interest in oral English leaning because the topics selected are related to daily life.

Second, the selection of useful relevant materials can enhance the efficiency of oral English learning in the enabling phase. Students are willing to complete learning tasks on their own. Moreover, not only can they practice alone but also practice related sentence patterns and discuss related topics with their peers. In addition, peer communication and cooperation can boost students' confidence in the completion of tasks. Students have sufficient time to prepare before class, which can decrease anxiety of face-to-face communication in class. Furthermore, students may have a strong desire for learning before completing the task, but they are very satisfied after completing the task.

Finally, vast input materials about daily life topics and various productive activities create a good learning atmosphere, enabling students to study in a relaxing environment, which is also the reason why students have a positive attitude toward the teaching model.

Briefly, the new teaching model transforms the traditional input-driven teaching into output-driven teaching, which fully triggers students' initiative to explore knowledge and improves the teaching effect on oral English.

V. CONCLUSION

This study establishes that the POA-based flipped classroom teaching model can be constructed through the three-step teaching process of motivating—enabling—assessing. The application of the new teaching model transforms the traditional input-driven teaching into output-driven teaching, fully mobilizing students' subjective initiative in learning and exploration and enhancing the teaching effect on English language instruction.

For the first research question, the thesis validates that the teaching model can effectively enhance the oral English efficiency of senior high school students. The pretest and posttest revealed that the average oral English score of the experimental class increased by 12.14, indicating that students' oral English scores improved markedly after applying the teaching model. The oral English score of the experimental class is much better in content and grammar than that at the beginning of the semester. Furthermore, students in the experimental class displayed great interest in oral English

and could participate actively in the discussion in the class, which is a great improvement.

Regarding the second question, this study verifies that students have a positive attitude toward the new teaching model. After a semester's experiment, students in the experimental class built their confidence in oral English learning and reportedly benefited a lot from the teaching model, as well as improved their efficiency to learn independently. Teachers design and arrange the micro-videos carefully, which is convenient for students to master knowledge key points in a relatively short time. In addition, teachers use various curriculum resources, which can create a real English language environment. Moreover, they are willing to search for related materials about learning. From the actual effect, the mode model does improve the enthusiasm and self-confidence of students when they participate in listening and speaking courses. Furthermore, this study establishes the new teaching model to attain the ultimate goal of forming a deep fit between teaching methods and educational effects.

Besides considering effectiveness and attitudes, teachers should not only consider the completion of teaching and target tasks but also take care of students' actual acceptability and learning efficiency when choosing teaching models and teaching methods; only this way can they make full use of limiting time in class. Students have a desire for new knowledge, which is a unique step in the motivating phase of the teaching model. Students strongly hope to learn new knowledge to complete new communicative topics. In particular, students devote themselves to completing the tasks assigned by teachers and improving their output efficiency after realizing the gap between their own oral English level and output task standards. Last but not least, the entire teaching process complies with the laws of students' physical and mental development. Teaching activities not only reflect the gradual and orderly learning processes but also follow the order of students' learning process. From output task to teacher—student collaborative assessment, students can fully experience the joy and satisfaction of oral output, as well as establish the self-confidence of oral expression, which can decrease students' frustration in oral English learning.

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