The Effects of Online Production-Oriented Approach (POA) on Chinese Undergraduates' English Speaking Competence Development During COVID-19 Pandemic Era

Adelina Asmawi

Department of Language and Literacy Education, Faculty of Education, Universiti Malaya, Kuala Lumpur, Malaysia

Lixuan Sun*

Department of Language and Literacy Education, Faculty of Education, Universiti Malaya, Kuala Lumpur, Malaysia

Abstract—The Covid-19 pandemic has expedited Online Teaching and Learning (OTL) following a sudden closure of academic institutions. Although within the past years, POA was fully developed and expanded in various projects that yielded fruitful college English learning results (Matsuda, 2017), recently, in the learning and practice of Oral English by Chinese undergraduates, there are distinct drawbacks and issues affecting language learning. This paper attempts to apply POA to Chinese undergraduates' oral English classes based on OTL during the covid-19 pandemic, specifically focusing on whether POA can increase the effectiveness of oral English learning for undergraduates. Data analysis of both the pre and post-tests revealed significant improvement in the experimental class and minimal improvement in the controlled class. Students' pronunciation, vocabulary, and fluency improved in the experimental group. It is implied that the POA application was effective in enhancing Chinese undergraduates' speaking skills. Some suggestions are put forth to enhance the application of online POA during the covid-19 pandemic era.

 ${\it Index Terms} \hbox{--} {\it oral} \quad English \quad competence, \quad online \quad teaching, \quad production-oriented \quad approach, \quad Chinese \quad undergraduates$

I. INTRODUCTION

With the outbreak of the COVID-19 pandemic, the world of education has faced a host of unprecedented challenges. Lecturers have shifted to online teaching to reduce the spread of COVID-19 at universities across China in early 2020. As a result, ESL instructors in China were required to adapt language instruction to a fully online format rapidly, and started searching for innovative techniques to teach students to use English in the production stage and foster collaboration among learners in online settings (Cao, 2020; Shrestha et al., 2020; Sun, 2022). In this new educational reform, EFL lecturers are expected to innovate and improve course delivery to enable learners to remotely engage in learning of productive skills such as writing and speaking.

In recent years, proficiency in speaking skills has become a particular concern raised by most Chinese employers. However, getting EFL Chinese students to speak can be a challenge, especially in online English classes. This is as such because most English teachers trapped in the current examination system focus mainly on the written examination to enhance students' English scores within a limited time. Given this fact, Chinese high school students have gained outstanding results in listening, reading, and writing but most cannot communicate effectively (Polio, 2017; Zhang, 2017; Kohn, 2018). Consequently, oral communication should not be overlooked and required a revisit. For Chinese first-year university students, English courses seem challenging due to several reasons: First, teacher-centred methods are still prevalent in some schools, thus most students have not had speaking practice. The conventional PPP (Presentation-Practice-Production) teaching mode is the most commonly used oral English teaching method in China (Vettorel, 2018). However, the PPP approach might work well for teaching vocabulary and grammar, but not speaking skills. This is made worse as Chinese learners are often typically silent and are inactive during speaking classes (Malik & Sang, 2017). In fact, many entering universities have had little experience on how to keep a conversation going despite six years of studying English at school. A series of criticism against PPP have consequently led to the introduction of new teaching methods enhancing learners' communicative competence, such as Communicative Language Teaching (CLT) (Richards, 2006) and Task-Based Language Teaching (TBLT). The latter is an approach that employs a range of interactive tasks to engage learners in meaningful communication (Richard, 2006; Santos, 2011).

© 2023 ACADEMY PUBLICATION

^{*} Corresponding Author.

Similarly, one effective teaching approach recently integrated into face-to-face 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 at vocational colleges, where students' English level was elementary (Deng, 2018; Lv et al., 2020; Zhang, 2017).

Nevertheless, POA effectiveness has never been implemented and investigated in online speaking classrooms. In other words, as there is currently no research focusing on classes implementing online POA, this research investigates if POA could improve students' English speaking skills and their fluency in an online synchronous English class.

II. LITERATURE REVIEW

A. The Underlying Theory of Production-Oriented Approach

The underlying theory of the "Production-Oriented approach" (POA) is the "output-driven hypothesis," which illustrates that output often motivates learners more than input and facilitates the application of English knowledge, and also enhances their motivation to learn a foreign language. The output emphasizes both the process and results of production. The output-driven hypothesis is more suitable to improve productive skills such as writing, speaking, communication, and translation. In 2014, this hypothesis was revised and called the "output-driven input facilitation hypothesis," Consequently, Wen (2016) proposed the Production-Oriented Approach.

POA has three main principles: First, POA is learning-centered. Teachers ensure that every minute of instruction is effectively used, and employ techniques and activities to activate learning and engage learners. The learning-centered principle is in contrast with learner-centered instruction. The latter was initially suggested in reaction to the teacher-centered approach. Here, learning in the classroom needs cooperative efforts of both teacher and learners. Therefore, learning-centeredness may strike a balance between the roles of the teacher and the students.

Learning—using integration is the second principle that maintains that the acquired input must be used in consequent communicative tasks. POA tends to align input with output as processing input and acquired input are merged to lead to output. Once learners have learned new vocabulary, lexical chunks, and grammar by integrating input-based activities, they can link and integrate them into productive speaking and writing output.

The third principle is the whole-person education principle which explains that human beings have cognitive, affective, moral, and ethical needs. Teaching English is to achieve instrumental objectives such as enhancing communication skills and maintaining humanistic objectives, namely, inter-cultural competence, developing learners' critical thinking skills, and autonomous learning. Therefore, Chinese teachers tend to promote cultural exchange between China and other countries based on this principle. Three hypotheses explain the third element of the POA in the following section.

B. Output-Driven Hypothesis (ODH)

The output-driven hypothesis presumes that output is more effective than input in terms of learning outcomes. The reason is that if students start with an output activity to communicate, their preliminary trial may make them notice the gap in their language. Once they become aware of their deficiencies, students are eager to focus their attention on what needs to be learned instead of being 'force-fed'. Generally speaking, a communicative task needs the interlocuters to be supplied with relevant ideas, appropriate language, discourse markers, coherency, and a unified framework to present the ideas. This trial speaking task can help students realize their learning needs from the input given.

In the case of the Chinese students, they have accumulated a considerable amount of input through reading and listening. However, they still struggle with learning English despite being exposed to it from primary and secondary schools. Wen (2016) thus made an analogy about this input as having a full stomach without proper digestion. Output-driven instruction therefore may seem a more suited approach as it is about stimulating learners' appetite; as the saying goes, 'hunger is the best spice.' Thus, designing a speaking activity to get the learners to speak actively makes the learner motivated and eager, like a hungry person, to learn the relevant input (Sun, 2019).

C. Input-Enabled Hypothesis (IEH)

The input-enabled hypothesis verifies that all productive tasks which learners are asked to do need input-enabling materials. Teachers provide learners with newly enabling input, so the productive activity can develop the learner's grammatical and lexical competence. These input-enabling materials also increase learners' fluency and automaticity in using acquired input. Hence, input-enabled production can relate what has already been acquired with new knowledge and result in better learning outcomes compared to mere production practise through project-based or task-based instruction.

D. Selective-Learning Hypothesis (SLH)

The selective-learning hypothesis maintains that what is selected for input is expected to be aligned with the students' needs and enables them to perform the designated productive activities. Teachers have limited time for instruction, so they should selectively choose input based on varied student needs, discourse organization, and linguistic forms. Teachers also give freedom to students to search for something relevant to fulfil their purpose of learning. This hypothesis tends to disagree with bottom-up input instruction. The selective-learning hypothesis holds that classroom instruction should provide opportunities for university students to experience real-life learning. Moreover, learners' capacity to take in new things is limited, and their attention span is limited. According to this hypothesis, as teachers, we should enable students to focus their attention on important things rather than focusing on many new items to enhance learning efficiency (Wen, 2016).

E. POA Teaching Practice Procedure

The teacher goes through three stages in the POA teaching process: a) motivating learners, b) enabling or facilitation phase c) learners' assessment. The first is where lecturers design communicative scenarios which include cognitively challenging themes to motivate learners. Learners carry out these tasks stumbling upon language gaps in their existing knowledge. Such tasks encourage learners to utilize their present knowledge as they actively engage with learning new chunks (Wen, 2016).

In the second stage, the lecturer provides learners with additional input, language, and discourse structures to complete output tasks. Lecturers' enabling or scaffolding activities may start from words, chunks, sentences, and then to different texts. They may use a range of enabling activities such as role-play, monologue, jokes, debate, story-telling, and public speaking (Sun, 2021).

The assessment stage begins at the motivation stage and continues to the end of the assessment stage. Here lecturers evaluate learners in different aspects such as class participation, progress, and output. They usually assess learners' language use in grammar, collocations and critical thinking using different assessment methods such as observation, test papers, interviews, and verbal communication. POA has two types of assessment - instant assessment and delayed assessment. In the instant assessment, lecturers assess learners for selective learning, which means that they keep modifying the teaching materials to meet the lesson's objective. The delayed assessment, on the other hand, is where lecturers assess learners' final tasks. Over three stages of the POA teaching process, lecturers play the role of mediator and facilitator to guide, design and scaffold. The following diagram is the theoretical framework of POA.

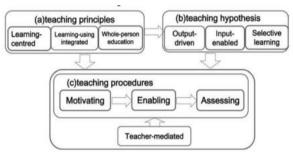


Figure 1. Theoretical Framework of POA (Wen, 2016)

As shown in Figure 1, the theoretical framework of POA is formed by three main components: teaching principles, teaching hypotheses, and teaching process. The first includes learning-using integrated principle, learning-centred principle, and whole-person education principle and is considered the theoretical framework. The teaching hypotheses are output-driven, input-enabled, and selective learning hypotheses. Teaching process is made up of three phases: motivating, enabling, and assessing. The POA teacher trainers carefully trialed the effectiveness of teaching materials. They share this approach with colleges by designing and implementing teacher training courses. In what follows, we will review empirical studies on the application of POA in developing speaking skills.

F. Past Studies

Several studies confirmed that POA is an innovative teaching approach in China, particularly for college learners (Wen, 2016; Vettorel, 2018; Zhang, 2017; Lv et al., 2020). Ellis (2017) believed that POA has a solid theoretical foundation and involve engaging teaching resources. However, he criticized the POA for ignoring the critical role of social interaction in language learning. He stated that the approach is primarily based on input and output without clearly declaring that communication usually happens within social interaction. He drew the POA team to this fact to clarify the extent to which the materials promote acquisition-rich interaction.

Ellis (2017) also questioned how this approach fosters the negotiation of meaning and form, and whether learners are engaged in language-related episodes when they perform activities. Over the recent years, there have been some studies conducted to examine the efficiency of the POA on productive skills, namely writing and speaking. Most (Zhang, 2017; Li & Li, 2020; Liu & Cao, 2021; Zhou, 2021; Wu & Wei, 2022) examined the effect of the POA on writing, summarized POA principles and teaching procedures as well as their effects. To date, few studies have investigated and reported the effects of POA on college students' speaking performance.

Li (2018) conducted a study to investigate the effects of the POA on college students' speaking ability. Results revealed that students' speaking scores improved in both POA and PPP groups. However, students in the POA group were more fluent and used more advanced vocabulary. In the same vein, Liu et al. (2020) divided college students into seven groups and got students to download the input materials related to each group's output task. The learners in each group found the answers to complete each output task. The teacher provided learners with language and content organization, and then, reviewed students' presentation slides. Students' motivation and enthusiasm for speaking increased after getting peer feedback on the POA. However, the effectiveness of the POA was not confirmed through conducting an experimental study or qualitative study.

Ren and Wang (2018) developed a questionnaire to investigate students' motivation levels. 45 first year students from different disciplines participated in a survey which lasted four months. Findings revealed that students started to express considerable interest in the POA approach, which led to an increase in their integrative motivation to learn English. In another study, Yin (2020) examined the application of the POA on pre-service EFL teachers at a college in Korea. This study on students' experience focused on the ways POA teaching procedure (motivating, enabling, and assessing) influenced the students' speaking processes over a semester. Data were collected from reflective journals, class observations, interviews, and group discussions. Findings showed that focused listening through the POA teaching procedure developed students' speaking performance and enabled them to develop strategies to use "input" in order to enhance "output."

To the best of our knowledge, no study has investigated the effect of POA on students' speaking performance in synchronous online classes. Applying the POA approach in an online class therefore, needs further research to ascertain their speaking competency particularly for collaborative tasks in such a context. The following research question was thus, formulated:

What are the effects of POA on Chinese undergraduates' speaking competency in an online learning environment?

III. METHOD

A. Research Design and Participants

This study aims to investigate if POA has any effect on first-year Chinese college students' speaking competence in an online class in 2020. The researchers conducted a quantitative study through pre and post-tests using repeated measure ANOVA to answer the research question. To maintain the reliability and validity of the results, the researcher used IELTS speaking tests extracted from Cambridge IELTS 15 published in 2020. The public version of IELTS speaking and its rubrics, including the accuracy of grammatical structures, coherence, fluency, pronunciation, and lexical resource, was used to assess the speaking performance in pre-and post-tests. The researcher taught English teaching lessons in both the experimental and controlled classes online on two different ways. The experimental class was taught using the POA model, while the controlled class was taught using the conventional teaching method. The course lasted for fifteen weeks. The pre-test and post-test scores were analyzed by SPSS software.

The participants were two parallel classes of 60 college students majoring in engineering at Harbin Normal University, at Harbin city in China. The researchers asked colleagues who work as IELTS examiners to conduct an online speaking IELTS test as a pre-test to ensure all students have the same level of speaking proficiency. The results of the test revealed that students had a similar level of speaking proficiency. The researcher randomly selected twenty-five learners in each experimental and control group using the fishbowl sampling technique.

B. Research Instruments

The instrument employed in this study was the IELTS speaking test (part 2 and part 3) to measure students' speaking competency. This test was used as a pre-test and post-test. It is worth mentioning that inter-rater reliability was used to ensure the extent to which two or more examiners agree with the given scores. To address the issue of consistency of the implementation of a rating system, one examiner conducted a speaking test online and recorded the session. Then the examiner scored each student's performance online, following which, the video was sent to the second examiner for scoring. The researcher then consolidated the students' scores based on two band scores given by two examiners.

C. Research Procedures

Initially, the researchers administered Oxford Placement Test Version 1.1 to ensure the participants are of the same language proficiency level. Ten students with extreme scores were removed from the experiments. Then, 25 students were randomly assigned to an experimental and control group. The researchers conducted a pre-test of the IELTS speaking competence among students in both the control and experimental groups to measure their speaking proficiency and any significant differences between their speaking scores. Two raters scored the IELTS speaking test results online using the Zoom meeting application. Then one researcher taught speaking by applying the POA approach online in both experimental and control classes over fifteen weeks. The researcher taught students in the control group using the conventional method (presentation, practice, production). The main reference materials for teaching speaking through the POA model were used for experimental group. The researchers included more input, such as videos and podcasts related to the topics to enhance students' output in experimental group.

D. A Sample of the Lesson Plan

The unit theme is "Discovering yourself." There were two reading texts: the first was used for in-class instruction, whereas the second was assigned for extended learning. The first reading text is about a university student who was about to graduate and described his concerns about his future career. He discussed his ideas with his father and was encouraged to contemplate and make the right choice. To guide him, his father took him to catch crabs. Guided by the Crab Bucket Syndrome, the father taught him about the crab mentality effect and advised him not to follow his peers, but instead to identify his strengths, how these strong points work for him and discover his interests (Greenall & Wen, 2016)

As for the objectives, learners are expected to develop narrative and descriptive skills, the language for advising how to get to know themselves, and for giving opinions by comparing and contrasting ideas. They are expected to learn lexis, lexical chunks, and new sentence structures. This lesson was designed based on POA principles to develop language knowledge, language skills, and cognitive skills. The researchers designed the classes based on the three phases of the POA teaching procedure; motivating, enabling, and accessing, as illustrated in Figure 2.

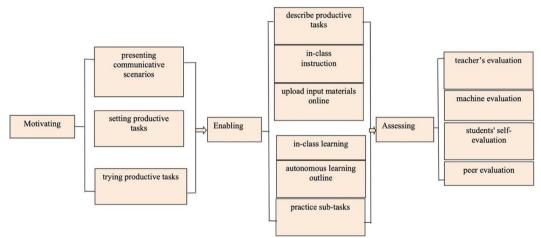


Figure 2. POA Teaching Procedure

(a). Theoretical Research on PAD Class

In the motivation phase, the teacher initially presented authentic situations that the students may face in the future. These situations motivated and improved students' enthusiasm to communicate using English and to complete productive tasks. Then, students started carrying out speaking tasks. At this point, they realized the gaps in using lexis and grammar knowledge and thus, became engaged in the productive tasks. These tasks are fundamentally speaking and writing tasks such as role-play, journal writing, survey report, and class presentation. In this research, we mostly focused on assigning speaking tasks to improve students' speaking skills. Students worked in groups of four and discussed career choices in breakout rooms. Table 1 presents the productive tasks and sub-tasks in the motivating phase:

	PRODUCTIVE TASKS AND SUB-TASKS IN THE MOTIVATING PHASE						
Scenarios	Productive tasks	Sub-tasks					
Situation 1	Imagine being at your graduation ceremony. You and your classmates are about to talk about career planning, anxieties, and ambitions in a seminar. At the end of the seminar, you are supposed to give some practical advice on making the right career choices and overcoming fears.	Group work: develop a questionnaire on choosing a career and discuss. Make a group presentation on collecting and analyzing the data related to your questionnaire. Role-play the fears or concerns of graduates about future careers and include giving each other a piece of advice.					
Situation 2	You are invited to give a speech in a virtual webinar named "Graduates' Employment Challenges: Issues and strategies." You will talk about the topic of 'discovering yourself', your perspectives and experience.	Story-telling: narrate some inspiring anecdotes in your life that helped you discover yourself. Watch relevant inspiring videos online and summarize the main ideas of each video.					

TABLE 1
PRODUCTIVE TASKS AND SUB-TASKS IN THE MOTIVATING PHASE

(b). Enabling Phase

This phase plays a vital role in the POA teaching procedure closely related to input-enabled hypothesis and selective learning hypothesis (Wen, 2018). At the beginning of this stage, the researcher explained the productive tasks, provided scaffolding for learners, and guided them on how to complete them. The teacher gave enabling tasks - input materials and output tasks for students (Qiu, 2020). For instance, each productive task is divided into several output enabler

activities. The teacher designed scaffolding activities (Vygotsky, 1978), with students' progressive levels of English proficiency in mind.

For this study, this phase had four major stages. First, the teacher provided students with essential lexical items, namely vocabulary, useful expressions, and discourse structure, through reading a text on 'catching crabs.' Then, the teacher provided PowerPoint slides to teach useful language units. Meanwhile, students started to read and generate ideas from the reading text. The other text was assigned for extended reading at home to help learners become autonomous. Then, the teacher uploaded relevant input materials, like videos and speeches, to prepare students for each task. Following this, students selectively went through the online materials. They were also encouraged to look for other useful materials to fill the information gap and accomplish given tasks. In the last stage of enabling, students started to practise the output tasks. At the same time, the teacher prompted them to use what they had learned from the selective materials to ensure they could apply those inputs into completing the output tasks (Ren & Wang, 2018). Wen (2018) maintained that these stages might be rearranged and repeated based on students' levels until the students are able to complete the productive tasks successfully. Each productive sub-task was designed for a particular learning objective, as stated in Table 2.

TABLE 2

	Sub-tasks	Learning goals		
٠	Work in a group to develop and discus a survey on students' concerns and ambitions about future careers.	• To collect, analyze, present data. To learn the language for analyzing and presenting the data.		
•	Make a group presentation on the data collection and analysis.	• To use relevant language expressions.		
٠	Role-play: 1. describe your fears about your future career and life, and 2. give advice based on the fears.	• To use sentence structures in describing and giving advice.		
•	Story-telling: narrate some anecdotes in your life where you were inspired to discover yourself.	· To narrate a story.		
•	Watch videos online and summarize the main ideas of each video in a speech.	 To use lexical chunks and expressions in giving the speech. 		

(c). Assessment Phase

There are two types of assessment: formative and achievement assessments in the POA. The teacher formatively assessed students in the enabling phase while students work on sub-tasks, and the second assessment was carried out once students submitted productive tasks (Zhang, 2017; Wen, 2016b). POA favours applying Teacher-Student Collaborative Assessment where teachers familiarized students with criteria or rubrics of speaking, such as coherence, lexical resources, pronunciation, and grammar. Then, they selected some students to comment and score each other's speaking performance. Following this, the teacher evaluated and discussed the students' common problems, and proposed recommendations (Wen, 2016b). Then, the teacher assigned the students to give a presentation or narrate their stories, and self and peer evaluate their performance.

IV. RESULTS

Initially, the researchers employed Shapiro–Wilk test to evaluate the normality of the data. As can be seen in Table 3, the probability values at the pre-test and the post-test in the experimental and control groups were greater than 0.05, indicating that the data were normally distributed.

 $TABLE\ 3.$ Normality Test at the Pre-test and Post-test in the Experimental and Control Groups

Time	Group	Shapiro- Wilk	df	Sig.
Pre-	Control Group	0.938	25	0.132
test	Experimental Group	0.935	25	0.110
Post-	Control Group	0.840	25	0.001
test	Experimental Group	0.966	25	0.535

Levene's test was used for the homogeneity test of variance between groups. If Levene's test is not significant (p>.05), there is homogeneity of variances between groups. The probability values of Levene's test for the pre-test (1,48) =12.7, p=0.66) and the post-test (1,48) =11.81, p=0.66) were greater than 0.05, indicating the homogeneity of variances between groups. The Greenhouse-Geisser was used for the homogeneity test of variance within groups. The Greenhouse-Geisser values for time (F (1,48) =1898.47, p<0.001) and the interaction of time and group (F (1,48) =226.82, p<0.001) were significant, indicating homogeneity of variance within groups.

Repeated measures ANOVA was used to determine the significant difference in outcome variable of the pre-test and post-test between the experimental group (N=25) and the control group (N=25). Results showed that there was a significant difference between groups (experimental group and control group; F(1,48) = 42.45, p<0.001). The results also showed that there were significant differences in the time (pre-test and post-test; F(1,48) = 1898.47, p<0.001) and the interaction of time and group (F(1,48) = 226.82, p<0.001).

Table 4 shows the mean values for the pre-test and the post-test in the experimental group POA and the control group.

TABLE 4
MEAN VALUES FOR THE PRE-TEST AND THE POST-TEST IN TWO GROUPS

Group	Time	Mean	Std. Error	95% Confidence Interval	
Огоцр				Lower Bound	Upper Bound
Control Group	Pre-test	65.20	0.73	63.73	66.67
	Post-test	72.28	0.57	71.13	73.43
Experimental	Pre-test	67.28	0.73	65.81	68.75
Group (POA)	Post-test	81.84	0.57	80.69	82.99

The interaction between time and group is significant, so post tests should be performed to determine the source of the differences. Independent t-test showed that the mean values of students at the pre-test between the experimental group (M=67) and the control group (M=65) were not significant (t (48)= -2.012, p=0.051). However, there were significant differences (t (48) = -11.85, p=0.051) in the mean values of students `the post-test between the experimental group (M=81.84) and the control group (M=72.28).

Paired t-test showed that the mean values of students in the control group at the pre-test (M=65) and the post-test (M=72) were significant (t (24) =-21.70, p=0.001). Also, there were significant differences (t (24) =-38.87, p<0.001) in the mean values of students in the experimental group at the pre-test (M=67) and the post-test (M=81.84).

The present study was designed to determine the POA in online teaching of speaking skills through a comparison between the POA approach and the conventional method. The most prominent finding to emerge from the analysis is that students' speaking improved in both groups. However, there were significant differences in mean scores of pre-test and post-test among students in the POA group. This study revealed that POA could significantly influence the speaking proficiency of Chinese college students. It was also found that the grammatical accuracy, vocabulary knowledge, pronunciation, and students' fluency were enhanced.

V. DISCUSSION

In this study, the POA used in an online learning environment significantly and positively affected the pronunciation of EFL Chinese students. Students listened to native speakers' videos and audios to check their pronunciation, resulting in increased confidence in using new lexis. Siregar (2017) pointed out that the most critical factor in verbal communication is pronunciation which contributes to speaking proficiency. Othman et al. (2017) also maintained that one of the common problems of non-native contexts is lack of access to native-like communication which can influence the learners' speaking, particularly pronunciation. It was realized that exposure to native-like pronunciation in enabling and motivating stages for provision of input could positively affect the pronunciation of Chinese students. Apart from that, students' vocabulary repertoire is enhanced due to exposure to online reading and listening. They searched for new target vocabulary while developing the questionnaire, and preparing for role-playing and story-telling in the enabling stage. They could apply new vocabulary in their speech and use discourse markers to make their speech more coherent and fluent. Students found the materials and content engaging as the themes were related to their life.

The POA in an online learning environment was found to have a positive effect on students' overall speaking proficiency. This finding is consistent with that of Li's (2020) study on college students' speaking ability, particularly in terms of fluency and vocabulary. It also corroborates the findings by Yin (2020), who found that focused listening enabled preservice EFL teachers to develop strategies to use "input" to enhance their output, i.e., speaking. The findings from this study make several contributions to the current literature. First, the online POA approach has the potential to replace traditional teaching approach to enhance speaking proficiency. The POA model prepares students for required academic skills at university, such as developing the questionnaire, data collection, and presentation. In practice, students in the POA group were given more speaking opportunities in breakout rooms to accomplish the communicative tasks, embrace the challenges, and engage in active online learning. The POA pushes students beyond their comfort zone and changes their mindset on learning English.

VI. CONCLUSION

Over a semester, students were taught speaking through the online POA and conventional methods. Students' speaking performance improved in pre-test and post-test of both experimental POA and conventional control groups. However, students in the experimental class outperformed students in the control class, verifying the POA's effects on

teaching speaking. Findings revealed that the online teaching of speaking skills through the POA intervention had positively affected Chinese college students in terms of fluency, vocabulary, and pronunciation.

This research has implications for English teachers and material developers post Covid 19 pandemic. Teachers applying online POA might face some challenges as they need more time to prepare class materials and update their pedagogical practice. Secondly, teachers should take into account students' needs and English levels when customizing teaching materials and selecting teaching goals. They also need to familiarize students with assessment criteria and teach students to reflect on their speaking using self-evaluation and peer assessment.

Overall, this study strengthens the idea that the POA is useful to refine English instruction in China. The POA principles and hypothesis seem to resonate with social constructivism theory on language teaching and learning, such as collaborative assessment and creating authentic situations (Matsuda, 2017). This study has shown the applicability of the POA as other studies (Zhang, 2017; Ren, 2018), although the POA might not suit all learning situations. Therefore, teachers should make modifications in various contexts to make the POA work for their classrooms. This study has shown that the POA application in an online learning environment is feasible and may improve students' competence in speaking.

REFERENCES

- [1] Cao, C. L. (2020). The practical research on the continuous learning ability of the students after the suspension of classes. *Progress: Teaching and Research*, 68(04), 10-11.
- [2] Deng, H. L. (2018). Comparison between production-oriented approach and task-based teaching method: concept, hypothesis and process. *Foreign Language Education*, 40(03), 55-59. doi:10.16362/j.cnki.cn61-1023/h.2018.03.012.
- [3] Ellis, R. (2017). The production-oriented approach: moving forward. *Chinese Journal of Applied Linguistics*, 40(4), 454-458. https://doi.org/10.1515/cjal-2017-0027
- [4] Greenall, S., & Wen, Q. F. (eds.) (2016) New Standard College English: An Integrated Course (Book 3), Beijing: Foreign Language Teaching and Research Press.
- [5] Hanten, G., Li, X., Chapman, S. B., Swank, P., Gamino, J., Roberson, G., & Levin, H. S. (2007). Development of verbal selective learning. *Developmental Neuropsychology*, 32(1), 585-596. https://doi.org/10.1080/87565640701361112
- [6] 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
- [7] Krashen, S. (1985). The input hypothesis: Issues and implications. London: Longman.
- [8] Li, F., & Li, X. (2020). On the practice of college English reading and writing course from the perspective of poa theory. *Open Journal of Modern Linguistics*, 10(05), 560. https://doi.org/10.4236/ojml.2020.105032
- [9] Li, S. (2018). An analysis on spoken English at university level based on production-oriented approach. *Creative Education*, 9(02), 333-340.
- [10] Liu, G., & Cao, H. (2021). The application of poa-based reciprocal teaching model in Chinese senior high school English writing class. *Theory and Practice in Language Studies*, 11(8), 891-900. http://dx.doi.org/10.17507/tpls.1108.04
- [11] Liu, H. Y., Zhang, Y. M., & Du, X. L. (2020). Oral English teaching model based on production-oriented approach. 2020 International Conference on Economics, Education and Social Research (ICEESR 2020)
- [12] Long, M. H. (1983). Native speaker/non-native speaker conversation and the negotiation of comprehensible input1. Applied linguistics, 4(2), 126-141.
- [13] Lv, T. J., Liu, J., & Liu, X. L. (2020). Exploration of oral English flipping classroom teaching model based on POA concept. *Journal of Suihua University*, 37(06), 127-129.
- [14] Malik, M. A., & Sang, G. (2017). Students' oral involvement in the Chinese university classroom: A comparison between classes of Chinese and international students. *International Journal of Research Malik, Studies in Education*, 6(1), 19-28. DOI: 10.5861/ijrse.2016.1408
- [15] Matsuda, P. K. (2017, August). Some thoughts on the production oriented approach. *Chinese Journal of Applied Linguistics*, 40(4), 468-469. https://doi.org/10.1515/cjal-2017-0030
- [16] Ministry of Education, China. (ed.). (2018). *National Standards for the Teaching Quality of Undergraduate English Majors in General Colleges and Universities*. Beijing: Higher Education Press.
- [17] Othman, Z., Wahi, W., Ya'acob, A., & Kofli, N. T. (2017). A collaborative ESP: Engineering specific purpose of workplace. Journal of Institutional Research South East Asia, 15(2), 121-134.
- [18] Peters, M. A., Wang, H., Ogunniran, M. O., Huang, Y., Green, B., Chunga, J. O. et al (2020). China's internationalized higher education during Covid-19: Collective student autoethnography. *Post Digital Science and Education*, 2(3), 968-988. DOI: 10.1007/s42438-020-00128-1
- [19] Polio, C. (2017). Reflections on the production-oriented approach vis-a-vis pre-service teachers. *Chinese Journal of Applied Linguistics*, 41(2), 464-467. https://doi.org/10.1515/cjal-2017-0029
- [20] Qiu, L. (2020). Designing enabling activities in the production-oriented approach: criteria and examples. *Foreign Language Education in China*, 3(2), 12-19.
- [21] Ren, J. H. (2016). College English classroom instructions in China: crisis and solutions. *Proceedings of 2016 3rd International Conference on Economic, Business Management and Education Innovation*, 55, 422-424.
- [22] Ren, J. H., & Wang, N. (2018). Production-oriented approach and its implications for the cultivation of critical thinking skills in college English instruction in mainland China. English Language Teaching, 11(5), 33-38. https://doi.org/10.5539/elt.v11n5p33
- [23] Richards, J. (2006). Communicative language teaching today. Cambridge: Cambridge University Press.
- [24] Santos, P. (2011). Evidence-based teaching: Implications for task-based language teaching. Asian EFL Journal, 56(4), 4-15.

- [25] Shrestha, S., Haque, S., Dawadi, S., & Giri, R. A. (2022). Preparations for and practices of online education during the Covid-19 pandemic: A study of Bangladesh and Nepal. *Education and Information Technologies*, 27(1), 243-265. https://doi.org/10.1007/s10639-021-10659-0
- [26] Siregar, S. (2017). The influence of dialect on the student's pronunciation in speaking ability. *Pedagogy: Journal of English Language Teaching*, 5(1), 27-36. DOI: https://doi.org/10.32332/pedagogy.v5i1.766
- [27] Sun, L. X. (2019). An Application Study on Production-oriented approach in Oral English Teaching in Senior High School. [Master Thesis, Harbin Normal University].
- [28] Sun, L., & Asmawi, A. (2021). A literature review of studies on production-oriented approach (POA) in China. *International Journal of Linguistics, Literature and Translation*, 4(6), 74-81. https://doi.org/10.32996/ijllt.2021.4.6.9
- [29] Sun, L., & Asmawi, A. (2022). The impact of production-oriented approach on oral English performance of senior high school Chinese students: an application study. *International Journal of Learning, Teaching and Educational Research*, 21(3), 231-246. https://doi.org/10.26803/ijlter.21.3.12
- [30] Vettorel, P. (2018). Engaging with the language-the poa approach. *Chinese Journal of Applied Linguistics*, 41(2), 253-255. https://doi.org/10.1515/cjal-2018-0019
- [31] Vygotsky, L. S. (1978). Mind in society: The development of higher psychological processes. Cambridge, MA: Harvard University Press.
- [32] Wen, Q. F. (2018). The production-oriented approach to teaching university students English in China. *Language Teaching*, 51(4), 526-540. DOI: https://doi.org/10.1017/S026144481600001X
- [33] Wen, Q. F. (2016b). Teacher-student collaborative assessment: an innovative assessment method for the production-oriented approach. *Foreign Language World*, 37(05), 37-43.
- [34] Wu, Z., & Wei, L. (2022). An exploratory reform in separation of teaching and examination for postgraduate academic English course based on poa. Open Journal of Social Sciences, 10(3), 279-289. on POA. https://doi.org/10.4236/jss.2022.103021
- [35] Yin, S. (2020). An analysis on teaching effect of professional spoken English based on POA in higher vocational colleges: A case study of oral English teaching in Guangzhou Civil Aviation Vocational and Technical College. *Journal of Sichuan College of Education*, 36(3), 27-33.
- [36] Zhang, L. L. (2017). An experimental study on the effectiveness of the production-oriented approach. *Modern Foreign Languages*, 40(3), 369-376.
- [37] Zhang, W. J. (2017). Applying Production-oriented Approach to College English Teaching: An Action Research. [Doctoral Dissertation, Beijing Foreign Studies Universities].
- [38] Zhou, P. (2021). A research on CALL-based poa in English writing teaching. *Journal of Contemporary Educational Research*, 5(12), 156-161. Doi: 10.26689/jcer.v5i12.2851

Adelina Asmawi is Head, Department of Language and Literacy Education (2018-current). She was the Deputy Dean of Undergraduate Studies and the Quality Manager at the Faculty of Education, University of Malaya from 2014 to 2017. She holds a PhD in Professional Development of Teachers, TESOL, and Instructional Technology from Melbourne Graduate School of Education, University of Melbourne, Australia.

Lixuan Sun is a PhD candidate in Department of Language and Literacy Education, Faculty of Education, University of Malaya; a visiting scholar in College of Education, University of Illinois at Urbana-Champaign, America. He is a university English teacher in Faculty of Foreign Languages in Harbin Institute of Petroleum, China. His research interests include Second Language Acquisition, Online Language Teaching, TESOL, etc.