The Effects of Production-Oriented Approach on Chinese Vocational College Students' English Speaking Ability

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Abstract

This study aimed to 1) explore whether Production-Oriented Approach in teaching speaking English in higher education could improve the Chinese vocational college students' speaking ability; and 2) investigate whether Chinese college students were satisfied with Production-Oriented Approach for oral English lessons. The study was conducted at a Chinese vocational college in Yunnan province, China. The quasi-experimental group of 48 students was selected by convenience sampling method. The instruments adopted in the study consisted of the Pre/Post-Test and a satisfaction questionnaire. The Pre/Post Test result revealed a significant improvement of the Chinese vocational college students' speaking ability scores in the five parts of fluency, pronunciation, grammar, vocabulary and content (P< 0.05). The questionnaire data analysis indicated that the students were satisfied with the Production-Oriented Approach in teaching and learning English speaking at the level of 'Agree' (X=3.880/SD-1.188). Thus, it is recommended the teacher should focus on developing students' speaking ability and help them improve their speaking skills and students learning strategies under the guidance of the production-oriented approach as well as the exploration of teacher-student interaction. This study provides valuable information about the impact of teaching English in higher education on improving the speaking ability of higher vocational college students as well as students' satisfaction with teaching English as a foreign language. These findings have important implications for future teaching research and practice, which will help promote the development of English teaching and improve the speaking ability of higher education college students.

Keywords: Production-Oriented Approach; Speaking ability; Chinese vocational college students

Introduction

In today's integrated world economy, English as an important language tool for international communication and cooperation. To be able to communicate globally, learners need to learn speaking, which is believed as a crucial language-communication skill (Goh & Burns, 2012). That is why acquiring speaking skills in English is considered an essential part of learning a foreign or second language (Richards, 2008). The world is undergoing a great change of globalization and internationalization, which encourages closer contact of the world peoples. Along the same line, China will be more open to the future and insist on positive interaction with the outside world. The English Program Standards for Higher Vocational

Education are to cultivate students' ability to use English for oral communication in the workplace environment, to improve overall cultural literacy and cross-cultural communication awareness. However, at present, the oral English ability of students in higher vocational colleges is relatively low. This may result from the requirement of the English exam that places more importance on reading and writing. In the English classroom, most English teachers pay greater attention to listening, reading and grammar in their daily teaching, but neglect the training of spoken English (Polio, 2017; Zhang, 2017; Kohn,2018). Despite many college students have more than ten years of English learning experience, but they have difficulty in communicating freely in English. Now, the changes in China's higher education that require that graduates should have sufficient skills in English for communication. Thus, students' oral ability will be no longer neglected but need to be improved. The task is therefore for the teachers of English to shoulder.

However, there are some problems in the current teaching of spoken English in higher vocational, such as the phenomenon of "separation of learning and use"(Wen 2015), in which most college students in China do not have language environment and opportunity to implement corresponding oral communication activities, and most of the time they focus on English listening and reading, which makes teaching input more but effective output less, this makes the oral skills they have learned gradually detached from the actual application, making the input and output disconnected. Many students believe that English learning is not important for their future career and that English learning is only for passing the exam. In addition, English teaching methods have recently undergone tremendous changes with new lenses through which Chinese teaching philosophy is embraced (Vettorel,2018; Cumming, 2017). The teachers who often traditional teaching methods realize that they need to change their teaching strategies if students' speaking abilities are the main focus and that in their current practice, they do not create an environment for students to communicate orally in English (Zhang, 2017), so the speaking ability of higher vocational students has not been substantially improved, and still stays at the undesirable levels. Meanwhile, relevant literature demonstrates that the conventional PPP (Presentation-Practice-Production) teaching mode is the most commonly used oral English teaching method in China (Vettorel, 2018; Cumming, 2017). A single teaching mode may lead to low classroom participation. In the long run, this is not conducive to improving the professional skill development of vocational teachers, nor is it conducive to improving their students' speaking skill and interest in English. However, one effective teaching approach recently integrated into classes at colleges and universities in China is the Production-Oriented Approach (POA). It is based on the "output-driven hypothesis," where output motivates learners more than input and facilitates the application of English knowledge. The output-driven hypothesis is more suitable for productive skills such as speaking, communication, writing, and translation. In early 2014, this hypothesis was revised and called the "output-driven input facilitation hypothesis," before Professor Wen then, proposed the Production-Oriented Approach (Wen, 2016). Several scholars have reported significant progress in speaking, writing, and translating among university students (Wen, 2016, 2017; Deng, 2018). Some scholars found that POA was useful for improving speaking skills their learning satisfaction. at vocational colleges, where students' English level was elementary (Deng, 2018; Lv et al., 2020; Zhang, 2017).

Therefore, it's necessary for teachers to seek appropriate teaching methods in order to improve students' oral English abilities and enhance their interest in learning spoken English. In this study, based on the national conditions and learning situation of China, Wen (2015) proposed a new English teaching method 'Production-oriented Approach' based on the "output-driven hypothesis," where output motivates learners more than input and facilitates the application of English knowledge. The output-driven hypothesis is more suitable for productive

skills such as speaking, communication, writing, and translation. It motivates students to produce a large amount of language by designing authentic language communication tasks. In the process of output, students takes the initiative to use language knowledge, experience the social functions of language, and get the opportunity to consolidate and extend what they have learned. It shows an effective path to language acquisition through communication. In the teaching process, this pedagogy is always oriented to the output target, allowing students to learn selectively about the text they are learning, thus aligning learning with application. In the evaluation process, teachers' guiding role and students' initiative are reflected. More attention is paid to the diversification of evaluation methods and establishing a harmonious interpersonal relationship between teachers and students. The Teacher-Student Collaborative Assessment of this pedagogy can effectively promote students to learn and learn by evaluating. TSCA advocates that every student self-assessment or peer-assessment be preceded by teacher professional leadership, in which the teacher selects a typical sample and leads a collaborative assessment with all students. Instead of one training session, students receive more than one targeted training session. Self-assessment or mutual assessment takes place immediately after each specialized training. This is not only a review of the classroom content, but also an application and consolidation of the new knowledge, ideas and skills just learned (Wen 2020).

Research Objectives

1. To explore whether Production-oriented Approach in teaching speaking English in higher education can improve the Chinese college students' speaking ability

2. To investigate whether the Chinese college students are satisfied with Production-oriented Approach for oral English lesson

Literature Review

1. Theoretical Foundations of Production-oriented Approach

Since the middle and end of the 20th century, most linguists have focused their research on theories of second language acquisition, among which the most influential "input and output theories" have provided a deep theoretical foundation for the birth of many pedagogies. In addition, the newly proposed "selective learning" theory in the 21st century has also provided a richer theoretical guidance for language learners and teachers. POA theory draws on foreign language teaching concepts (Ellis & Johnson, 1994, Krashen,1985, Long,1983, Swain,1995) and useful components of teaching practice, based on solving the common problem of "emphasizing learning over use" or "emphasizing use over learning" in foreign language teaching in China (Wen, 2013, 2015; Zhang, 2016).

Production-oriented Approach (POA) used in mainstream education in China are characterized as being emphasis on language output, authentic contexts, cultivation of communicative competence, learner-centered and process assessment, which is attempted by Wen (2015) in the context of the post methods era (i.e. Brown,2002; Kumaravadivelu 2006; Richards & Rodgers 2008), to overcome the disadvantages of 'separation of learning and use' in foreign language learning and to further improve the efficiency and effectiveness of foreign or second language teaching in the classroom. "Production-oriented approach" (POA) is based on the "output driven hypothesis," which explains that output motivates learners more than input and also improves their desire to learn a foreign language (Wen, 2018). The output-driven hypothesis is more suitable for social demands as it fosters productive skills such as speaking, writing, and translation. Output focuses both on the process of production and results of output. Since 'output-driven hypothesis' does not generalize and define the relevant role of 'input', after several rounds of teaching experiments by several teachers, such as Chen (2010), Fang and Xia (2010), Wang (2010), Liu and Zhong (2011), Su (2011), Wen (2014) changed this

concept into the 'output-driven-input-enabling hypothesis' emphasizing the important role of "input" in the process of foreign language teaching, and later named it as the Production-oriented Approach (POA) in the 7th International Symposium on English Language Teaching in China (Wen, 2014), and finally the production-oriented methodology system was formally formed (Wen, 2015).

1.1 Teaching and Learning Process of POA

Teaching with the POA consists of three phases: (1) motivating; (2) enabling; and (3) assessing. All three phases are mediated by teachers, whose mediating roles include guiding, designing, and scaffolding in addition to being a facilitator and a consultant (Wen, 2015).

Although the POA has been developed to overcome the weaknesses in current English instruction in China, it is also suitable for other contexts where English is taught as a foreign language such as Japan, South Korea, or Thailand (Wen 2016:1-15).

Among them, the 'motivating' session is the starting point of teaching, including three steps, respectively, the teacher presents the communicative scene, students try to complete the communicative task, and the teacher explains the teaching objectives and output tasks (See Table 1 for teaching steps and requirements of motivating phases).

Table 1 Teaching steps and requirements of motivating phases (Wen, 2015)

	Teaching Steps	**Teaching Requirements**
1	Teacher presents communicative scenes	Scenarios are communicative and topics are cognitively challenging
2	Students try to complete the communicative activity	Students become aware of their language deficiencies and develop a desire to learn
3	Teacher explains the output objectives and tasks	Make students clear about both communicative and linguistic objectives Make students clear about the type and content of output tasks

'Enabling' is the main session of teaching, in this session, teachers need to play a leading role, according to the needs of the output task and students' current level, select appropriate input learning materials, guide students to selective learning of input materials, and provide appropriate scaffolding to help students facilitate the speaking output task (see Table 2 for teaching steps and requirements).

Table 2 Teaching steps and requirements of Enabling phases (Wen, 2015)

	Teaching Steps	**Teaching Requirements**
1	Teaching Steps	Teaching Requirements
2	Teacher describes the output task	Students have a clear understanding of the steps to complete the output task and the specific requirements for each step.
3	Students engage in selective learning, and the teacher provides guidance and checks.	Students are able to select the content, language forms and discourse structures needed for the output task from the input.

'Assessing' is the testing stage of teaching. In this stage, the teacher uses peer assessment or teacher-student co-assessment to evaluate the output results after students have

completed the output task and to provide teaching feedback. The 'Production-oriented Approach' includes both immediate evaluation of students throughout the language enabling session and delayed evaluation after students complete the output tasks (See Tables 3 for the steps and requirements). Among the challenges of the delayed assessment, Wen (2016) created a 'teacher-student collaborative assessment' in a way to complement the delayed assessment.

Table 3 Teaching steps and requirements of the Delayed Assessment (Wen, 2016)

	Teaching Steps	Teaching Requirements
1	Teachers and students learn the assessment criteria together.	Criteria are clear, concise and easy to check
2	Students submit output results.	Submission deadlines and submission forms are clear
3	Teacher and students evaluate output results in class.	Effective use of time, clear requirements for the audience, targeted teacher evaluation
4	Teachers evaluate output results outside of class.	Teachers and students participate in the evaluation.

1.2 Instructional Hypothesis of POA

Instructional hypothesis are the theoretical underpinnings of the teaching and learning process. It includes 'output-driven hypothesis', 'input-enabling hypothesis' and 'selective-learning hypothesis'.

The 'output-driven' hypothesis is based on the 'output hypothesis' (Swain,1985,1993; Swain & Lapkin,1995) and the 'interaction hypothesis' (Long, 1996; Long,1983a) which argues that 'productive language use is both a driver and a goal of language learning, and is more effective than input learning' (Wen, 2015). According to Wen (2017) 'Output-driven' hypothesis can motivate students to know their own shortcomings and difficulties in learning, and fully mobilize their enthusiasm for learning and desire for knowledge.

The 'input-enabling hypothesis' emphasizes the need for students to learn to help use and promote 'self-reflection' and 'self-improvement'. (Wen, 2017) arguing that students can learn better in output-driven learning with appropriate and timely learning inputs (Wen, 2015). Wen (2015) argues that students can activate their knowledge and enhance their language fluency in the process of completing output tasks. However, in the process of students' knowledge construction, teachers need to provide students with appropriate materials or explanations to give full play to scaffolding and promote students' comprehensible input, so as to make up for students' own shortcomings, expand their knowledge system, and improve the quality of their language output (Wen, 2017).

The 'selective-learning hypothesis' argues that selective learning is more effective in improving learning efficiency and optimizing there learning effect, and opposes the traditional teaching model of teaching intensive reading without selective teaching but with high expectations for students (Wen, 2015). The Production-oriented approach advocates treating language learning materials as enabling materials rather than learning objectives, and advocates that language teachers select parts of the lesson preparation process that are beneficial for output activities to be fine-tuned so that students can engage in selective learning in the limited class time (Zhang, 2017).

'Assessment for learning' is a new assumption in the theoretical system of Production-oriented approach, which advocates that teachers need to professionally lead students to

evaluate while they learn, assess each other's learning, and use evaluation as a sublimation stage for teachers' teaching and students' learning. Learning assessment is mainly implemented through the new form of 'teacher-student collaborative assessment' (Wen, 2016) which not only can make up for the shortcomings of the existing assessment sessions, but also can reduce the burden of teacher assessment and can be carried out at different stages in the classroom. Before the lesson, teachers need to select and review representative samples of students' work according to the unit's teaching objectives to prepare materials for the post-performance assessment activities. In the class, teachers let students first think independently about the evaluation of typical samples, and then communicate to subgroups, and then organize and carry out a whole-class discussion to conduct the final review to determine. Finally, give the review opinions prepared before the class for students' reference in this process at the right time. After the class, teachers need to provide students with guidance and relevant materials for self-evaluation and peer assessment, and guide students to self-evaluation or peer assessment on effect of 'teacher-student cooperative assessment' in promoting learning (Wen, 2017).

2. Measuring student satisfaction

Student satisfaction is an essential indicator of students' overall academic experiences and achievement (Virtanen et al. 2017). There are different instruments to measure student satisfaction. Using survey questionnaires is generally standard practice for measuring learner satisfaction. Over the years, a variety of tools such as Course Experience Questionnaire (Ramsden 1991), National Student Survey (Ashby et al. 2011) and Students' Evaluations of Educational Quality (Marsh 1982), were developed and used to measure student satisfaction. In this study will use of a Course Experience questionnaire to measure students' satisfaction to the production-oriented approach. The CEQ was developed by Ramsden (Ramsden, 1991; Wilson et al., 1997) as a teaching performance indicator, focusing on aspects of the classroom teaching environment which previous research had found were linked to deep and surface approaches to learning, and higher quality learning (Chalmers, 2007). The scales include Good Teaching, Clear Goals and Standards, Appropriate Assessment and Appropriate Workload (Chalmers, 2007). The CEQ also includes an outcome scale, Generic Skills, and an Overall Satisfaction with Course Quality.

3. the Input Hypothesis

The input hypothesis is central to the American linguist Krashen's theory of second language acquisition (Krashen, 1981) and has been an important guide in both language research theory and language teaching practice. This means that learners can only acquire language if they have access to comprehensible input (i.e. input in the second language that is slightly above their current level of language skills and is focused on achieving meaning or information rather than form), which is known as The 'i+1' principle. 'i' is defined as the current learner level and 'i+1' indicates the level of language input that the learner can easily receive and acquire with the help of context and additional linguistic information. However, if learners' language input level is too high or exceeds their current level 'i+2', it can cause difficulties in comprehension, low or below their current level (i+0 or i-1), it can produce significant language learning effects (Krashen 1985). In fact, before Krashen (1984) characterized the acquisition of optimal input, he also pointed out the role of output in the process of language acquisition, that is, language output "contributes to some extent" to language acquisition, in other words, the actual spoken expressions that language learners perform affects the amount of language input directly to them, i.e., the more the speaker speaks, the more people he or she speaks with. Krashen (1984) suggests that conversational partners (especially foreigners) often try to help language learners understand what is being said through modifiers, and judge the extent of modifiers by observing whether they understand what is being said and by listening to their verbal expressions. In other words, in general, a second

language speaker who is more accented, hesitant, and error-prone in verbal expressions will receive more adapted language input than someone who is more confident and fluent in verbal expressions.

4. the Output Hypothesis

Since the 1990s, the focus of second language acquisition research has shifted to the role of language output in language learning. Swain (1985) proposed the 'language output hypothesis' to address the shortcomings of Krashen's 'language input hypothesis' and emphasized the importance of output. Subsequently, Swain (1995) proposed three major functions of the language output hypothesis based on the previous theory, namely, the 'noticing function', 'hypothesis testing function' and 'metalinguistic function'. The 'noticing function' is the core of the theory, which means that second language learners notice the problems of their language group through language output and thus trigger the cognitive process in second language learning. This triggers a cognitive process in second language learning in which they generate new linguistic knowledge and consolidate their existing knowledge, and then consciously analyze and revise language forms to improve fluency and accuracy (Swain & Lapkin. 1995). The 'hypothesis testing function' refers to the fact that second language learners test and revise their hypotheses about the language form of the target language through language output, and continue to improve the accuracy of their language output with feedback. Finally, the 'metalinguistic function' refers to the psychological mechanism for second language learners to reflect on their language output when they encounter difficulties. The second language learners may use their acquired language knowledge to reflect on the language they are expressing when they encounter difficulties in language output, thereby enriching their knowledge of the target language and internalizing it.

5. Selective Learning Theory

"Selective learning theory suggests that learners need to select and prioritize key information because selective learning is more effective in achieving learning goals and results than non-selective learning. According to psychologist Douanten (2007) effective learners selectively refine important information among multiple inputs rather than processing and memorizing large amounts of information. In other words, when people want to learn something, they usually choose a specific event rather than other events in the environment. Wen (2015) points out that most people have limited attention and memory at the same time, so they need to select key information for processing and learning, and to learn selectively" in order to improve their learning efficiency. In addition, Professor Wen believes that the traditional "intensive reading" English teaching mode is too "comprehensive" because it does not selectively process all the language points that appear in the text, which makes it difficult for students to absorb and internalize the knowledge in the limited classroom time.

The second language acquisition theories proposed since the 1980s have provided the theoretical basis for the emergence of the production-oriented approach.

The famous linguist Swain proposed the output hypothesis-concept (Swain, 1985, 1993, Swain & Lapkin, 1995) which is an important source of the production-oriented approach theory. In the output hypothesis concept, language output is the ultimate goal of language learning and also the internal driven of language input. However, Swain does not mention the role of 'language output' in language learning, which is the driving force behind the internalization of language knowledge by language learners. Another famous linguist Krashen proposed the concept of the input hypothesis, which is also an important source of production-oriented theory (Krashen, 1981, 1984, 1985), who states that the effectiveness of second language acquisition depends on 'language input', but ignores the driving role played by 'language output'. Based on the shortcomings of the above theories, scholars such as Wen have

initiated an in-depth consideration of this issue and provided corresponding ideas for the subsequent development of the production-oriented approach theoretical system.

Across these studies, the relatively new theoretical system and short development history of this pedagogy, no scholars abroad have explored the application of this method in foreign language teaching for the time being, but a number of foreign scholars have made positive evaluations and thought deeply about this method. Ellis (2017) affirmed the production-oriented approach in terms of pedagogical theory, content, materials, and process. concluded that the content and process of the approach enable students to become aware of their cognitive and linguistic limitations and become more engaged in the subsequent language learning process. However, he suggested areas still in need of improvement regarding the method's learning assessment, teaching faculty, student classroom activities, evaluation of teaching materials, and suggested the need for a subsequent comparative study of output teaching methods and other teaching methods. Matsuda (2017) held a positive attitude towards the output pedagogy and evaluates it in terms of theoretical foundations, learning effectiveness and materials design, arguing that the pedagogy breaks with previous outdated linguistic theories (e.g. the hypothesis that language input is more important than language output) and can help students learn and effective language materials more effectively, with flexible and interesting teaching materials. Polio (2017) on the other hand, reflects on the production-oriented approach from the perspective of pre service teachers, pointing out that the output-based approach provides pre-service teachers with a good teaching model and new teaching ideas, and points out some key issues for pre-service teachers to pay attention to the theories related to the production-oriented approach. Schaller-Schwaner (2018) also affirms the production-oriented approach, and arguing that the production-oriented approach opened up new perspectives on teaching for her and prompted her to actively reflect on her prior knowledge of other teaching theories and her own teaching experiences.

6. Related Research on Application and Testing of POA

The Production-oriented Approach has received the attention of most scholars in China since the time it was formally proposed, and several front-line teachers. For example, Gu (2016), Qi &Shi (2016), Tang & Hu (2021), Zhang (2017), Zhang (2018), and Zhang (2016, 2017) conducted several rounds of classroom action research and empirical studies to test this teaching theory, and finally successfully proved that this teaching method can effectively improve students' listening, speaking, reading, writing, and translating English language skills, and has also been cited by other scholars in China in their own teaching research. Among them, Zhang (2017) proved through an experimental method that the Production-oriented Approach can effectively improve students' listening, speaking and writing skills, enhance students' motivation to learn English and improve their self-confidence in learning English. At the same time, the teaching evaluation methods of the Production-oriented Approach have also been analyzed in depth, for example, some scholars have adopted the practice and reflection research method, summarized and clarified the principles of assessment focus through practice, and analyzed the 'assessment for learning-approach' combined with cases (Sun, 2017, 2020). In addition. Some scholars have also conducted in-depth research on the theoretical transformation of production-oriented approach and the process of textbook development, such as Chang (2017), took action research method to analyze the process of textbook development based on the guidance of production-oriented approach, and proposed and explained 'Teaching theory a action research two-wheel driven' textbook development model.

7. Related Research on Instructional Design Studies of POA

In terms of teaching application, most scholars have focused their research on production-oriented teaching design on the basis of the teaching process of the motivating, enabling and assessing. They have focused their research on production-oriented instructional on the design of a specific instructional process for a particular session or case study design for a specific course. (Wen, 2020) also reinterprets the instructional process in the production-oriented approach theoretical system, aiming to provide reference for other scholars in instructional design. On this basis, some scholars point out the differences between production-oriented approach and task-based teaching method. The comparison results shows that production-oriented approach is more suitable for the characteristics and needs of Chinese English students, which can achieve both communicative and linguistic purposes, as well as prompt the combination of input and output, and is more advantageous in Chinese English teaching (Bi, 2019). Therefore, most studies by scholars have mainly focused on the application scope of production-oriented approach in university English teaching, taking college students with high English language proficiency levels as the research objects in order to explore a suitable teaching design of production-oriented approach.

In terms of the design of the motivating session, fewer scholars in China have conducted in-depth studies on this session. Among them, Professor Wen, the proposer of the production-oriented approach, in a recent study, focused on the scenario design in the motivating session, clarified the roles of four elements (topic, purpose, identity and occasion) in different contexts, showed through examples how to achieve speech output scenarios in authentic communication, and emphasized the use of explicit methods to develop students' sense of identity in order to enhance classroom effectiveness (Wen, Sun, 2020) which provides an important reference for other scholars' instructional design of driving sessions.

In the enabling session, related studies focus on the design and implementation of output tasks. Wen (2020) explored the design of the enabling session in the context of the output exercises of 'Vocabulary, Phrase, Sentence, and Discourse'. Wei, Jing, and Yong (2020) discuss how to effectively produce output to achieve the purpose of learning to use under the interaction of 'content, language form, and discourse structure'. Lin (2017, 2019, 2020) investigates the design ideas and the process, principles, effectiveness of the language enabling session etc. Zhang (2020) proposes the design of a multimodal oral report output task and designed it as a core concept for teaching multiple literacies in a one-input enabling-session with the aim of improving the quality of oral reports at the linguistic, discursive, and multimodal levels.

In terms of the teaching design of specific courses, scholars mainly focus on the design of English courses in colleges and universities, such as teaching English for special purposes in engineering (Du, Wang, Liu & Zhou, 2019), English courses for non-English majors (Qi & Shi 2016; Zhang, 2020; Zhang, 2016, 2017), and English major courses (Tang, 2020). Among them, Du and other scholars (2019) took IT industry workplace English-course as an example and elaborated on the instructional design guided by production-oriented approach, with students' needs as the output goal and organic combination of industry cognition and language communication skills. Qi and Shi (2016) propose a production-oriented teaching design for non-English majors' English audio-visual classes that can effectively improve students' output ability, and suggest that teachers should tailor the teaching design to the school's characteristics and resources, integrate it into real teaching activities inside and outside the classroom, and make fundamental changes in students' minds by "using" it. It is worth mentioning that Zhang (2016) refined and implemented the abstract teaching process of the production-oriented approach in the action research, reinterpreted the three stages of teaching, summarized five optimized teaching principles, and improved the original teaching model, which provides a reference for the author's future action research instructional design.

Previous studies have focused on the application of POA in English language teaching has been carried out extensively and several papers have been published to prove the effectiveness of this method for the cultivation of English language proficiency, however, the production-oriented approach is seldom used in higher vocational English language teaching. Theoretically, the POA is also able to improve the speaking proficiency of higher vocational students, but there is still a lack of empirical research to further validate the effect of the production-oriented approach on the promotion of the students' oral proficiency. Secondly, there is a need to further expand the scope of teaching practice of the production-oriented approach in the teaching of spoken English in higher vocational education. There are also fewer studies on the effect of POA on the oral English proficiency of higher vocational students, and the research on the pedagogical application of this method carried out in higher vocational mainly focuses on the teaching of oral courses for non-English majors, e.g., Mei (2020), Xie (2020), and Zhang (2019). Therefore, this study was carried out the research on oral English teaching in higher vocational schools, as well as aimed at exploring an effective teaching mode of oral English classroom in higher vocational level.

Conceptual Framework

This research was a quantitative study with quasi-experimental group of 48 students was selected by convenience sampling method. The instruments adopted in the study consisted of the Pre/Post-Test and a satisfaction questionnaire. The researcher defines the research conceptual framework based on the theory of Production-Oriented Approach together with one group pre-test/post-test and a satisfaction questionnaire. The details are as follows Fig 1.
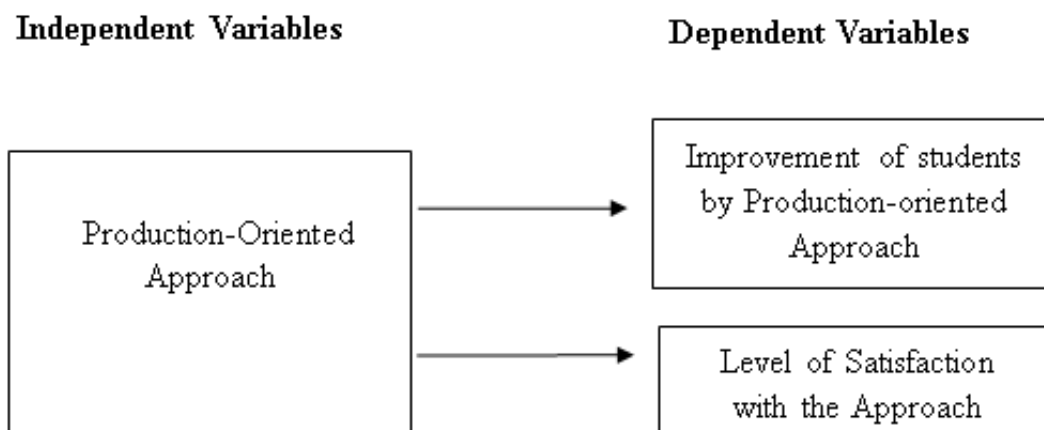

Fig.1 Conceptual Framework of the study (source: Created by researchers, 2023)

Research Methodology

This research is a quantitative study with quasi-experimental group of 48 students was selected by convenience sampling method. The study collected data from the two research instruments used: one group pre-test/post-test and a satisfaction questionnaire.

1. One group pre-/post-test

In this design, this one group was exposed to the POA lessons over a period of time (See Appendix A for details of the test questions). After the lessons, the post-test was given to find out what changes are made to the students' speaking skills in terms of fluency, pronunciation, grammar, vocabulary and content and the results were gathered at the end. The pre-test and post-test questions were based on the oral test questions of IELTS Speaking (See Appendix 3).It requires a level of proficiency equivalent to that of a high school graduate, and a student who passes the test at this level can basically meet the English proficiency

requirements for entering a higher vocational school for further study. Speaking test requires students to be able to communicate with other people in familiar situations, for example, to ask questions or to convey basic factual information. To summarize, the difficulty level of the test was suitable for the research subjects in this study (See Appendix B for Pre-and Post-test Evaluation Rubric). This rubric can be attributed to Marek & Wu (2011, May 14).

2. The Satisfaction Questionnaire

First, the questionnaire questions were subjected to a Item-Objective-Congruence activity to ensure the validity of the questionnaire research instrument. Second, before sending the questionnaire to higher vocational college students, to ensure its reliability, the researcher invited another group of 30 non-participating students to participate in a pilot test on October 16, 2023, and the pre-experimental test resulted in an alpha value of 0.757 for the questionnaire. Therefore, the questionnaire in this study was considered reliable.

The questionnaire used in this study was carefully prepared and designed to obtain answers to the research questions. Information from literature review of the area was also adopted to construct the questionnaire items. The questionnaire had a total of 15 questions divided into three main sections as shown in Appendix A.

Teaching of POA English speaking class (Items 1-4)

Assessment of POA English speaking class (Items 5-10)

Genetic skills and learning experience (Items 6-15)

For the primary analysis, descriptive statistics (mean, standard deviation) for the questionnaire data was used. The means were interpreted as follows: Strongly disagree in the point range of Strongly Disagree 1.00-1.80; Disagree 1.81-2.60; Neutral 2.61-3.40; Agree 3.41-4.20; Strongly Agree 4.21-5.00 (Pimentel, 2010). The Likert Scale Interval was shown in Table 3.

Table 3 The 5-point Likert Scale（Source: Pimentel, 2010）

Likert Scale Description	Likert Scale	Likert Scale Interval
Strongly Agree	5	4.21-5.00
Agree	4	1.81-2.60
Neutral	3	2.61-3.40
Disagree	2	1.81-2.60
Strongly disagree	1	1.00-1.80

Research Results

Objective 1. The results showed that the analysis of pre-test and post-test in five parts: fluency, pronunciation, grammar, vocabulary and content, from Table 4.1-4.5, it is found that at the significant level of 0.05, the pre-test and post-test in five parts is 0.000, less than 0.05. The result shows the production-oriented approach can be applied to English speaking class of high vocational education, and it can play a significant effect of promoting learning, which is specifically reflected in the improvement of students' speaking ability scores in the five dimensions of fluency, pronunciation, grammar, vocabulary and content.

After the test, the researcher gets all students pre-test total score and post-rest total score, based on the analysis of pre-test and post-test in final score, it found that the mean score of pre-est score was 12.7 and the post-test score was 19, that means the student gets better to understand after they study of applying production-oriented approach in teaching English speaking, the mean gap between pre-test and post-test was 6.3, which means most of the students get higher ability after they received POA in teaching English speaking.

Therefore, the researcher concludes that the two different scores of Chinese higher vocational students shown POA of teaching English speaking, it works for applying POA in teaching English speaking, as shown in the Table 4-9.

Table 4 The descriptive statistics of fluency for T-test in the pre-test and post-test.

	Group	N	Mean	S.D.	t	P
Fluency	Pre-test	48	2.667	1.506	-4.812	0.000
	Post-test	48	3.958	1.091		

Table 5 The descriptive statistics of pronunciation for T-test in the pre-test and the post-test

	Group	N	Mean	S.D.	t	P
Pronunciation	Pre-test	48	2.542	1.443	-4.527	0.000
	Post-test	48	3.708	1.051		

Table 6 The descriptive statistics of grammar for T-test in the pre-test and the post-test

	Group	N	Mean	S.D.	t	P
Grammar	Pre-test	48	2.625	1.579	-3.915	0.000
	Post-test	48	3.750	1.212		

Table 7 The descriptive statistics of vocabulary for T-test in the pre-test and post-test

	Group	N	Mean	S.D.	t	P
Vocabulary	Pre-test	48	2.458	1.414	-4.787	0.000
	Post-test	48	3.708	1.129		

Table 8 The descriptive statistics of vocabulary for T-test in the pre-test and the post-test

	Group	N	Mean	S.D.	t	P
Content	Pre-test	48	2.417	1.366	-5.794	0.000
	Post-test	48	3.875	1.084		

Table 9 The descriptive statistics of final scores for T-test in the pre-test and post-test

	Group	N	Mean	S.D.	t	P
Final Score	Pre-test	48	12.708	2.673	-11.529	0.000
	Post-test	48	19.000	2.674		

Objective 2. The results showed that the overall mean of applying POA in teaching English speaking was 'Agree' (x= 3.880/SD-1.188), which proved that most of the students were satisfied with the result of applying POA in teaching English speaking.

For detail, the researcher noticed that of all 15 statements, students marked Statement 3 (S3) and Statement 11 (S11) with the lowest score of which average were (x=3.73 and x=3.77). this question was "The teacher understood my learning needs" and "The lesson helped me develop my ability to work as a team member" that means the applying POA can help higher vocational students improve their English speaking skills, but individual students may not be able to adapt too well to the new teaching method and need time to adopt this teaching method.

However, the researcher noticed that according to all 15 questions, students mark Statement 6 (S6) and Statement 10 (S10) with score which average was (x=3.734.00 and x=3.94), this question was "I knew how I was going to be assessed in class" and "The assessment was a good test of what I was taught", the reasons could be POA integrates students well into the speaking classroom and through classroom presentation, peer/group mutual assessment and teacher's comprehensive assessment and other evaluation activities, students strengthened their knowledge of their own language level, created a learning atmosphere of mutual evaluation and mutual learning, and stimulated the motivation to improve their own language deficiencies, thus giving full play to the significant advantages of "assessing for learning".

Then, the researcher noticed that according to all 15 questions, students mark Statement12 (S12) and Statement 14 (S14) with the highest score which average was (x=4.00 and x=4.06), this question was "The lesson improved my skills in speaking communication" and "The lesson has made me more confident about my ability to learn", the reasons could be POA integrates students well into the speaking classroom and has a positive impact on students' speaking skills.

The questionnaire surveyed 48 high vocational college students about their satisfaction. The questionnaire data analyzed was shown in Table 10 below. Descriptive statistics namely means and SDs were calculated for all items.

Table 10 Descriptive Statistics for the Fifteen Statements

No.	Items	Mean	SD	Interpretation
1	The teacher had a thorough knowledge of the subject content.	3.790	1.237	Agree
2	The teacher treated me with respect.	3.880	1.248	Agree
3	The teacher understood my learning needs.	3.730	1.300	Agree
4	The teacher communicated the subject content effectively.	3.810	1.331	Agree
5	The teacher made the subject as interesting as possible.	3.900	1.276	Agree
6	I knew how I was going to be assessed in class.	4.000	1.130	Agree

No.	Items	Mean	SD	Interpretation
7	The way I was assessed was a fair test of my speaking skills.	3.790	1.010	Agree
8	I was assessed at appropriate intervals	3.850	1.148	Agree

9	I received useful feedback on my assessment	3.880	1.142	Agree
10	The assessment was a good test of what I was taught	3.940	1.119	Agree
11	The lesson helped me develop my ability to work as a team member	3.770	1.372	Agree
12	The lesson improved my skills in speaking communication	4.000	1.255	Agree
13	After class, I feel more confident about tackling unfamiliar expression in English	3.810	1.065	Agree
14	The lesson has made me more confident about my ability to learn	4.060	0.976	Agree
15	Overall, I was satisfied with the quality of this speaking class	3.960	1.220	Agree
	Average	**3.880**	**1.188**	**Agree**

Discussions

1. Application and Testing of Production-Oriented Approach

The results of analysis of pre-test and post-test in five parts. There was a significant difference, on average, between pre-test score and post-test score, this also could be proved that students' speaking abilities could get effects from applied POA in teaching English speaking. The student could get a higher score in the post-test, they could get a higher score after the teacher applied POA. The results show the theoretical system of production-oriented approach can be applied to the speaking class of high vocational education, and it can play a significant effect of promoting learning, which is specifically reflected in the improvement of students' speaking ability scores in the five dimensions of fluency, pronunciation, grammar, vocabulary and content.

The results of this study are in line with Wen (2018) whose views on Production-oriented approach is based on the "output driven hypothesis," which explains that output motivates learners more than input and also improves their desire to learn a foreign language. The output-driven hypothesis is more suitable for social demands as it fosters productive skills such as speaking. Output focuses both on the process of production and results of output. The "learning-centered principle" advocates that all activities of classroom teaching should serve the occurrence of effective learning (Wen，2015). "using" refers to output language use speaking. This concept advocates "learning while using, using while learning, using while learning, and combining learning with using" (Wen, 2015), hoping that students can move away from learning texts in a receptive way and use them as a tool to learn to complete output tasks in English and improve their ability to use English comprehensively.

Then the Production-oriented Approach has received the attention of most scholars in China since the time it was formally proposed, and several front-line teachers. Such as, Gu (2016), Qi &Shi (2016), Zhang et al (2017) conducted empirical studies to test this teaching theory, and finally successfully proved that this teaching method can effectively improve students' speaking English language skills, and has also been cited by other scholars in China in their own teaching research. Among them, Zhang (2017) proved through an experimental method that the production-oriented approach can effectively improve students' speaking skills, enhance students' motivation to learn English and improve their self-confidence in learning English.

Therefore, it can be seen that the production-oriented approach can be applied to the higher vocational English speaking class and effectively promote students' speaking ability,

which further enriches and develops the scope of application of the theoretical system of the POA.

2. Instructional Design of Production-Oriented Approach

The results of analysis of the satisfaction for production-oriented approach shows that most of the respondents were satisfied with the researcher applying production-oriented approach in teaching English speaking. In terms of teaching application, most scholars have focused their research on production-oriented teaching design on the basis of the teaching process of the motivating, enabling and assessing.

The results of this study are in line with Ellis (2017) affirmed the production-oriented approach in terms of pedagogical theory, content, materials, and process. Eillis concluded that the content and process of the approach enable students to become aware of their cognitive and linguistic limitations and become more engaged in the subsequent language learning process. However, he suggested areas still in need of improvement regarding the method's learning assessment, teaching faculty, student classroom activities, evaluation of teaching materials, and suggested the need for a subsequent comparative study of output teaching methods and other teaching methods. Matsuda (2017) held a positive attitude towards the output pedagogy and evaluates it in terms of theoretical foundations, learning effectiveness and materials design, arguing that the pedagogy breaks with previous outdated linguistic theories and can help students learn and effective language materials more effectively, with flexible and interesting teaching materials. Polio (2017) reflects on the production-oriented approach from the perspective of pre-service teachers, pointing out that the output-based approach provides pre-service teachers with a good teaching model and new teaching ideas.

Wen (2020) also reinterprets the instructional process in the production-oriented approach theoretical system, aiming to provide reference for other scholars in instructional design. Bi (2019) shows that production-oriented approach is more suitable for the characteristics and needs of Chinese English students, which can achieve both communicative and linguistic purposes, as well as prompt the combination of input and output, and is more advantageous in Chinese English teaching. Therefore, most studies by scholars have mainly focused on the application scope of production-oriented approach in university English teaching, taking college students with high English language proficiency levels as the research objects in order to explore a suitable teaching design of production-oriented approach.

Similarly, this study explores the teaching effect of the production-oriented approach in the process of teaching spoken English at higher vocational college, and the results of the study shows that this teaching mode has significant teaching advantages in promoting students' speaking ability.

Conclusion

From the above discussion, this study provides valuable information about the effects of teaching English in higher education on improving the speaking ability of higher vocational college students as well as students' satisfaction with teaching English as a foreign language. These findings have important implications for future teaching research and practice, which will help promote the development of English teaching and improve the speaking ability of higher education college students. The production-oriented approach can effectively solve the drawbacks of "separation of learning and use" in the traditional foreign language class and improve the effect of foreign language teaching. However, due to its short history of development, it still needs to be improved later. Its rich and reasonable teaching concepts, theoretical assumptions and innovative and efficient teaching process are of great research value. Future research should focus on the depth and breadth of this theory to develop and improve the theoretical system of production-oriented approach.

Suggestions

It is recommended that the subsequent research direction can focus on the application of the POA in English classes of different teaching objects, such as the application of POA in higher vocational English writing class or English grammar class; it can also pay attention to the overall teaching design of the POA in a certain English course, including the setting of teaching objectives, the selection of teaching content and the design of teaching steps; it can also focus on a certain teaching segment. It can also focus on the specific teaching steps under a certain teaching link, such as the teaching design and implementation strategies in the driving, facilitating or evaluating teaching link; at the same time, it can also focus on the micro issues in the specific steps of a certain link, such as how to set up the presentation of communication scenarios and set up questions in the motivating link, how to design output tasks to adapt to the form of classroom teaching and how to select learning materials for selective learning in the enabling link, and how to apply new forms of evaluation in the assessing link. In the assessing section, how to apply the new form of evaluation "teacher-student cooperative evaluation" and better play the role of "assessment for learning". The above research directions can improve the classroom design of the production-oriented approach in the future.

References

Adams, R.J. (2005). Reliability as a measurement design effect. *Studies in Educational Evaluation, 31*(2-3), 162-172.

Bachman, L.F. (1990). *Fundamental considerations in language testing*. Oxford University Press.

Bi, Q. (2019). Comparison of "output-oriented method" and "task-based teaching method": design and use of teaching materials. *Foreign Language Teaching, 40*(04), 61-65.

Bloom, B.S. (1956). *Taxonomy of educational objectives. Cognitive domain*. McKay.

Brown, H.D. (2002) English language teaching in the "post-method" era: Toward better diagnosis, treatment, and assessment. *Methodology in language teaching: An anthology of current practice*, *9*, 18.

Chalmers, D. (2007). *A review of Australian and international quality systems and indicators of learning and teaching*. Carrick Institute for Learning and Teaching in Higher Education.

Chang, S.L. (2017). A study on the preparation of teaching materials by "production-oriented approach". *Modern Foreign Language, 40*(03), 359-368.

Chang, I.Y., & Chang, W.Y. (2012). The Effect of Student Learning Motivation on Learning Satisfaction. *International Journal of Organizational Innovation, 4*(3), 281-305. Retrieved from http://search.proquest.com/docview/921995037?accountid=15533

Chen, W.K. (2010). Research on the reform of writing teaching in English majors based on output-driven assumption. *Journal of Henan Institute of Education (Philosophy and Social Science Edition), 29*(03), 120-122.

Chen, W. (2020) Research on nominalization teaching of academic English writing based on output-oriented approach: An example of enabling teaching sessions. *Frontiers of Foreign Language Education Research, 3*(01),15-23, 86-87.

Chien, T.K. (2007). Using the learning satisfaction improving model to enhance the teaching quality. *Quality Assurance in Education*, *15*(12), 192 - 214.

Deng, H. (2018). Comparison of "production-oriented approach" and "task-based teaching method". *concept, assumption and process. Foreign Language Teaching, 39*(03), 55-59.

Deng, T.（2019）．Discussion on the mode of oral English teaching in higher vocational education based on production‐oriented approach. *Educational Science Forum,*（30）, 72-76.

Du, W., & Liu, et al.（2019）．Research on the teaching practice of POA in engineering ESP courses‐‐taking the course of "workplace English for it industry" as an example. *Frontiers of Foreign Language Education Research, 2*(03), 42-50.

Ellis, M., & Johnson, C.（1994）．*Teaching business English: An introduction to business english for language teachers, trainers, and course organizers*. OUP Oxford.

Ellis, R.（2017）．The production‐oriented approach: Moving forward. *Chinese Journal of Applied Linguistics, 40*(4), 454-458.

Fang, X. (2010). Competency-based, output-driven and the construction of English specialized course clusters. *Shandong Foreign Language Teaching, 31*(03), 3-8.

Fu, H., & Li, X.（2021）．Spoken English training of winter Olympics volunteers based on production‐oriented approach. *Open Journal of Modern Linguistics, 11*(3), 327‐334. https://doi.org/10.4236/ojml.2021.113026

Goh, C. C. M., & Burns, A.（2012）．*Teaching speaking: A holistic approach*. Cambridge University Press.

Hanten, G., Li, X., & Chapman, S. B.（2007）．Development of verbal selective learning. *Developmental Neuropsychology, 32*(1), 585-596.

Iman, J. N. (2017). Debate instruction in EFL classroom: Impacts on the critical thinking and speaking skill *International Journal of Instruction, 10*(4), 87–108. https://doi.org/10.12973/iji.2017.1046a

Ji, W., Gui, J., & Zhu, Y. (2020) Design and implementation of input facilitation in production-oriented teaching. *Language Teaching and Research,* (03), 33-40.

Jia, G., Ma, Y., & Jiang, N.（1999）．*A psychological study of English teaching in secondary school*s. Hunan Normal University Press.

Karaguven, M. (2012). The adaptation of academic motivation scale to Turkish. *Educational Sciences: Theory and Practice, 12*(4), 2611-2618.

Kohn, K. (2018). POA meets ELF in intercultural telecollaboration. *Chinese Journal of Applied Linguistics, 41*(2), 244-248. https://doi.org/10.1515/cjal-2018-0017

Krashen, S.（1981）．*Second language acquisition and second language learning*. Pergamon Press.

Krashen, S. (1984). *Principles and practice in second language acquisition*. Pergamon Press.

Krashen, S. (1985). *The Input Hypothesis: Issues and Implications*. Longman.

Krashen, S.（1992）．*Linguistics and language pedagogy: The state of the art*. Georgetown University.

Krathwohl, D. R. (2002). A revision of Bloom's taxonomy: An overview. *Theory into Practice, 41*(4), 212-218.

Kumaravadivelu, B. (2006). *Understanding language teaching: From method to post-method*. Routledge.

Lewin, K. (1946). Action research and minority problems. *Journal of social issues, 2*(4), 34-46.

Liang, Y.L., & Liang, Y. H. (2012). Research on the intelligent tutor system of spoken English based on voice assessment. *Modern Education Technology, 22*(11), 82-85.

Liu, X. R., & Zhong, M. C.（2011）．Output‐driven assumptions and the change of thinking habits in oral output--taking the example of oral English teaching for non-English major graduate students. *Journal of Changchun University of Science and Technology, 6*(02), 171-172.

Long, M. H. (1983a). Does second language instruction make a difference? A review of research. *TESOL Quarterly, 17*(3), 359-382.

Long, M. H. (1983b). Native speaker/non-native speaker conversation and the negotiation of comprehensible input 1. *Applied linguistics, 4*(2), 126-141.

Long, M. (1996). *The role of the linguistic environment in second language acquisition. Handbook of second language acquisition*. Routledge.

Matsuda, P. K. (2017). Some thoughts on the production-oriented approach. *Chinese Journal of Applied Linguistics, 40*(4), 468-469

Miyawaki, K. (2012). Selective learning enabled by intention to learn in sequence learning. *Psychological research, 76*(1), 84-96.

Prabhu, N.S. (1987). *Second language pedagogy*. Oxford University Press.

Polio, C. (2017). Reflections on the production-oriented approach vis-à-vis pre-service teachers. *Chinese Journal of Applied Linguistics, 40*(4), 464-467. https://doi.org/10.1515/cal-2017-0029

Qi, P., & Shi, X. (2016). Research on the design and effect of English audiovisual speaking program based on POA. *Education Academic Monthly,* (08), 106-111.

Qiu, L. (2017). Research on the process-oriented design of language facilitation in the "production-oriented approach". *Modern Foreign Languages, 40*(03), 386-396.

Qiu, L. (2019). A dialectical study of "production-oriented approach" enabling session. *Modern Foreign Languages, 42*(03), 407-418.

Qiu, L. (2020). An analysis of the design criteria of "production-oriented approach" facilitation. *Frontiers of Foreign Language Education Research, 3*(02), 12-19-90.

Ramsden, P. (1991). A performance indicator of teaching quality in higher education: The Course Experience Questionnaire. *Studies in Higher Education, 16*(2), 129-150.

Richard, C.J., & Rodgers, S.T. (2001). *Approach and Methods in Language Teaching*. Cambridge University Press.

Richards, J.C. (2008). *Teaching listening and speaking*. Cambridge University Press.

Schaller-Schwaner, I. (2018). Reflections on the production-oriented approach (PO) in China: A new name and a new acronym. *Chinese Journal of Applied Linguistics, 41*(2), 249-252. https://doi.org/10.1515/cjal-2018-0018

Su, L. (2011). Listening teaching for English majors based on output-driven assumption. *Educational Academic Monthly*, (06), 107-109.

Sun, S.G. (2017). Reflective practice research on "teacher student cooperation evaluation". *Modern Foreign Languages, 040*(003), 397-406.

Sun, S. (2020a). An example of teacher-student cooperative evaluation principle in the "production-oriented approach". *Frontiers of Foreign Language Education Research, 3*(02), 20 – 27.

Sun, S. (2020b). Optimizing teacher-student collaborative assessment in the production-oriented approach: A dialectical research. *Chinese Journal of Applied Linguistics, 43*(3), 305-322. https://doi.org/10.1515/CJAL-2020-0020

Swain, M., & Lapkin, S. (1995). Problems in output and the cognitive processes they generate: A step towards second language learning. *Applied linguistics, 16*(3), 371-391.

Swain, M. (1985). Communicative competence: Some roles of comprehensible input and comprehensible output in its development. *Input in second language acquisition, 15*, 165-179.

Swain, M. (1993). The output hypothesis: Just speaking and writing aren't enough. *Canadian Modern Language Review, 50*(1), 158-164.

Swain, M.（1995）．Three functions of output in second language learning. In G. Cook, & B. Seidlhofer (Eds.), *Principle and practice in applied linguistics: Studies in honour* of H. G.Widdowson (pp. 125-144). Oxford University Press.

Swain, M. (2005). *The output hypothesis: Theory and research*. Routledge.

Tang, C. Y., & Jie, M. T.（2011）．Output‑driven assumptions and English interpretation teaching. *Journal of Xi'an University of Architecture and Technology (Social Science Edition), 30*(03), 75-79.

Vettorel, P. (2018). Engaging with the language-The PO approach. *Chinese Journal of Applied Linguistics, 41*(2), 253-255. https://doi.org/10.1515/cjal-2018-0019

Wang, J.P. (2010). Reform of business English writing program in higher vocational education from output‑driven assumption. *Journal of Hubei Economic College (Humanities and Social Sciences Edition), 7*(10), 187-188.

Weerasinghe, I. S., & Fernando, R. L.（2017）．Students' satisfaction in higher education. *American Journal of Educational Research, 5*(5), 533–539. https:／／10. 12691/ education-5-5-9.

Wei, Y., & Zhang, L.（2013）．The survey on barriers of oral English learning for college students in China. *English Language Teaching, 6*(6), 68-76.

Wen, Q. (2012). English as a lingua franca: A pedagogical perspective. *Journal of English as a lingua franca, 1*(2), 371-376. https://doi.org/10.1515/jelf-2012-0024Wen, Q. (2018). The production‑oriented approach to teaching university students English in China. *Language Teaching, 51*(4), 526-540. https://doi.org/10.1017/S02614448160 0001X

Wen, Q.（2020）．*Production‑oriented approach: Developing a theory of foreign language education with Chinese features*. Foreign Language Teaching and Research Press.

Wen, Q., & Bi, Q. (2020). A Review of the Similarities and Differences between production-oriented approach and Task‑Based Teaching Methods. *Foreign Language Teaching, 41*(04), 41-46.

Wen, Q. F. (1999). *The teaching of English as a foreign language*. Shaanxi Normal.

Wen, Q. F.（2008）．Output‑driven assumption and the reform of English professional skills program. *Foreign Languages*, (02), 2-9.

Wen, Q. F.（2013）．The application of output‑driven assumptions in university English teaching: Reflections and suggestions. *Foreign Languages*, (06), 14- 22.

Wen, Q.F. (2014). "Output-driven-input-enabling hypothesis": an attempt to build a theory of university foreign language classroom teaching. *China Foreign Language Education, 7*(02), 3-12.

Wen, Q. F.（2015）．Constructing the theoretical system of "production‑oriented approach". *Foreign Language Teaching and Research, 47*(04), 547-558.

Wen, Q.F. (2016). Teacher-student cooperative evaluation: a new form of evaluation created by "production-oriented approach". *Foreign Languages*, (05), 37-43.

Wen, Q.F.（2017a）．Chinese characteristics of "output‑oriented method". *Modern Foreign Languages, 40*(03), 348-358.

Wen, Q.F. (2017b). Chinese features displayed in the production-oriented approach. *Modern Foreign Languages, 3*(40), 348-358.

Wen, Q. F.（2020a）．Column introduction: Reinterpretation of the teaching process of "production‑oriented approach". *Foreign Language Education Research Frontiers, 3*(02), 3.

Wen, Q. F.（2020b）．Stages of development and determinants of new teaching theories by skilled foreign language teachers. *Chinese Foreign Language, 17*(01), 50-59.

Wen, Q.F., & Sun, S.G. (2020). An example of the elements of the "production-oriented approach" to driving scenario design. *Frontiers of Foreign Language Education Research, 3*(02), 4-11.

Xie, Y. (2020). The teaching practice of production-oriented approach in higher vocational English speaking classroom. *Campus English*, (35), 99-100.

Zhang, L.Y. (2022). Research on the application of "production-oriented approach" in English general language teaching. *Foreign Language Education Research Frontiers, 3*(03), 3-10, 90.

Zhang, P.Q. (2020). A study on the classroom teaching practice of "production-oriented approach" facilitating session--an example of students' multimodal oral report design. *Frontiers of Foreign Language Education Research, 3*(03), 11-18.

Zhang, W. (2020). Effects of the production-oriented approach on EFL learners' writing performance in China's tertiary education. *Chinese Journal of Applied Linguistics, 43*(3), 323-341. https://doi.org/10.1515/CJAL-2020-0021

Zhang, W.J. (2016). The practice of college English classroom teaching based on production-oriented approach. *Foreign Language and Foreign Language Teaching*, (02), 106-114.

Zhang, W.J. (2017). An experimental study on the impact of "production-oriented approach" on college English writing. *Modern Foreign Language, 40*(03), 377- 385, 438-439.

Zhang, Q., & Zhang, L. (2018). A new exploration of teaching Chinese traditional culture based on the production-oriented approach--a review of English tutorial on Chinese culture. *Publishing Wide*, (20), 89-91.

Zhao, H.M. (2018). The application of production-oriented approach in college English listening and speaking teaching. *Journal of Hubei Open Vocational College, 31*(24), 131-132.

Zhao, G.Q. (2002). Ruminations on the ways of teaching spoken English. *Foreign Language E-learning*, (01), 54-57.