

## A Study of Online Synchronous Immersive Communication in Mandarin Chinese (中文在线实时沉浸式沟通之研究报告)

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**Abstract:** Online real-time immersive communication has valuable effects on language learning. However, the extent to which this kind of interaction helps improve Chinese language learners' speaking ability remains unexplored. This study examines whether online real-time immersive communication helps improve learners' speaking ability and whether it enhances their overall learning experience. Learners who participated in this study were enrolled in a pre-advanced Chinese language and engaged in online tutorials with pre-service teachers in pursuit of teaching Chinese as a foreign language. They completed an online speaking test and an end-of-semester survey on their overall learning experience, in addition to participating in individual interviews. The results point toward growth in speaking skills and overall positive learner experiences in online immersive learning. Learners' input supports the design and planning of the online program and its technology use but recommends future reduction of workload. Limitations and directions for future research are discussed at the end of the paper.

**摘要:** 在线实时沉浸式沟通对于语言学习具有重要的影响。然而,这种互动方式在多大程度上能提高汉语学习者的口语表达能力仍需进一步的探索。本研究讨论在线实时沉浸式沟通是否有助于学习者口语能力的提高,并分析此沟通模式是否对学习者的整体学习体验有所提升。研究参与者为迈入高级水平的中文学习者与对外汉语专业的职前教师,采用的数据包括中文学习者所参与的口语前后测数据以及学习体验的调查问卷和个人访谈。研究结果显示,在线实时沉浸式沟通对学习者的口语表达能力的确有所提高,在整体学习体验上亦呈现积极正面的效果。学生对在线学习项目的设计、实施和技术应用表示支持的同时,也建议降低学习工作量。最后,本论文指出了研究的局限和未来探索方向。

**Keywords:** Online Chinese language learning, online real-time communication, pre-service teachers in CFL, speaking ability, learning experience

**关键词:** 在线中文学习, 在线实时沟通, 口语表达能力, 对外汉语专业职前教师, 学习经验

## 1. Introduction

The advancement and versatility of technology tools and the internet have brought unprecedented opportunities for innovative pedagogy to foreign language learning and teaching (Warschauer, 1997; Lin, 2014; Spring, Kato, & Mori, 2019). Language educators introduce technology tools inside and outside of their classrooms for both educational and entertainment purposes. Along with this trend, computer-mediated language learning is developing as a promising subfield (Spring et al., 2019). Both synchronous and asynchronous video-mediated communication are employed to improve foreign language skills in writing and speaking (Lin 2014). However, Canto, Jauregi, and van den Bergh (2013) commented that “organizing and implementing telecollaboration projects in foreign language curricula is not an easy endeavor” (Canto, Jauregi, & van den Bergh, 2013; Belz & Thorene, 2006; Guth & Helm, 2010). Various studies (Kato, Spring, & Mori, 2016; Canto, Jauregi, & van den Bergh, 2013) show that video-mediated synchronous communication with native speakers effectively improves student participants’ language skills, especially their oral proficiency. However, other studies suggest that the effect of this type of communication on students’ speaking abilities is not clear (Yang, Gamble, & Tang, 2012; Spring et al., 2019). To be more specific, more investigation into the reasons for improvement of students’ oral proficiency is needed. According to a study by Spring et al. (2019), various related factors influence students’ speaking abilities in video-mediated synchronous communication, including types of tasks, environment, engaged time, students’ initial proficiency level, and their enjoyment and motivation (Spring et al., 2019).

This study of a video-mediated synchronous language learning program, the Online Real-time Immersive Communication (ORIC) initiative, a component added to a Mandarin Chinese course, focuses on student participants’ speaking abilities and overall learning experience.

## 2. Literature Review

Studies of computer-mediated language learning have burgeoned since the early 1990s (Beauvois, 1992; Kern, 1995; Smith, 2005), as technology development has created more opportunities for novel communication channels and language learning models (Üzüm, Akayoglu, & Yazan, 2020). Previous researchers have addressed this topic from various angles, such as learning environment and models (O’Rourke, 2007; O’Dowd & Lewis, 2018), language skills and abilities (Canto, Jauregi, & van den Bergh, 2013; Lin, 2014; Kato, Spring, & Mori, 2016; Spring, Kato & Mori, 2019), and students’ learning experience and attitudes (Schultz, 2012). In this review, we will consider three aspects of online language learning: intersectionality of second language learning theories and

computer-mediated language learning; online language learning models, and; language abilities and skills.

## **2.1 Second Language Acquisition Theories and Computer-Mediated Language Learning**

Social constructivists (Kato, Spring, & Mori, 2016; Gergen, 1999) theorize that individuals construct knowledge through direct and meaningful interactions and reflections. In second language acquisition, language instructors and educators “seek to create learning environments in which learners can gain knowledge of their target language and culture” (Kato et al. 2016; Canale & Swain, 1980). That is to say, when language learners interact with people who have more cultural and linguistic resources than they do, the learners may benefit more than without those interactions (Kato et al., 2016; Scarcella & Oxford, 1992). However, in a foreign language learning environment, there may not be enough native speakers to build up individual face-to-face interactions. Computer-mediated interaction bridges native speakers and language learners living in different areas. The involvement of computer-mediated interaction in foreign language learning is also supported by the multiliteracies learning theory developed by the New London Group; this theory encourages a pedagogical approach including cultural, linguistic, and technological diversity in teaching and learning that “prepares learners for a successful life in a more and more globalized world” (Zhang, 2016). However, neither social constructivists nor the New London Group addresses how language educators should balance linguistic and cultural knowledge when administering a meaningful computer-mediated interaction.

## **2.2 From Tandem to Telecollaboration**

In response to the high demand for language learning resources and technologies, the e-tandem language learning model has been gaining increasing attention in world language teaching and learning (O’Rourke, 2007; Zhang, 2016). Tandem language learning refers to language exchanges between speakers of two different native languages. The electronic forms of this kind of exchange include emails, text messages, and so on. These e-tandem projects have proven very effective in improving not only language learners’ language abilities (Stickler & Lewis, 2008; Chung, Graves, Wesche, & Barfurth, 2005), but also intercultural understanding (Zhang, 2016). However, some studies (Cappellini, 2016; O’Dowd 2013) point out deficiencies of the e-tandem model. Cappellini (2016) found that participants’ expertise in language teaching, especially in error correction, may hinder the process of interactions. Without sufficient professional training, participants can also encounter intercultural misunderstandings and technology issues (O’Dowd & Lewis, 2018; Telles, 2015). The drawbacks of the e-tandem model are encouraging language educators and researchers to develop more models of telecollaboration. In addition to e-tandem, instructors are implementing *Cultura* and *eTwinning* (García & Crapotta 2007; Miguela, 2007). *Cultura* is an international project that connects two groups of students—one in American culture and another in a different culture—to enhance their intercultural communication and understanding. The *eTwinning* project, mainly situated in European areas, pairs two schools so they can collaboratively develop a mutually beneficial online model. However, these two models may still not be

able to solve e-tandem's core problems of advancing sufficient professional knowledge and intercultural understanding.

In recognizing the inherent limitations of online intercultural exchanges, Claire Kramsch (2013) makes an even stronger argument that although learners tend to improve in conversation fluency and online chatting skills, the surface level of language used in these exchanges tends to preclude in-depth discussion or exploration of cultural differences, deeper understanding of incompatible views toward the globe, or critical analysis and interpretations of historical events. Careful design of tasks and clearly defined objectives and criteria are likely key to the success of online intercultural interaction. As computer-mediated language learning continues to play a role in foreign language teaching and learning, there is a need for further investigation and evaluation of its effectiveness in intercultural exchange and learning.

### **2.3 Language Abilities and Skills**

Many studies examining computer-mediated communication focus on its effectiveness in improving learners' language abilities and skills, including speaking, reading, writing, and vocabulary (Spring et al., 2019; Kato, Spring & Mori, 2016; Lin, 2014; Canto, Jauregi, & van den Bergh, 2013), and in students' learning experience (Dewaele & Alfawzan, 2018; Schultz, 2012; Jauregi, Graaff, van den Bergh, & Kriz, 2012).

When Spring et al. (2019) evaluated students' speaking abilities based on different levels of fluency in the context of a computer-mediated communication program, they found that when learners of different levels of language proficiency communicated with native speakers, learners in the intermediate-level group improved more significantly than those in a lower-level group. This finding contrasts with Lin's study (2014), which suggests that students who were in lower proficiency levels might gain more progress in speaking abilities. Spring et al. (2019) believed that it might be because lower-level students "have more room to improve and that it takes increasingly greater time to move into each successive proficiency band" (p. 3). It is likely that as students' learning progresses, instructors discover their individual learning styles and needs, and therefore design different lessons to accommodate them. In Kato et al.'s (2016) study of students' listening and speaking abilities in video-synchronous computer-mediated communication, they found that pairing with native speakers in such a program increased students' speech rate, indicating benefits to students' speaking abilities. Spring et al. (2019) brought up an issue about evaluation: "since oral fluency is generally measured using the amount (number of words or syllables spoken) or speed (speech rate or articulation rate) of speech, learners who bring more linguistic resources may be able to focus more on improving fluency, meaning that beginning learners may exhibit fewer measurable gains in oral fluency" (Spring et al., 2019). These comments suggest two hypotheses: First, lower-level language learners may not, in fact, benefit more than higher-level learners from video-based synchronous communication; second, the evaluation standard, such as speech rate and articulation rate, may play a role here, not only in defining proficiency levels of language users, but also in evaluating students' improvement.

Zhang (2016) conducted a study of an e-tandem project with Chinese language learners according to the multiliteracies learning theory. She found that the e-tandem program helped beginning-level Chinese learners improve their language learning when they interacted with native speakers. However, the study's analysis was based solely on a questionnaire and did not measure students' speaking abilities with any quantitative method, such as language performance, speech rate, fluency, or complexity. Abraham (2008) looked into reading comprehension and vocabulary learning and conducted a meta-analysis based on 11 studies of computer-mediated glosses in second language reading comprehension and vocabulary learning. He found that "computer-mediated glosses had an overall medium effect on second language reading comprehension and a large effect on incidental vocabulary learning" (p. 199).

Researchers also looked into students' motivations and learning experiences displayed in the video-based synchronous communication program. Jauregi et al. found that implementing networked interaction sessions in foreign language courses had significant effects on students' motivation to learn a foreign language (Jauregi, Graaff, van den Bergh, & Kriz, 2012). The study by Spring et al. (2019) also explores the impact of enjoyment on students' learning experience and improvement and supports the finding that networked synchronous communication enhances students' learning. This brings up the question of whether or not students' enjoyment affects their learning outcomes. Schultz (2012) and Brantmeier (2005) proposed that there are not significant correlations between students' positive learning experiences and their learning outcomes. However, Dewaele and Alfawzan (2018) found, by contrast, that the two factors are closely interrelated. Spring et al. (2019) pointed out that students enjoy learning in large part because it leads to improvement.

Another dimension to the topic under discussion is the language studied. Most research has focused on learners of European languages, including English (Ercetin, 2003), French (Cooledge, 2004; Bouvet & Close, 2006; Youngs, 1994), German (Overstreet, 2006), and Spanish (Brantmeier, 2005; Ben Salem, 2007; Little, 2001; Taylor & Nikolova, 2004), among which studies on English outnumber the rest. Those studies on learners of European languages find that the intervention of technologies, either in the form of electronic hardware or online platforms, improves students' learning. Another group of scholars looked into East Asian languages, which have been relatively less explored, including Japanese (Hirotani, Matsumoto, & Fukuda, 2012; Spring, Kato, & Mori, 2019) and Mandarin (Zhang, 2016; Tseng, Lin, & Chen, 2018).

### **3. Method**

This study employed both quantitative and qualitative analytical methods to study whether or not video-based synchronous computer-mediated communication with native speakers enhances learners' learning experiences and improves their speaking abilities. To this end, the Online Real-time Immersive Communication (hereafter ORIC) program was created. The ORIC program was used as an add-on mechanism to enrich a Mandarin Chinese language course at a pre-advanced level. The Assessment of Performance toward

Proficiency in Languages (AAPPL) Interpersonal Listening and Speaking test was administered to assess learners' speaking proficiency at the beginning and end of the semester. An end-of-semester survey was developed and conducted to elicit learners' learning experiences and their input on the design and implementation of the ORIC program, both quantitatively and qualitatively. These surveys included oral interviews with individual students to deepen understanding of the results of the survey and enrich data analysis. Specifically, the study addresses the following research questions:

1. Did the speaking ability of pre-advanced Mandarin Chinese learners improve through their participation in the ORIC program? If yes, to what extent did they improve their speaking ability?
2. Did pre-advanced Mandarin Chinese learners enhance their overall learning experience through participating in the ORIC program? If yes, to what extent did they benefit from the ORIC program?

### **3.1 Course Description and the ORIC Program**

The course under study was a three-credit pre-advanced Mandarin Chinese language course offered at an American public university. According to the World Readiness Standards advocated by American Council on the Teaching of Foreign Languages (ACTFL), the course prepared students to develop competence in Chinese language and culture across interpersonal, interpretive, and presentational modes. Learners met three times per week, for 50 minutes each time, and were expected to attain proficiency toward the Pre-Advanced level in the four language skills upon completion of the course. The course consisted of six topics: self-introduction in professional settings; appearances and characters; the place where I live and symbolism of colors; gift giving and receiving culture; "leftover women" and marriage issues, and; humans and animals. Each topic was taught in a two-week cycle and concluded with an integrated authentic task in action.

ORIC is a newly launched program as an add-on curricular requirement for the course; it aims to create an enriched and relaxing immersive setting for pre-advanced Chinese language learners in which they can interact with native speakers of Mandarin Chinese synchronously. Each Chinese language learner was matched with three to four native speakers of Mandarin Chinese, who were in an undergraduate program to prepare prospective teachers of Chinese as a second or foreign language. The US students enrolled in the course were required to complete eight online meetings in order to receive full credit, and they were given opportunities to add three more meetings for extra credit. Each online meeting lasted for at least one hour. The online meetings were scheduled and determined by the students themselves, and each ORIC meeting was completed at the end of a two-week cycle, as the class transitioned to a new two-week cycle, namely, from Friday afternoon to Monday morning in the US Eastern Standard Time zone.

### **3.2 Participants**

This study consisted of 11 college students enrolled in a pre-advanced Chinese language course at an American public institution in the United States. One student was

raised in a Cantonese family; 8 students had some degree of exposure to Chinese language and cultural heritage at home; and 2 students with Korean heritage were majoring in Chinese. There were 6 female and 5 male students. All were undergraduates: 1 fourth year, 7 second year, and 3 third year. Their ages ranged from 19 to 22, with a mean of 19.5. Each participating student in the United States was matched with 3 to 4 undergraduate students majoring in Teaching Chinese as a Second or Foreign Language in Taiwan. The matching of US and Taiwan student participants was completed based on their interests, learning differences, individual preferences, and other requests. A total of 37 students were enrolled in an undergraduate course on web-based Chinese teaching practice as pre-service student teachers in Taiwan. They met once a week for 3 hours and participated in the ORIC program to complete the online practicum program, a partial requirement for the course. Of the 37 students, 36 were female and 1 was male. In terms of ethnic background, 26 were born in Taiwan, 6 were from Hong Kong and Macau, 2 were from Malaysia, 1 was from mainland China, 1 was from Thailand, and 1 was from Japan. All were undergraduates: 2 second year, 19 third year, and 16 fourth year. Their ages ranged from 19 to 25, with a mean of 21.24.

### 3.3 Procedures

The online ORIC program was carefully implemented and closely monitored. The two appointed faculty members representing each institution communicated frequently, based on a well explored collaborative model. Each of the two faculty members taught a course in which student participants were required to complete the ORIC sessions to partially fulfill semester-long academic requirements. Course syllabi were mutually shared and appropriately modified.

Each course had a graduate assistant to help the instructor coordinate and facilitate the ORIC program and ensure its smooth implementation. Immediately after the conclusion of each online meeting, these two graduate assistants provided and exchanged instant summative feedback to the faculty members and participating students on both sides, so improvements could be made at the following online meeting.

During the first week of the semester, the US students signed an ORIC pledge confirming their understanding of the ORIC requirements and full commitment to the program. Immediately subsequent to the signing of the pledge was a technology orientation through which students learned how to navigate Zoom and Google Drive.

Zoom was consistently used as the online platform through which students met with their online tutors. Google Drive was selected as the central site where students on both sides uploaded materials, including language tasks to be accomplished for online meetings, recorded Zoom videos, weekly checklists and reflections, learning notes, and PowerPoint files. Each group of learners independently decided on other social media means to communicate before and after the Zoom meetings. The language tasks required for the Zoom meetings closely aligned with the themes covered in the course. Students were also strongly encouraged to decide on and discuss any topics they were interested in for online discussion.

In a typical tutorial session, only one tutor interacted with his or her assigned tutee. Other peer tutors in the same group were present in a supporting role, such as observing the class or assisting by typing characters for unfamiliar words and pinyin in the Zoom chat box. All tutors in a group took turns offering tutorial sessions, and the main tutor was responsible for creating PowerPoint slides on the topic in the two-week learning cycle. The PowerPoint slides were devised and coherent with specific tasks predetermined by the instructor. They usually included visual aids, such as pictures and photos, juxtaposed with core grammar and vocabulary. It took place at the end of a two-week cycle, meaning that the tutees would have completed all assigned work requiring them to apply linguistic and cultural knowledge in different assignments and tasks, indicative of cumulative learning progress. The tutorial session therefore functioned as a review session to conclude a unit. It was communicative in nature, and tutors and their students could go beyond learned materials to add new grammar and vocabulary depending on learners' interests and needs. Throughout the entire semester, the tutors made efforts to ask contextualized questions to elicit targeted grammar and vocabulary from the students and corrected errors as needed. In this process, tutoring observers would take notes of the corrected errors and send them to the students after the tutorial session via email or other means.

#### **4. Results and Discussions**

The study employed a combination of quantitative and qualitative analysis to complement and strengthen each measure. To gain insights into language gains resulting from the ORIC online program, learners completed AAPPL speaking tests at the onset and conclusion of the program. Additionally, they completed surveys about their overall learning experience and participated in individual interviews at the end of the semester.

The AAPPL Interpersonal Listening and Speaking Test (Form B), developed by ACTFL, was administered as the entry and exit assessment at the beginning and end of the semester. The Internet-based test consists of six tasks informed by the functions described in the ACTFL Proficiency Guidelines, with topics including personal background information, city, school life, sports, holidays, and celebrities (ACTFL, 2012). Students would listen to prerecorded questions and then respond one by one. The speech recordings were rated based on the ACTFL Performance Descriptors for Language Learners (ACTFL, 2012), which include four dimensions by which to evaluate language performance: language control (the accuracy of language in use), vocabulary (the richness and appropriateness of vocabulary words), communication strategies (the ability to maintain communication), and cultural awareness (the cultural knowledge reflected in language use). The scores are rated by ACTFL-certified AAPPL raters, who determine each test taker's language ability across the tasks and topics. Intermediate learners are expected to be able to engage in a conversation by asking and responding to questions, telling simple stories, and describing people, places, and objects. Advanced language learners are able to fully participate in a conversation, describe, and narrate with detailed information and elaboration.

The online, end-of-semester survey included 21 questions divided into 5 parts: learning experience, design and planning, recommendations, technology, and overall



comments. Out of 21 survey questions, 13 were 5-point Likert-scaled questions, and the rest were open-ended.

Data collected through the AAPPL speaking test included quantitative ratings of language proficiency and qualitative analysis based on transcribed speech. The survey also featured quantitative and qualitative analyses on Likert-scaled items and open-ended responses. Thus, quantitative data included the results of the AAPPL speaking test at the entry and exit of the program and the results of an end-of-semester survey composed of 5-point Likert-scaled items. Qualitative data included responses collected through open-ended questions in end-of-semester surveys and individual interviews.

#### 4.1 AAPPL Ratings for Speaking

The AAPPL Interpersonal Listening and Speaking Test was administered at the beginning and end of the semester to compare ratings for speaking performance. As predicted, the results of the pre-test are lower than those of the post-test. Pre-test results ranged from Intermediate I to Advanced, whereas post-test results ranged from Intermediate 3 to Advanced. For the pre-test, 10 students received ratings at the Intermediate level, and 1 student was labeled Advanced. Upon completion of the course, 8 students' ratings were within the Intermediate range and 3 were at the Advanced level. Table 1 shows the ratings that students received for the AAPPL speaking test at the entry and exit of the program.

**Table 1 Results of Pre-test and Post-Test in AAPPL**

<b>Progress</b>	<b>Student</b>	<b>Pre-Test</b>	<b>Post-Test</b>
0 sublevel	S 3	Intermediate 3 (I-M)	Intermediate 3 (I-M)
	S 8	Intermediate 4 (I-M)	Intermediate 4 (I-M)
	S 9	Intermediate 4 (I-M)	Intermediate 4 (I-M)
	S 10	Advanced	Advanced
	S 11	Intermediate 5 (I-H)	Intermediate 5 (I-H)
1 sublevel	S 1	Intermediate 4 (I-M)	Intermediate 5 (I-H)
	S 2	Intermediate 4 (I-M)	Intermediate 5 (I-H)
	S 5	Intermediate 4 (I-M)	Intermediate 5 (I-H)
2 sublevels	S 4	Intermediate 4 (I-M)	Advanced
3 sublevels	S 6	Intermediate 3 (I-M)	Advanced
	S 7	Intermediate 1 (I-L)	Intermediate 4 (I-M)

Note: I-L: Intermediate-Low; I-M: Intermediate-M; I-H: Intermediate-High.

As Table 1 shows, of 11 students, 5 students remained at the same rating for the pre-test and post-test, and 6 students' ratings increased by 1 to 3 sub-levels. More specifically, among those whose ratings increased in the post-test, 3 students (students 1, 2, and 5) increased by 1 sublevel, 1 student (student 4) increased by 2 sublevels, and 2 students (students 6 and 7) increased by 3 sublevels. The rating of Intermediate I for Student 7 was too low for students in the pre-advanced class. In a follow-up interview with her at the end of the semester, she confessed her reluctance and lack of motivation and preparation to take the test, resulting in her low initial rating. For the end-of-semester speaking test, her speaking ability was rated at Intermediate 4, a high jump to the Intermediate-Mid level. The other student (student 6) whose rating increased by 3 sublevels,

from the Intermediate-3 to Advanced, stands out as the learner with the most improvement. Her follow-up interview pointed to her hard work, commitment to learning, and high motivation to do well as individual factors in this impressive leap. While the course required learners to meet with their online tutors 8 times during the semester, she took advantage of the extra credit opportunities and met with her tutors up to 11 times. Impressively, several days before she took the post-test, she met online with her tutors to practice speaking for 2.5 hours, during the busiest time of the semester. This is a good example of “practice sharpens the skill.” She takes her learning very seriously and seizes all opportunities to fulfill her genuine desire to improve. The open-ended survey questions confirmed that a positive learning experience is associated with learners’ improvement in speaking abilities and that learners’ willingness to invite native speakers’ frequent involvement in their learning process enhances learning experience both linguistically and culturally (Spring et al., 2019).

Looking at the distribution of percentages, 45% of students’ ratings were unchanged, while 55% received higher ratings at the end of the course.

In relation to the speaking performance of the student (student 10) who received the advanced rating for both the entry and exit tests, it is important to note that the AAPPL Interpersonal Listening and Speaking Test does not identify sublevels at the advanced level, as it does at the novice and intermediate levels. Therefore, the advanced level embraces a very wide range of language ability, from the very bottom of advanced language proficiency, closer to Intermediate 5, to the very top ceiling of the advanced level or even up to the superior level, indicative of native-like language ability. This inherent limitation of the AAPPL test thus prevents accurate comparison of this particular student’s speaking abilities before and after the program. A closer look at the transcribed data in Table 2 indicates that his speaking ability did improve significantly (see also Appendix).

**Table 2 Pre-test and Post-Test Results for Student 10**

Pre-Test	Post-Test
1.最近, 最近 um, 说什么, 什么事也没有啊	1.Amy Adams 是做过很多挺有意思的事情
2.最近有名的人很多绯闻过来过去, 我们有一对明星 Ariana Grande 她跟她的未婚妻 um 刚分手所以大家都是说这个	2.她在 um 她其实 um..27 岁的时候才拿到她第一个 um 最很大的电影角色
3.除了以外 um 我们的总统 Trump 也经常的新闻上面可是不是最好的 (blur)	3.平常也不多都是 20 岁开始演的或者更早她以前想当芭蕾舞者
4.他经常说有些很多人觉得过分的事情 um 很多人当然不支持 um 这些	4.可是她就是发觉她比不过别人也受过伤所以她就放弃了这个梦想
5.所以就像他跟朝鲜人 um 那个谈话你们也能看出来现在近期有点有点不怎么样所以就看看	5.可是她以前很喜欢 um 在学校里 um 演戏所以 um 她就当了演员
	6.目前她有很多很出名的电影 um 也在热播就像蝙蝠侠大战超人
	7.这是刚差不多前年前年开演的一个大片很多人受很多人欢迎
	8.所以她在里面演了 (English Name)
	9.除了这个以外她也会做很多慈善活动
	10.她给一些以前受灾者差不多捐了 20 万美金给他们是一个很有善心的一个人。

In response to a question about describing a celebrity, student 10 performed significantly differently in various dimensions in the entry and exit tests. The transcribed speech data reveal salient differences in linguistic richness, such as the use of vocabulary, idiomatic expressions, conjunction words, and time adverbials, and in the amount of detailed information and supporting ideas contributing to the organization and coherence of the description and length of discourse.

In the post-test, student 10 used at least double the amount of vocabulary and idiomatic expressions as compared to the pre-test. Since the student did not describe the same celebrity in the two tests, most word expressions do not overlap, mainly due to the differences in occupations, careers, and achievements of the two celebrities.

In the pre-test, student 10 described two celebrities, Ariana Grande and Donald Trump, at very short length and with very limited lexical items. The student used only three lexical items—绯闻 (love affairs), 未婚妻 (fiancée), and 分手 (break up)—to introduce Grande, and another three lexical items—过分 (something is going too far), 支持 (support), and 朝鲜人 (Korean people)—to introduce Trump. Student 10's vocabulary and expressions in the post-test were much richer and idiomatic, with more detailed descriptions. The student made efforts to focus on introducing Amy Adams and to elaborate on her past and her evolution to her present self. The student used a rich amount of vocabulary and expressions vividly and appropriately to elaborate on different stages of Adams's career in the performing arts. The vocabulary doubled, with lexical items including 其实 (actually), 芭蕾舞者 (ballet dancer), 发觉 (found and realized), 受过伤 (got injured), 放弃了这个梦想 (gave up the dream), 演戏 (to act), 演员 (actress), 热播 (becomes a hit), 蝙蝠侠大战超人 (a film entitled *Superman Vs Batman: Dawn of Justice*), 受很多人欢迎 (well-liked by many people), 慈善活动 (charity activities), 受灾者 (affected households), 捐 (donate), and 很有善心 (very kind).

In addition to linguistic elements at the word or phrase levels, the use of conjunction words and time adverbials is much more noticeable and frequent in student 10's post-test. The transcription on the right side of Table 2 features a story-like description of Amy Adams. It is longer than the pre-test descriptions of celebrities, with 10 well-connected sentences versus 5 sentences on the left (pre-test). As shown on the left side of Table 2, in the pre-test, student 10 used almost no time adverbials, except for very limited occurrences of 所以 (so) and 可是 (but), to connect fragmented ideas and thoughts. By contrast, in the post-test (Table 2, right side), the student showed appropriate recurring use of connectors and time adverbials to connect past events and a sequence of actions chronologically; these include 27岁的时候.....才 (...did not do something until 27 years old), 平常 (usually), 20岁开始 (since 20 years old), 更早 (even earlier), 以前 (before), 目前 (currently), and 前年 (the year before last year).

Directly relevant to the inclusion of linguistic elements is the amount of information and density of content provided in the two sets of Student 10's transcribed data. This shows different levels of language proficiency. The speech data on the right of Table 2 follows a story line central to a well-known figure and includes more coherent and well-organized

ideas that are progressively developed and presented, with detailed logical supporting information added to the description. Such characteristics are not evident in the much shorter descriptions of the celebrities on the left.

In summary, student 10's post-test is characterized by rich lexical usage and a wealth of information that is logically and progressively connected and developed at the discourse level, showing strong evidence of proficiency at the Advanced-Mid level or even a bit above that, according to the ACTFL's Oral Proficiency Guidelines (OPI). Although both post-test and pre-test results are considered Advanced, these characteristics were missing in the same student's pre-test, which shows evidence of functions and linguistic features required at very low end of the Advanced level.

It is arguable that language proficiency cannot be accurately assessed by only a single item. A cluster of functions need to be fully considered and evaluated holistically. Further analysis and closer looks at more recorded speech samples produced by the same student are needed in order to assign a more accurate rating. Still, the above analysis provides solid evidence that student 10's speaking ability improved significantly at the end of the course and that the rating of the post-test (as the same as the pre-test) fails to fully indicate his gains in competence. In order to accurately assess his language proficiency, the OPI, with a set of well-articulated guidelines up to the superior level with native-like competence, is a viable option. The OPI's major downside is financial: It is not affordable for many research projects, including this study. That explains why the OPI was not administered for this study, and instead the AAPPL was used to assess learners' speaking performance.

## 4.2 Learning Experience

The first part of the end-of-semester survey includes 6 questions on learning experience, of which 5 are 5-point Likert scale questions and 1 is an open-ended question. Table 3 (next page) shows the results of 5 Likert scale questions on overall learning experience.

According to the survey results in Table 3, most students held positive attitudes toward their overall learning experience with ORIC (rating  $\geq 4$ ), and only 2 students had a relatively neutral attitude (rating = 3). One possible interpretation of these students' feedback is that their learning outcome did not meet their expectations. It may also be that they were more inclined to learn Mandarin Chinese offline.

Ten students believed that their speaking abilities improved with ORIC (rating  $\geq 4$ ), with an average of 4.091. Nine of them responded that their listening abilities had improved (rating  $\geq 4$ ), with an average of 4.273. Only one student held a neutral attitude toward his speaking ability improvement, which might be attributed to his higher level of language speaking proficiency, which was sufficient for smooth interaction with the online tutors. Comparing this student with students whose speaking abilities were at a lower level, it is possible that the substantial progress needed to reach the next level of proficiency becomes more difficult and requires a greater time commitment.

**Table 3 Survey Results of Language Learning Experience**

<b>Student</b>	<b>Overall ORIC enhanced my language learning experience.</b>	<b>ORIC helped me improve my speaking in Mandarin Chinese.</b>	<b>ORIC helped me improve my listening skills in Mandarin Chinese.</b>	<b>ORIC enabled me to learn new insights about Chinese culture.</b>	<b>Overall ORIC enhanced my confidence in using the Chinese language to communicate.</b>
S 1	4	4	4	4	4
S 2	4	4	4	5	4
S 3	4	4	5	2	4
S 4	3	3	4	4	4
S 5	5	5	5	5	5
S 6	5	5	5	5	5
S 7	4	4	5	5	4
S 8	4	4	4	5	4
S 9	5	4	5	5	5
S 10	4	4	3	4	4
S 11	3	4	3	5	3
Average	4.091	4.091	4.273	4.455	4.182

Interestingly, students seemed to hold a more positive attitude toward gaining new insights about Chinese culture, with an average of 4.455. Only one student (student 3) gave a low rating to this aspect of growth. Since ORIC was programmed to focus on speaking and listening, his tutors may not have integrated much cultural knowledge into his sessions. Another possible interpretation is that with strong heritage and background, he may have already known a lot about Chinese culture and therefore saw little gains out of ORIC, or perhaps he may have been less sensitive to the cultural differences observed by his peers. Hence, when tutors introduced culture-related issues, he failed to sense them. Regarding students' confidence in using Chinese for communication, 10 students gave positive feedback (rating  $\geq 4$ ), and 1 student held a neutral attitude. Overall, students valued their learning experience and spoke favorably of what they learned from tutors. It was also speculated that throughout a semester-long tutorial meeting, the students established tight bonds with their tutors, considering them not only their teaching assistants but also native Chinese-speaking friends who shared linguistic and cultural knowledge. This type of learning company greatly enhanced students' learning experience.

To complement the analysis of the quantitative data, the survey included an open-ended question to elicit learners' comments and constructive suggestions. Responses were surprisingly diverse, with both positive and negative input. First, regarding the content of ORIC tutorials, one student believed his ORIC tutors helped him a lot with learning more vocabulary. Taking a closer look at the PowerPoint slides created by the tutors, we found that the tutors working with this particular student did integrate a lot of new words and expressions on the assigned topics and tasks. Since the ORIC program was implemented throughout the entire semester, tutors would become more familiar with their students' language performance as more meetings were held and were able to adjust their lesson plans to accommodate the students' needs and interests. Expanding the vocabulary size by introducing more idiomatic expressions such as proverbs and four-word expressions was

considered substantial adjustments. Another student commented that topics should be tailored to practical use and suggested introducing more cultural topics. Due to learning objectives and time constraints, culture was not considered a separate independent topic and was therefore not required in ORIC meetings or prioritized in the AAPPL speaking test. In principle, the role of culture in the program is naturally embedded in the required language tasks. Whether it was included in the tutorial sessions depended on tutors' lesson planning, learners' language performance, and the course of natural conversation between the tutors and learners.

Second, students highly valued visual aids. Two students mentioned that PowerPoint slideshows were very helpful in learning language, since visual aids "help contextualize the language." The PowerPoint slides as a means of enhancing learning became salient and pivotal for online learning. Among other possible advantages, they were useful for information processing, as visual stimuli, and for encouraging interaction. All tutors were required to plan and prepare their online sessions in alignment with laid-out objectives, and the creation of PowerPoint slides was a required component that provided evidence of their effort and preparation. One tutorial session usually started with a series of simple questions designed to help a student review the targeted vocabulary and grammar and ended with wrap-up questions requiring the student to produce discourse-level speech summarizing his or her opinions. For instance, a typical wrap-up question could be: "Please describe your favorite celebrity in terms of his/her appearance and personalities" or "How would you like to refurnish and decorate your bedroom by Chinese Fengshui?" Question prompts were usually shown in each PowerPoint slide with pictures or photos as hints for answers, so students could deploy these visual resources to practice vocabulary and grammar.

Third, two students accredited the improvement of their language skills to their ORIC experience. As one student put, ORIC singlehandedly helped him develop speaking skills "at a deeper and more personal level." The other student proposed that "it might be beneficial to include the other parts...more predominantly." Though he did not explain what the "other parts" means, an individual interview suggested that this student was referring to writing and reading skills, on the ground that ORIC provided more opportunities for students to hone their speaking skills and enrich their vocabulary. Due to limitations of space and time zone differences, ORIC tutors did not have enough time to create opportunities for the language learners to practice reading and writing skills. Instead, they focused on enlarging students' vocabulary and improving their oral proficiency. AAPPL test results, which show the students' improvement on speaking and vocabulary use, indicate that the foci of ORIC were effective.

Finally, one student moved out of his comfort zone as a learner and commented that online tutors needed more training. All tutors at the partnered institution were undergraduates majoring in Teaching Chinese as a Foreign Language. As pre-service teachers in Mandarin Chinese, they participated in the ORIC program as a practicum component and an additional pathway for them to learn to teach and teach to learn. Professional development is an ongoing process, and language educators all need to receive

training in different phases; this holds true for pre-service and in-service language educators for enduring career advancement.

### 4.3 ORIC Design and Planning

The second part of the survey includes five 5-point Likert scale questions and one open-ended question on the design and planning of the ORIC online program. The results of the 5-point Likert scale questions are presented in Table 4.

**Table 4 Survey Results of Design and Planning**

<b>Student</b>	<b>ORIC meeting language handouts were helpful for my Chinese learning.</b>	<b>ORIC Checklist/Reflection sheet was helpful for me to monitor my learning process.</b>	<b>My ORIC tutors were well-prepared, cooperative and helpful.</b>	<b>My ORIC tutors were interesting and engaging.</b>	<b>ORIC is a viable supplement for immersion and practice in building fluency.</b>
S 1	4	2	5	5	5
S 2	5	4	5	5	4
S 3	4	4	5	5	3
S 4	2	1	5	5	3
S 5	5	4	5	5	5
S 6	5	5	5	5	5
S 7	4	2	5	5	4
S 8	3	2	5	5	4
S 9	5	2	5	5	5
S 10	4	3	5	5	4
S 11	4	4	5	5	3
Average	4.091	2.909	5	5	4

As Table 4 indicates, learners gave top scores to tutors' performance in two question items on preparation and engagement. All learners felt that their tutors were well-prepared, cooperative, helpful, interesting, and engaging. A sharp contrast to this is the relatively low mean (2.909) of learner evaluations of the use of weekly checklists and reflection sheets. This is puzzling, as the checklists and reflections were expected to be helpful in keeping track of learners' weekly progress and logistics management. According to an informal interview with one of the students, submitting the checklist and reflection on a weekly basis was considered somewhat redundant and repetitive. The student suggested that the checklist and reflection sheet be completed on a biweekly or monthly basis, indicating that the checklist and reflection are still of good value, but the frequency of submission led learners to give them low ratings. A more feasible, expanded timeline might have resulted in better satisfaction.

In addition to weekly submissions of checklists and reflections, students had weekly language handouts with clearly defined language tasks and functions to prepare for their online meetings. The majority of learners indicated that the language handouts were helpful for their learning (rating  $\geq 4$ ), with an average of 4.091. Two students gave low

ratings, but they did not provide any additional comments on the open-ended question. Overall, many learners reflected that ORIC was a viable supplement for immersion and practice in building fluency (rating = 4).

In terms of information gleaned from students' open-ended comments, two students responded that scheduling was a minor issue at the beginning of coordination but was resolved as the program moved along. As there is a day-and-night difference between the United States and Taiwan, students were fully aware that they needed to keep their schedule accommodating and flexible. Once the program had been going for one to two weeks, and both groups of student participants were accustomed to it, scheduling became much easier and more acceptable.

#### 4.4 Technology

The third part of the survey elicited students' user experience of technology tools, with two Likert scale questions and one open-ended question on other social media tools they used for communication with tutors. Table 5 shows the summary of the results of technology usage

**Table 5 Survey Results of Use of Technology**

<b>Student</b>	<b>Zoom is a suitable and stable platform.</b>	<b>Google Drive is a good medium for uploading and managing learning materials.</b>
S 1	2	4
S 2	4	5
S 3	4	5
S 4	2	4
S 5	5	5
S 6	5	5
S 7	3	5
S 8	3	5
S 9	5	5
S 10	4	5
S 11	5	5
Average	3.818	4.818

Google Drive was the central repository for students and tutors to upload and share all materials. No problems were reported with accessing and using Google Drive. The results show that students were extremely satisfied with Google Drive (mean = 4.818), much more so than with Zoom (mean = 3.818). Zoom was quite stable and user-friendly, and it was adopted by the two institutions for online meetings. Surprisingly, students rated Zoom much lower than expected, considering how suitable and stable a platform it was. The reason might be not that learners didn't favor Zoom, but rather that they did not think the choice of online platform mattered much, and so they did not have a preference. Another possible reason for the lack of a strong preference might be their unfamiliarity with and infrequent use of the software. Learners did not express any negative comments



in answers to open-ended questions. Students had the freedom to choose whatever social media they wanted to use outside the online meetings; frequently mentioned software included Facebook, Messenger, and WeChat, a Chinese multipurpose messaging system. The use of social media is outside the scope of the study and therefore will not be discussed in this paper.

#### **4.5 Overall Comments**

The end of the survey solicited students' overall impressions of the course to see if they would recommend the ORIC component as an add-on for other Chinese language courses. In response to a 5-point Likert scale question, 9 students recommended the added ORIC component to the course (rating  $\geq 4$ ), and 2 students held neutral attitudes (rating = 3). In response to open-ended questions, several students pointed out reasons for their reservations. First, ORIC added a heavy workload to the three-credit course. One student stressed that ORIC would be equivalent to an additional credit for the course rather than an additional compulsory component. In an informal feedback form completed during the semester, more than half of students agreed with this proposal. This rationale is consistent with what a majority of the students stated in responses to the open-ended questions, and the suggestion is justifiable. To fulfill the ORIC requirements, students needed to devote time to the language task handout, interact online with the native speakers for at least one hour for each online meeting, complete after-meeting checklists and reflections, and upload completed checklist and reflection sheets, learning notes, and recorded Zoom videos. Some tutors were overprepared and excited to practice teaching, and this led the online meeting to last longer than an hour multiple times. Moreover, most of the work was completed over the weekend, depriving students of some leisure time. If a 50-minute class at the very end of a two-week cycle was canceled and substituted by the ORIC component, that would easily resolve the issue of overload. This design is applicable to future language courses. In several Chinese language courses taught after the study, the ORIC meeting was considered regular class time, and both instructors and students seemed to consider this a reasonable arrangement.

In terms of target language proficiency for students, one student mentioned that the nature of ORIC might make it more suitable for lower-level courses, especially for students in a non-heritage track. This is a valid point and confirms the instructors' predictions. The course in this study was mainly composed of heritage learners, who had long been exposed to abundant resources conducive to natural learning in their home settings or in Chinese-speaking communities in the United States, China, or Taiwan. Exposure to ORIC did not excite most of the learners in the class. Such experience, on the contrary, might be eye-opening and refreshing for non-heritage learners with little experience in live interaction and communication with native speakers. Since non-heritage learners at the novice level of proficiency have limited language competence and are still developing learning strategies and communicative strategies, they might not benefit from ORIC as much as second-year non-heritage learners at the intermediate level. It is hence hypothesized that the ORIC component is more suitable for intermediate learners than elementary learners in the non-heritage track. After the conclusion of the study, ORIC was implemented in second-year language courses at the intermediate level, and learners appreciated that

opportunity much more than did learners in the course of this study. The ORIC model later successfully transitioned from serving pre-advanced to advanced learners to serving intermediate learners, and it garnered more satisfactory feedback and appreciation from students.

Overall, students spoke very positively about several aspects of their learning experience in their responses to open-ended questions. First, ORIC helped students improve their speaking abilities by “providing a chance [for them] to speak with people who are fluent in Mandarin.” Students believed that they “learned more when [they] had natural conversations.” Second, ORIC allowed them more opportunities to learn about Chinese culture as distinguished from the culture in Taiwan. One student mentioned that he “was able to expand the knowledge of Chinese culture by acknowledging the differences in behaviors between American and Chinese people.” Students were also grateful for the friendships they built with the Taiwanese tutors. One student expressed that he “really enjoyed building a relationship with tutors.”

The open-ended questions elicited students’ constructive suggestions for future improvement. Their input was diverse, and suggestions included standardizing tutorial training, enhancing technology orientation, and reducing the workload. This echoes what students’ informal interviews upon completion of the course. Issues with the workload of the course, as discussed earlier, were consistently and repeatedly emphasized by some students in their written input. Technology orientation did not seem to be a big issue, as it was mentioned by only one student. As we know, quality tutorial training is critically needed for pre-service teachers to prepare for their careers, and this was completely handled by the partnered program abroad. The graduate assistants for the two sides frequently communicated about ongoing needs for improvement of tutorial effectiveness during the semester. In any event, the ORIC component was considered a practicum for the student teachers to practice teaching online, and they were not able to achieve perfection or a high level of professionalism at that time. Continued professional development is always a long-term goal to pursue.

## **5. Conclusion**

The results of this study show that ORIC, a video-based synchronous communication program, enhances students’ overall language learning. The design and layout of the ORIC program is well-structured and carefully monitored to ensure its smooth implementation and foster effective collaboration between the US institution and the partnered institution abroad. As indicated by the quantitative data, although individual learners’ speaking ability improved in varying degrees, it is evident that ORIC provided a viable path for learners to improve their overall speaking proficiency. Recognizing its pedagogical value, instructors should be careful about adequately managing student workload. As many student participants stressed, adding the ORIC as a curricular requirement made the workload equivalent to that of a 4-credit course. It is hence critical to revisit the curricular requirement, make necessary adjustments, and continue experimenting with ORIC in non-heritage courses. Strategic planning for another round of

implementation in intermediate Chinese after the current study has proven successful in balancing both regular and ORIC components, resulting in agreeable and acceptable time commitment among non-heritage students.

Before the launch of the study, it was suggested that online exchanges and tutorials are more effective in immersive settings than in an e-tandem model. With all factors equally controlled, it is hypothesized that a full immersion experience is more helpful for learners' language and cultural acquisition than a half-and-half program featuring both English and the target language. Full immersive communication enables genuine exposure to the target language and culture and increases opportunities for spontaneous and authentic communication. Ultimately, this is likely to yield observable qualitative changes in language output and growth, especially when learners are interacting not just with native speakers in general, but with native speakers who are pursuing a professional path in teaching Chinese as a foreign language, such as those in this study. This assumption may sound intuitive and logical, but more research is needed to test and verify it. One possible direction for future study is to conduct a comparative study with both full immersion and partial immersion as experimental and control groups.

Another opportunity for further exploration is to compare a course with ORIC components to the same course without ORIC components. The current study supports the notion that adding the ORIC program to the existing pre-advanced course is beneficial for learners' overall experience. But it lacks evidence to conclude that learners' progress in speaking is surely or greatly attributed to ORIC learning. Learning progress is made possible by many factors that interplay and interweave in a complex learning process. Whenever possible, comparable groups should have controllable factors or variables be as equal as possible in any further study.

Technologies have made online global communication much more feasible and prevalent than ever before. While the ORIC program has reaffirmed its value in language courses, there is much still to explore. This study is limited to the examination of speaking language skills. Much work needs to be done in different sub-areas of study, including measurement of language gains in vocabulary learning and in the remaining three language skills: listening, reading, and writing. Whether the ORIC components or something like them can enhance learners' cultural understanding and motivation also awaits further research. Investigators and practitioners must work together and guide Chinese language educators with new insights and findings.

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## Appendix

Pre-Test	Post-Test
1. Zuì jìn, zuì jìn um, shuō shí me, shí me shì yě méi yǒu ā What do you want me to say? Nothing has happened recently.	1. Amy Adams shì zuò guò hěn duō tīng yǒu yì sī de shì qíng Amy Adams has done a lot of interesting things.
2. Zuì jìn yǒu míng de rén hěn duō fēi wén guò lái guò qù, wǒ men yǒu yī duì míng xīng Ariana Grande tā gēn tā de wèi hūn qī um gāng fèn shǒu suǒ yǐ dà jiā dōu shì shuō zhè gè	2. Tā zài um tā qí shí um...27suì de shí hòu cái ná dào tā dì yī gè um zuì hěn dà de diàn yǐng jiǎo sè She actually got her first and biggest movie role at the age of 27.

<p>Recently, there are many celebrity love affairs. Ariana Grande and her fiancé just broke up so everyone is talking about this.</p> <p>3. Chū le yǐ wài um wǒ men de zǒng tǒng Trump yě jīng cháng zài xīn wén shàng miàn kě shì bú shì zuì hǎo de (blur) Besides, our President Trump is often on the news, but not on the best news.</p> <p>4. Tā jīng cháng shuō yǒu xiē hěn duō rén jiào dé guò fèn de shì qíng um hěn duō rén dāng rán bú zhī chí um zhè xiē He often says things that a lot of people find going too far. People definitely don't support these.</p> <p>5. Suǒ yǐ jiù xiàng tā gēn cháo xiān rén um nà gè tán huà nǐ men yě néng kàn chū lái xiàn zài jìn qī yǒu diǎn yǒu diǎn bú zěn me yàng suǒ yǐ jiù kàn kàn From the conversation he had with the north Korean, you can see it has been a bit of a tough time.</p>	<p>3. Píng cháng yě bú duō dōu shì 20 suì kāi shǐ yǎn de huò zhě gèng zǎo tā yǐ qián xiǎng dāng bā lěi wǔ zhě She started acting at the age of 20. She wanted to be a ballet dancer earlier.</p> <p>4. Kě shì tā jiù shì fā jiào tā bǐ bú guò bié rén yě shòu guò shāng suǒ yǐ tā jiù fàng qì le zhè gè mèng xiǎng But when she found and realized that she was no match for other people, and she also got injured, she gave up the dream.</p> <p>5. Kě shì tā yǐ qián hěn xǐ huān um zài xué xiào lǐ um yǎn xì suǒ yǐ um tā jiù dāng le yǎn yuán But she used to like acting in school. She thus became an actress.</p> <p>6. Mù qián tā yǒu hěn duō hěn chū míng de diàn yǐng um yě zài rè bō jiù xiàng biān fú xiá dà zhàn chāo rén Now she has a lot of famous movies that become a hit, like Batman v Superman: Dawn of Justice.</p> <p>7. Zhè shì gāng chā bú duō qián nián qián nián kāi yǎn de yī gè dà piàn hěn duō rén shòu hěn duō rén huān yíng It was a big movie released about two years ago, and it was well-liked by many people.</p> <p>8. Suǒ yǐ tā zài lǐ miàn yǎn le (English Name) So she played (English Name) in it.</p> <p>9. Chū le zhè gè yǐ wài tā yě huì zuò hěn duō cí shàn huó dòng Besides that, she also does many charity activities.</p> <p>10. Tā gěi yī xiē yǐ qián shòu zāi zhě chà bú duō juān le 20 wàn měi jīn gěi tā men shì yī gè hěn yǒu shàn xīn de yī gè rén She donated about \$200,000 to some affected households. She is a very kind person.</p>
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