

Teaching Chinese Language and Culture Through Chinese-American Virtual Exchange: A Pedagogical Reflection (虚拟文化交流与对外汉语教学: 教学反思)

Luo, Han
(骆涵)

Lafayette College
(拉法耶特学院)
luoh@lafayette.edu

Abstract: Despite its increasing popularity and widely reported success, the use of virtual exchange has not been very popular in the field of Chinese as a foreign language (CFL). The Chinese language program at a U.S. liberal arts college has been experimenting with various types of virtual exchange projects in partnership with Chinese students at a Chinese university in China in the past years. To further promote virtual exchange in the CFL field, this article attempts to provide a pedagogical reflection of one of the telecollaborative exchanges implemented at this college, outlining the description of the exchange, the rationale of the project design, learning outcomes, pedagogical challenges, and practical implications for future Chinese-American virtual exchange projects. The positive learning outcomes of the described exchange indicate that the combination of the e-tandem model and the telecollaboration model poses a promising direction for future virtual exchanges. The reported pedagogical challenges reveal that Chinese language instructors need to take a wide range of factors into consideration in virtual exchange design, including time difference, target language proficiency gap, workload, task type, and more.

摘要: 虚拟语言文化交流近年来在外语教学领域备受推崇,然而其在对外汉语教学中的运用并不广泛,有关中美虚拟语言文化交流的教学材料和教学反思也不多见。近几年来,美国一家文理学院的中文项目一直致力于中美虚拟语言文化交流的探索,积累了一些实战经验。为了促进虚拟语言文化交流在对外汉语领域的推广,本文针对该文理学院尝试的一项中美虚拟语言文化交流活动进行教学反思,从活动描述、设计理念、学习结果、教学挑战、教学启示和未来方向等角度分析如何在中文教学中有效使用中美虚拟语言文化交流。该交流项目的成功经验显示将网络语言交换和跨文化远程协作结合起来是可行的思路。同时,该项目所经历的挑战也表明对外汉语教师在设计虚拟语言文化交流时应该考虑多重因素,比如时差、目标语言能力差距、学生工作量、任务类型等等。

Keywords: Virtual exchange, telecollaboration, Chinese as a foreign language, pedagogical reflection

关键词: 虚拟语言文化交流、远程合作、对外汉语、教学反思

1. Introduction

With the development of information and communication technology (ICT) over the past two decades, foreign language educators have been making use of technologies to connect their learners with users of other languages and engage in authentic communicative interaction and collaboration for the purpose of language and culture learning. The dramatic growth of interest in this pedagogical activity has also invited practitioners and researchers to critically reflect on the different terminologies that have been used (Colpaert, 2020). To date, virtual exchange has been adopted as an umbrella term to refer to the variations of this pedagogical approach, which “involves the engagement of groups of learners in extended periods of online intercultural interaction and collaboration with partners from other cultural contexts or geographical locations as an integrated part of their educational programs and under the guidance of educators and/or expert facilitators” (O’Dowd, 2020, p. 449).

In the field of foreign language education, the design of virtual exchange has mainly been guided by two models to develop language learners’ linguistic and intercultural competences: e-tandem and telecollaboration (Dooly, 2017). Informed by interactionist theories of second language acquisition, the e-tandem model (O’Rourke, 2007; Rahimi & Fathi, 2022) focuses on developing linguistic competence, fostering learner autonomy, and increasing exposure to authentic linguistic input outside of the language classroom. In this model, individual native speakers of two different languages from classes across different countries are paired in order to communicate together with the help of internet technology and the aim of learning each other’s language. Typically, online communication is conducted half in the target language and half in the native language so that students from each respective side are provided with an opportunity to practice their target language.

In contrast, the telecollaboration model is influenced by sociocultural theories of second language acquisition and reflects the trend of attaching importance to intercultural and sociocultural aspects of foreign language teaching in the late 1990s and early 2000s (Thorne, 2003). This model differs from the e-tandem model in that its focus shifts from language learning to culture-and-language learning. In addition to the development of linguistic competence, telecollaboration also emphasizes the development of intercultural competence (O’Dowd, 2016). Belz (2003) defines telecollaboration as “institutionalized, electronically mediated intercultural communication under the guidance of a language cultural expert (i.e., a teacher) for the purpose of foreign language learning and the development of intercultural competence” (p. 2).

A tremendous amount of research has documented various types of beneficial outcomes of virtual exchange, ranging from second language development to intercultural learning (Lewis & O'Dowd, 2016; Luo & Yang, 2018, 2022). The growing interest in virtual exchange has also been promoted by pragmatic factors. Due to the economic and environmental cost of study abroad programs, some scholars advocate virtual exchange as a potential low-cost alternative to physical mobility programs (Richardson, 2016). The challenges of study abroad programs or physical mobility programs have been exacerbated during global pandemics, making virtual exchange an attractive and cost-effective option for international learning.

Various types of networks and platforms have been established to support language instructors' virtual exchange initiatives. For example, primary and secondary school teachers interested in virtual exchange are supported by large networks and virtual platforms such as eTwinning (<http://www.etwinning.net>) and ePals (<http://www.epals.com>). In addition, the European Telecollaboration for Intercultural Language Acquisition (TILA) project is also dedicated to promoting the use of telecollaboration for secondary education. The TILA project (<http://www.tilaproject.eu/>) provides a platform to assist secondary school teachers and teacher training programs in implementing adequate integration of telecollaboration practices in foreign language education. Language teachers can find a wide variety of useful resources on TILA, including pedagogical materials on telecollaboration, task samples, virtual classrooms, a partner searching tool, technical assistance, teacher training materials, various online tools, best practice samples, and more.

Governmental and organizational support for virtual exchange at the university level has also been growing. In recent years, the Telecollaboration in Higher Education conference established a new academic organization UNICollaboration: The International Association of Telecollaboration and Virtual Exchange (<http://uni-collaboration.eu/>), which aims to provide support and training for university educators who are interested in engaging their learners in telecollaborative activities and finding telecollaborative partnerships. In 2018, a flagship program entitled Erasmus+ Virtual Exchange was launched by the European Commission to further expand the reach and scope of the Erasmus+ program via virtual exchange. In the United States, the SUNY group of universities initiated the Collaborative Online International Learning (COIL) model (<http://coil.suny.edu/>) to connect students and professors in different countries for collaborative projects in different subject areas and to provide training and support for educators and institutions who are interested in integrating virtual exchange in their curricula. This mission is also shared by the Stevens Initiative (<http://www.stevensinitiative.org>). For telecollaborative practitioners at the university level with more specialized interests, smaller networks and platforms have been created to focus on certain subject areas. Three examples of such networks are the Teletandem Brasil Project (<http://www.teletandelbrasil.org>) for foreign language learning, the X-Culture network (<http://x-culture.org>) for international business studies, and the mentor-led virtual exchange networks, such as *Soliya*, for important socio-political issues through connecting students from the West with students from the Muslim and Arabic world.

Despite its increasing popularity and widely reported success, the use of virtual exchange has not been very popular in the Chinese as a foreign language (CFL) field. With a significant upsurge of interest in telecollaboration in China, Japan, South Korea, and Taiwan (Lewis & O'Dowd, 2016), research on virtual exchange involving CFL learners has begun to emerge (e.g., Jin & Erben, 2007; Ryder & Yamagata-Lynch, 2014; Luo & Gui, 2021; Luo & Gao, 2022). However, documented Chinese-American virtual exchange projects and pedagogical reflections on such efforts are still rather sparse. Thus, established models of successful virtual exchange specific to the Chinese language are still hard to find. The Chinese language program at a U.S. liberal arts college has been experimenting with various types of telecollaborative projects in partnership with Chinese students at a university in Shanghai in the past five years. To further promote virtual exchange in the CFL field and facilitate meaningful pedagogical discussions on this topic, this article attempts to provide a pedagogical reflection of one of the telecollaborative exchanges implemented at this college, outlining the description of the exchange, the rationale of the project design, learning outcomes, pedagogical challenges, and practical implications for future Chinese-American virtual exchange projects.

2. Project Description

The Chinese-American telecollaborative learning program under discussion was a 15-week exchange project, involving two natural Chinese language classes, CHN102 (i.e., second-semester first-year Chinese) and CHN112 (i.e., second-semester second-year Chinese) at a U.S. college and a group of English majors who were also members of the English debate team at a Chinese university in Shanghai, who regularly attend national debate competitions in China. Twenty-one Chinese language students (12 males, 9 females, with an age range of 17 to 20 years old) enrolled in the CHN102 and CHN112 courses at the U.S. college, among which 13 students were from CHN102 and 8 were from CHN112. All the Chinese language students at the U.S. college were native speakers of English except two female Vietnamese international students, one in CHN102 and one in CHN112. All of the 21 students from the Chinese university (4 males, 17 females, with an age range of 18 to 22 years old) were native speakers of Mandarin Chinese and demonstrated an advanced level of English language proficiency.

The author of this article was the instructor of both CHN102 and CHN112 at the U.S. college. The assistant of these two courses was a Fulbright Teaching Assistant (TA), who served as an English language instructor and the academic advisor of the English debate team at the Chinese university before her Fulbright Teaching Assistantship in the U.S. The Fulbright TA, who was physically present at the U.S. college and assisted with the Chinese language program when the telecollaborative project was established and implemented, was responsible for convening and organizing the Chinese group consisting of her former students through internet-based technologies while the author was in charge of the American group.

In the first week of the semester, participants from both sides were required to provide a brief biography highlighting interests, hobbies, personalities, and learning

expectations for the Chinese-American program. All the biographies were then collected and made accessible to the participants who were instructed to choose their partners based on the information. As a result, each student from the American group was paired up with one from the Chinese group. The instructor created two WeChat groups respectively for CHN102 and CHN112 in which participants from both sides could socialize and discuss cultural topics with their partners. The two WeChat groups remained separate throughout the semester. More specifically, the Chinese-American telecollaborative project had the following four components: one-on-one Skype conversations, WeChat group cultural discussions, one-on-one WeChat conversations, and reflection journals (see Table 1 for a summary).

Table 1 The Four Components of the Chinese-American Exchange

Component	Requirements	Sample Discussion Questions
One-on-one Skype Conversations	<ul style="list-style-type: none"> • Half an hour per week • Half in English and half in Chinese • Record Skype conversations 	<ul style="list-style-type: none"> • Chinese part: 你周末常常做什么? 你有什么爱好? 你有男/女朋友吗? • English Part: What is the dating culture like in China/America?
WeChat Group Discussion	<ul style="list-style-type: none"> • English was the main working language • Student-generated discussion topics • Cultural comparison 	<ul style="list-style-type: none"> • What are college students' main activities outside school in China and in the U.S.? • What is drinking culture like in China and in the U.S.?
One-on-one WeChat Conversations	<ul style="list-style-type: none"> • Individual conversations on a daily basis • Topics were open • Communication modes were open 	<ul style="list-style-type: none"> • Students were encouraged to discuss anything they were interested in, ranging from Chinese language study to their daily life experiences, and any other cultural aspects.
Reflection Journals	<ul style="list-style-type: none"> • Weekly reflection journal • Final reflection journal • Guidance for Writing Reflective Journals 	<ul style="list-style-type: none"> • How they perceived the program and its components • What they learned from the exchange • Challenges they encountered • Recommendations for improvement

One-on-one Skype conversations: CFL students from the American side were required to spend at least half an hour talking to their Chinese partners over Skype on one of the department lab computers, half in Chinese and half in English. These conversations were to occur on a weekly basis except for the first week, the spring break week, and the final week, resulting in twelve Skype conversations over the course of the semester. For the part in Chinese, the instructor provided a list of questions/topics in Chinese involving the vocabulary the students were familiar with or had just learned to include in their conversations. This was supposed to aid the participants in easier dialogue and mitigate the

language barrier. For the part in English, the instructor provided a list of cultural topics concurrent with the cultural themes covered in their Chinese textbooks, but students were welcome to switch to any other topics that interest them. At the beginning of the semester, the director of the department language lab conducted a half-an-hour orientation workshop for students in CHN102 and CHN112 to familiarize them with the technology materials. Students were instructed to record their Skype conversations as video files and save them under appropriate folders on the lab computers. The instructor would view each Skype conversation video as soon as they were available and make notes while watching them.

WeChat group cultural discussions: A WeChat group was created for each class, CHN102 and CHN112, including students from both sides of the partnership. The two WeChat groups served as cross-cultural discussion forums for both classes and their respective Chinese partners. The main language for WeChat group cultural discussions was English. Students were asked to formulate cultural discussion topics with their partners. For eight weeks in the semester (i.e., weeks 4, 5, 6, 7, 9, 10, 11, and 12), one or two partner pairs posted a selected cultural topic as well as associated discussion questions in the class WeChat group to invite their classmates and Chinese partners' thoughts and opinions. In particular, the students were encouraged to compare and contrast aspects of Chinese and American cultures. The discussion topics were supposed to be posted no later than 10pm every Sunday and closed for discussion at 10pm the following Saturday. At the end of the semester, each class voted on which cultural topic generated the longest and most robust discussion and a prize was given to that pair. The Chinese language instructor and the Fulbright TA participated in the WeChat group cultural discussions mainly as observers and occasionally as facilitators when student participation was low. The instructor frequently took notes and posed questions in her notes during each WeChat group discussion for later analysis.

One-on-one WeChat conversations: The students from the American side were required to connect with their Chinese partners individually through WeChat on a daily basis. They were encouraged to discuss anything they were interested in, ranging from Chinese language study to their daily life experiences, and any other cultural aspects. They could type texts or send voice messages in English or Chinese for the daily WeChat conversations. To facilitate the completion of this component, the instructor also regularly assigned CFL students homework requiring WeChat communication with their Chinese partners. For example, the Chinese language students at the U.S. college may need to write a short letter to their Chinese partners through WeChat, ask questions about their partner's daily life by incorporating the new vocabulary covered in the latest lesson, send a voice message to their partner commenting on the day's news, or seek help in understanding a Chinese joke or idiom. Five minutes of each class meeting in CHN102 and CHN112 was reserved for students to share the most interesting things they learned from their Chinese partners through this component.

Reflective Journals: Almost every week, each student from the American side was required to write a one-page reflective journal on their experiences with the Chinese-American learning program due at 10pm every Sunday. The last journal was expected to be a holistic reflection of the program throughout the semester. In these journals, they could

reflect on how they perceived the exchange and its components, what they learned from the 30-minute Skype conversations, the WeChat group cultural discussion, the daily-based WeChat interactions, the challenges they encountered, and/or recommendations for improving the program. The goals and expectations of reflective journals were openly discussed in class at the beginning of the semester and a document titled “Guidance for Writing Reflective Journals” was handed out to the students and posted on the two classes’ online Moodle sites. The instructor would read the students’ reflective journals as soon as they were submitted, take notes, and schedule informal follow-up interviews with the students to clarify points and elicit further insights.

CFL students from the U.S. college were required to take part in this program as it was incorporated into the syllabi of CHN102 and CHN112 and their performances in this program accounted for 20% of their final grade. Table 2 presents a detailed breakdown of the grading for this program. In contrast, the Chinese group were selected on a volunteer basis and their participation and performance in this program were not related to their final grade in any course.

Table 2 Grading for U.S. Students’ Participation in the Chinese-American Program

The Chinese-American Program	20%
Weekly Skype conversation	5%
WeChat group cultural discussion	5%
One-on-one WeChat daily conversation	5%
Reflective journal	5%

3. Rationale of Project Design

As discussed in the Introduction section, the e-tandem model mainly focuses on developing linguistic abilities, whereas the intercultural model of telecollaboration seeks to foster intercultural competence. Since this Chinese-American telecollaborative learning program intended to promote the learning of both language and culture, it was designed to combine the e-tandem model and the intercultural model of telecollaboration. The weekly one-on-one Skype conversations conducted half in Chinese and half in English were largely based on the rules of the e-tandem model with emphasis on learning each other’s target language. Guided by the principles of the telecollaboration model, the WeChat group cultural discussions focused on the development of learners’ intercultural knowledge and competence through cross-cultural comparisons and discussions through learner-selected cultural topics.

In addition, this virtual exchange sought to integrate different task types. An increasing body of research has shown that tasks play an important role in determining the learning outcomes of telecollaboration (Hauck & Youngs, 2008; O’Dowd & Ware, 2009). O’Dowd and Ware (2009) identified twelve telecollaborative task types from the literature and further organized them into three main categories: information exchange tasks, comparison and analysis tasks, and collaborative tasks. In this Chinese-American exchange, the one-on-one WeChat daily conversations mainly involved information exchange tasks where partners were encouraged to ask whatever questions of mutual interests and establish

a close personal relationship. During the weekly Skype conversations, partners had the opportunity to share cross-cultural information and analyze a designated or self-selected cultural phenomenon together “face-to-face,” which was a combination of information exchange tasks and comparison-analysis tasks. The WeChat group cultural discussions, mainly utilizing comparison-analysis tasks, explicitly elicited both sides’ opinions and insights on Chinese-American cultural differences revolving around student-generated topics. Through the weekly reflective journaling, learners consistently reflected on their own telecollaborative experiences and received feedback from the instructor. Such reflective tasks helped learners and instructors identify potential difficulties, resolve issues, and seek solutions in the process of the exchange so that the learners could remain on the right track and make the best use of the exchange project. Considering the workload required of this program and the limited Chinese proficiency of the American students, collaborative tasks were not included in the design.

Moreover, measures were taken to alleviate issues associated with the target language proficiency gap. By now, it is well documented that the target language proficiency gap between the two sides of the partnership is one of the important factors resulting in failed communication in virtual exchange (e.g., Ware, 2005; O’Dowd & Ritter, 2006). This problem seems to be especially acute for more “difficult” languages like Chinese and Japanese. This is because Chinese and Japanese are linguistically more difficult for English native speakers than many Western European languages and reaching higher levels of proficiency requires much more time. In order to mitigate the issue of target language proficiency gap in this exchange, the instructor at the U.S. college provided the students with scaffolding and support whenever necessary and broke the rule of equal L1 and L2 usage. For example, in the weekly Skype conversations where half Chinese and half English were expected, the instructor spelled out a list of questions in Chinese within the learners’ vocabulary range and cultural topics in English relevant to the themes covered in their textbooks. Meanwhile, English was the main language for the WeChat group cultural discussion and the one-on-one daily WeChat conversation despite the use of Chinese from the American group being encouraged. This allowed flexibility for the participation of learners of different Chinese proficiency levels and accommodated students’ discrepant expectations towards language study and culture learning.

Finally, this exchange combined the use of different technological tools including Skype and WeChat as well as a wide variety of communication modes to make the best use of the advantages of each communication tool. Many scholars have recognized the important impact of technological mediums on online intercultural communication (Hauck & Youngs, 2008; Kern, 2014; Malinowski & Kramsch, 2014; O’Dowd, 2007). The norm of virtual exchange nowadays tends to use a combination of different online tools, characterized by “a less text-based and more multimodal form of communication” (O’Dowd, 2012, p. 352). The synchronous Skype conferencing allowed partners to talk face-to-face in real time, solve problems on the spot, and build more personal relationships. WeChat is an all-in-one communication app, with amenities such as free texting and voice messaging, voice and video calls, moments (known as “Friends’ Circle” among Chinese users), photo sharing, games, and online payment, incorporating the features of Facebook, Instagram, Skype, and Twitter (Luo & Yang, 2018). The WeChat group function allowed

asynchronous text-based forum discussion. Moreover, students from the American side were encouraged to explore the other functions of WeChat such as Friends' Circle on their own, which would provide them with immense exposure to various aspects of authentic Chinese language and culture.

4. Learning Outcomes

In order to evaluate student learning outcomes of the Chinese-American exchange, the instructor examined a variety of data, including naturally occurring interaction data (i.e., Skype conversations, WeChat group discussion transcripts), students' weekly reflection journals, informal interviews with the students throughout the semester, end-of-semester interviews with the students, the teacher-researcher reflective journal, and student responses to an end-of-semester questionnaire.

Based on the results of the end-of-semester questionnaire, the CFL students on the U.S. side, in general, reported positive overall experience with the exchange. For the item "Please rate how well you like the Chinese-American telecollaborative learning program this semester (on a 7-point scale)," the twenty-one Chinese language students in CHN102 and CHN112, on average, evaluated the exchange positively ($M = 4.45$, $SD = 1.48$). The learners in CHN112 ($M = 5.25$, $SD = .37$) enjoyed the program more than those in CHN102 ($M = 3.96$, $SD = .43$) and the mean difference in overall experience was significant at the $p = .05$ level ($df = 1$, $F = 4.37$), which was likely due to the difference in Chinese language proficiency between the two language classes.

A close examination of the qualitative data revealed two types of knowledge learning gains (i.e., promotion of cultural learning and improvement of Chinese skills) and two types of affective learning gains (i.e., enhancement of learning motivation and establishment of a supportive language learning community). Cultural learning surfaced overwhelmingly as a commonly recognized learning outcome of the Chinese-American exchange from the qualitative data. Every student in CHN102 and CHN112 discussed cultural gains in one way or another and this theme frequently emerged from all sources of qualitative data. According to the students, WeChat group cultural discussions, Skype conversations, and one-on-one WeChat conversations were all contributors to the learning of Chinese culture. Throughout the semester, each of the two WeChat groups (i.e., one for CHN102 and one for CHN112) initiated and discussed eight cultural topics. As shown in Table 3, the cultural topics proposed by the two Chinese language classes and their partners overlapped to a great extent. The students from both WeChat groups demonstrated strong interest in the daily life aspects of contemporary China and America, as well as an eagerness to compare the two cultures. Most of these topics generated interesting cross-cultural discussions, in which students from both sides usually provided facts, shared knowledge and personal experiences, identified cultural differences, and expressed personal opinions.

Table 3 Cultural Topics for WeChat Group Cultural Discussion

	CHN102	CHN112
Week 4	Holidays and food	Chinese New Year and the regular New Year
Week 5	Your favorite kind of music	Your favorite American/Chinese food
Week 6	Chinese New Year and the regular New Year	Getting a job after graduation in China and the U.S.
Week 7	Heroes in Chinese or American culture	Popular music in China and the U.S.
Week 9	Plans to visit China or the U.S.	Dating culture in China and the U.S.
Week 10	Main activities outside of school	The role of social media in people's life
Week 11	Reasons for learning a foreign language	Drinking culture in China and the U.S.
Week 12	Social lives on campus	Pets people raise in China and the U.S.

Additionally, all of the students in CHN102 and CHN112 mentioned their improvement in Chinese skills in one way or another, although some students in CHN102 confessed that they used English to communicate with their partners most of the time. As the Skype conversations were the only component in which the use of Chinese language was mandatory for half of the time, it served as the main source for American students to develop Chinese skills in this exchange. The Skype conversations helped improve Chinese skills in three ways: authenticity, reinforcement, and correction. These interactions provided an authentic conversational context, in which Chinese partners “spoke very fast” “with expansive vocabulary” and perhaps “with a local accent,” and moreover, learners had “no control over how the conversation would go.” These features provided learners with “the chance to apply the structures and new words learned in class to real life situations”. Not only was the linguistic knowledge learned in class reinforced in these real-time conversations, but also the mistakes that hindered comprehension were corrected, resulting in improved Chinese language skills.

Enhanced motivation in learning Chinese is another frequently discussed benefit, as reflected in students' highly positive perceptions towards the exchange as a whole. They described the Chinese-American exchange as “interesting,” “fun,” “enjoyable,” “innovative,” “a new format to learn Chinese,” and “a great platform for intercultural learning.” They found the virtual project to be “an extraordinarily good idea,” the cultural discussions “invigorating and quite humorous,” and the process of partnering with a Chinese student and constantly engaging with them as “a great way to learn the language.” Many factors contributed to enhanced motivation. Having a “fun,” “friendly,” “cool,” “outgoing,” or “knowledgeable” conversational partner stood at the top of the list.

“Friendship,” “bonding,” “attachment,” “connection,” and “rapport” were frequently used by the students in the data, which all contributed to students' perception of a Chinese language and culture learning community, virtual or physical, fostered by the virtual exchange. Different types of relationships combined to strengthen this community, including the friendships between partners, the bonding in the Chinese class, and the connection established among all the Chinese and American students through the WeChat groups.

In order to see how students evaluated the four learning gains quantitatively, they were phrased into four positive statements in the end-of-semester questionnaire (e.g., “This Chinese-American Telecollaborative Learning Program has helped improve my Chinese skills”). The students were invited to provide a rating on a 7-point Likert scale to indicate to what degree they agreed or disagreed with the statements, with 1 corresponding to “strongly disagree” and 7 indicating “strongly agree.”

Table 4 Means and Standard Deviations of Perceived Benefits

		Chinese Skills	Cultural Learning	Motivation	Community
CHN102	Mean	3.92	5.92	4.69	5.00
	SD	1.71	1.04	1.25	1.15
CHN112	Mean	5.88	6.38	5.88	5.63
	SD	.99	.74	1.25	1.19
Combined	Mean	4.67	6.09	5.14	5.24
	SD	1.74	.94	1.35	1.18

As shown in Table 4, the students in CHN112 (i.e., intermediate level) provided higher ratings for all four learning gains than those in CHN102 (i.e., elementary level), with the biggest difference relating to the ratings on the improvement of Chinese skills. Among the four learning gains, both groups gave the highest rating to cultural learning, indicating that the exchange promoted the learning of culture effectively. The students in CHN102 provided the highest rating for cultural learning, followed by community building and enhancement motivation, with improvement of Chinese skills receiving the lowest score. The students in CHN112 also gave the most positive evaluation for cultural learning, followed by improvement of Chinese skills and enhancement of motivation (with equal average ratings), and then by community building with a slightly lower rating. Notably, the intermediate-level students provided high ratings across all the four learning gains and the differences among the ratings for the four categories were minimal, with a highest mean difference of .75 between cultural learning and community building (6.38 vs. 5.63). In contrast, the elementary-level students provided highly different average ratings for the four learning gains, with a biggest mean difference of 2.0 between cultural learning and improvement of Chinese skills (5.92 vs. 3.92). The lowest average rating was associated with improvement of Chinese skills given by the students in CHN102 ($M = 3.92$, $SD = 1.71$), showing that elementary-level students, on average, did not perceive themselves to have benefited linguistically from this exchange.

5. Pedagogical Challenges

Despite positive student perceptions and a variety of learning gains, the CFL students also reported various challenges associated with this Chinese-American exchange based on a close examination of different sources of qualitative data. The pedagogical challenges included scheduling and technological issues with Skype conversations, target language proficiency gap, irrelevance to Chinese proficiency development, heavy workload, lack of depth in WeChat group discussion, avoidance strategy, and the demanding role of the teacher-researcher. These challenges are, to a large extent, consistent with the findings of virtual exchange projects in other language learning contexts such as German-English partnership (O’Dowd & Ritter, 2006).

The most frequently discussed challenge of this exchange was associated with the difficulties surrounding the Skype conversations. The students consistently expressed frustrations and concerns over the scheduling and connection problems of Skype in informal interviews and weekly reflection journals. The Skype conversations were synchronous, but the 13-hour time difference between China and the U. S., as well as the busy schedules of college students, made it extremely difficult to schedule a time that would work for both sides. The requirement of recording the Skype conversations on one of the department lab computers definitely made things even more difficult for the CFL students because the language lab was only open at specific times.

The huge target language proficiency gap between Chinese and American students was another commonly reported problem in this exchange, despite the organizer of the exchange having taken a number of measures to ease this issue in project design. Learning English is highly regarded in China because high levels of proficiency in English will open up desirable career opportunities. Thus, Chinese children often start to learn English at a very young age and they typically have achieved an advanced level of English proficiency by the time they enter college. In contrast, foreign language learning enjoys less attention in the U.S. and it is common for college students to start as beginners of L2 Mandarin learners. In this exchange, many students, especially those in CHN102, confessed that they perceived their partners' mastery of English to be much better than their level of Mandarin Chinese. Thus, the Skype and also WeChat group discussions were conducted in English most of the time. Not surprisingly, many students did not perceive themselves to have sufficiently benefited from this exchange in terms of language learning.

Because of the limited linguistic gains, many students, especially those from the elementary-level class, questioned the relevance of the exchange to achieving the learning objectives of Chinese language classes. Many students pointed out that the primary goal of Chinese language classes should be the development of Chinese language skills especially due to the difficulty level of the Chinese language. Although the CFL students, in general, appreciated the cultural gains from the Chinese-American exchange, they preferred to focus on improving Chinese language skills in a Chinese class and viewed culture learning as less urgent. Some elementary-level students believed they could learn Chinese culture on their own by watching movies or reading books from the library.

Another very common student complaint about this program was the heavy workload involved. The Chinese-American exchange was an add-on project to the existing CHN102 and CHN112, which automatically generated more work than the CHN101 and CHN111 courses the students took in the previous semester. On top of the added workload, the students also needed to deal with the difficulty and frustration with scheduling Skype conversations on a weekly basis. Not surprisingly, many students felt overwhelmed and described the classes in which the program was built into as "hectic," "too demanding," "too overwhelming," and "lots of busy work." Meanwhile, the students also worried that this increased level of work associated with the exchange would affect their grades negatively as this exchange accounted for 20% of their final grades.

As much as they appreciated the exchange as a successful platform for cultural learning, many students observed that the WeChat group cultural discussions tended to be superficial because the discussions mainly involved exchange of surface-level information and in-depth conversations never really ensued. Some students attributed this insufficiency to the characteristic of the WeChat app itself and suggested that other types of technology with the thread function for forum discussion may be able to solve the problem, since the thread function would allow people to join the discussion anytime without losing track of what has been talked about. Other students believed the teachers needed to step in more and guide the discussions in the right direction in order for deeper interactions to occur.

Lack of in-depth intercultural conversations were also related to another issue of the exchange, i.e., the avoidance strategy the students took when interacting with their partners from the other culture. The instructor observed that the CFL students tended to be overly polite towards their Chinese partners. Some CFL students confessed in the reflection journals or informal interviews that they chose to talk about safe topics with their Chinese partners because they worried about offending them or causing misunderstandings. Therefore, they missed many valuable opportunities for deep intercultural learning in order to be seemingly polite.

Finally, a very important challenge of the exchange was the demanding role imposed on the instructor. As discussed previously, this exchange added an extra workload to the students. Meanwhile, the workload added to the instructor was also tremendous. As the instructor noted in the teacher-research reflective journal, the Chinese-American exchange was “extremely time-consuming to organize” because the instructor needed to “coordinate students from both sides,” “constantly interview students,” “read reflection journals,” “view Skype conversation videos,” “participate in WeChat group discussions,” and “provide timely feedback.” Notably, the student evaluations of the courses did not become more positive because of the extra work the instructor invested in creating this Chinese-American learning opportunity for the students; instead, the students evaluated the courses less positively compared to those in the previous semester likely due to the various challenges (e.g., heavy workload) the students experienced during the exchange.

6. Pedagogical Implications and Future Directions

The overall positive feedback from the students and the four types of learning gains (i.e., promotion of cultural learning, improvement of Chinese language skills, enhancement of learning motivation, and establishment of a supportive learning community) indicate that the combination of the e-tandem model and the telecollaboration model poses a promising pedagogical direction of virtual exchange to facilitate the learning of Chinese language and culture for college-level CFL students in the United States. Meanwhile, the various types of pedagogical challenges that surfaced from the reported exchange reveal that Chinese language instructors need to take a wide range of factors into consideration in project design in order for the Chinese-American telecollaborative exchange to achieve the desired learning goals.

In the past five years, the Chinese language program at the U.S. liberal arts college has adopted a variety of strategies to overcome the potential issues in Chinese-American virtual exchange. To reduce the burden of scheduling synchronous conversations and lessen the workload for students, the instructor has relied more heavily on the asynchronous communication function of WeChat and lowered the requirement of synchronous conversations to three to five times per semester. In addition, in later Chinese-American virtual projects, the students have been allowed to conduct synchronous conversations on their own electronic devices with no recordings of the conversations being required, although some type of evidence (e.g., screenshots) needed to be provided to demonstrate the happening of the conversations.

In order to alleviate the issue of target language proficiency gap, the instructor has moved the Chinese-American telecollaborative projects to more advanced Chinese language classes with the understanding that more advanced-level Chinese language students are equipped with better Chinese language abilities to conduct conversations with their partners in Mandarin. To address the relevance issue of the telecollaborative exchange in Chinese language courses, the instructor has explicitly discussed the relationship between language and culture in Chinese language classes and has emphasized that the ultimate goal of foreign language learning should aim for the development of intercultural competence. More advanced-level Chinese language courses are often content-based and culture is a natural component, which has also helped with the relevance issue. The Chinese language program also plans to integrate virtual exchange in English-taught content-based courses such as ‘Exploring Chinese Culture’ or ‘Intercultural Communication’ to address the relevance issue more directly as learning culture is an essential goal in these courses.

To resolve issues associated with superficial communication, lack of in-depth interactions, and avoidance strategy, the instructor has focused on designing tasks and topics that could offer tangible discussion points and enhance students’ motivation. For example, in the past years, the Chinese language program at the U.S. liberal arts college has experimented with telecollaborative projects centering around song sharing, Chinese idioms, sensitive cultural topics, issues in contemporary Chinese society, and Chinese behavioral culture. The author has observed that it is relatively easy to facilitate exchange of cultural information (i.e., the learning of cultural products and cultural practices) between the two sides, but it is more difficult for the students to engage in learning the cultural mind or cultural perspectives because cultural mind is abstract, invisible and intangible. It is thus important for the instructors to create topics or materials that turn the invisible cultural perspectives into tangible discussion points and guide the students to ask why in order to discover the cultural mind underlying cultural products, practices, and behaviors. For example, the project on sensitive cultural topics encouraged the students to focus on those topics that highly interested them but might be offensive to their partners. While they were always instructed to be polite and respectful when discussing these sensitive topics, they learned from the interactions that misunderstandings and communication breakdowns should not be deliberately avoided, but rather should be viewed as rich learning points.

The past five years of Chinese-American telecollaborative practice at the U.S. college has made the instructor fully aware of the significant role of the teacher in virtual exchange. There may be no way out to alleviate the demanding role of the teacher, but constant reflection and systematic learning have been crucial for the instructor to understand what competencies the teacher needs and what types of mentoring the teacher could offer in order to design and implement a rewarding telecollaborative exchange. O'Dowd (2013) proposed a four-domain model of teacher competencies required of the telecollaborative teacher: organizational competences, digital competences, pedagogical competences, and attitudes and beliefs. Language instructors who are interested in virtual exchange should strive to equip themselves with these competencies. In terms of the teacher role in virtual exchange, O'Dowd (2020) summarized three major types of pedagogical mentoring during virtual exchange based on a comprehensive literature review: presenting online interaction strategies before the exchange, leading online intercultural interactions, and integrating students' own online interactions into class work. Such pedagogical mentoring carefully provided by the teacher could hopefully help students avoid superficial engagement and provide learners with opportunities to reflect and learn from virtual exchange.

The insights gleaned from five years of Chinese-American telecollaborative practice at the U.S. college not only hold relevance for instructors of Chinese as a Foreign Language (CFL) but are equally applicable to educators of diverse languages engaged in various virtual exchange partnerships. Challenges such as time difference, disparities in target language proficiency, heavy workloads, and the demanding nature of the instructor's role are frequently reported hurdles encountered in virtual exchange programs across the spectrum of second language learning contexts. In any virtual exchange initiative, it is imperative to emphasize the development of effective task structures that foster profound rather than superficial discourse. Equally important is the ability to encourage students to venture beyond their comfort zones and leverage conflicts as valuable learning opportunities, rather than preserving superficial politeness or avoiding sensitive topics. It is hoped that the pedagogical implications derived from the Chinese-American exchange discussed here will prove valuable to all second language instructors interested in utilizing virtual exchange as a means for language and culture instruction.

References

- Belz, J. A. (2003). Linguistic perspective on the development of intercultural communicative competence in telecollaboration. *Language Learning & Technology*, 7, 68–117.
- Colpaert, J. (2020). Editorial position paper: How virtual is your research? *Computer Assisted Language Learning*, 33(7), 653–664.
- Dooly, M. (2017). Telecollaboration. In C. A. Chapelle & S. Sauro (Eds.), *The handbook of technology in second language teaching and learning* (pp. 169–183). Wiley-Blackwell.

- Hauck, M., & Youngs, B. L. (2008). Telecollaboration in multimodal environments: the impact on task design and learner interaction. *Computer Assisted Language Learning*, 21 (2), 87–124.
- Jin, L., & Erben, T. (2007). Intercultural learning via Instant Messenger interaction. *CALICO Journal*, 24(2), 291–311.
- Kern, R. (2014). Technology as pharmakon: The promise and perils of the internet for foreign language education. *Modern Language Journal*, 98(1), 340–357.
- Lewis, T., & O’Dowd, R. (2016). Online intercultural exchange and foreign language learning: A systematic review. In R. O’Dowd & T. Lewis (Eds.), *Online intercultural exchange: Policy, pedagogy, practice* (pp. 21–68). Routledge.
- Luo, H., & Yang, C. (2016). Using WeChat in teaching L2 Chinese: An exploratory study. *Journal of Technology and Chinese Language Teaching*, 7(2), 82–96.
- Luo, H. & Yang, C. (2018). Twenty years of telecollaborative practice: Implications for teaching Chinese as a foreign language. *Computer Assisted Language Learning*, 31, 546–571.
- Luo, H. & Gao, P. (2022): Intercultural learning through Chinese-American telecollaboration: results of a song sharing project. *Computer Assisted Language Learning*, 1–29. <https://doi.org/10.1080/09588221.2022.2026405>
- Luo, H., & Gui, M. (2021). Developing an effective Chinese-American telecollaborative language learning program: An action research study. *Computer Assisted Language Learning*, 34, 609–636. <https://doi.org/10.1080/09588221.2019.1633355>
- Luo, H. & Yang, C. (2022). Pedagogical benefits of Chinese-American telecollaboration: A study of student perceptions. *ReCALL*, 34(1), 37-50. DOI:10.1017/S0958344021000203
- Malinowski, D., & Kramsch, C. (2014). The ambiguous world of heteroglossic computer mediated language learning. In A. Blackledge & A. Creese (Eds.), *Heteroglossia as practice and pedagogy* (pp. 155–178). Springer.
- O’Dowd, R. (2007). Evaluating the outcomes of online intercultural exchange. *ELT Journal*, 61(2), 144–152.
- O’Dowd, R. (2013). The competences of the telecollaborative teacher. *The Language Learning Journal*, 43(2), 194–207.
- O’Dowd, R. (2016). Emerging trends and new directions in telecollaborative learning. *CALICO Journal*, 33 (3), 291–310.
- O’Dowd, R. (2020). The role of pedagogical mentoring in virtual exchange. *TESOL Quarterly*, 54(1), 146–172.
- O’Dowd, R., & Lewis, T. (Eds.) (2016). *Online intercultural exchange: Policy, pedagogy, practice*. New York: Routledge.
- O’Dowd, R., & Ritter, M. (2006). Understanding and working with “failed communication” in telecollaborative exchanges. *CALICO Journal*, 61(2), 623–642
- O’Dowd, R., & Ware, P. (2009). Critical issues in telecollaborative task design. *Computer Assisted Language Learning*, 22(2), 173–188.
- O’Dowd, R. (2012). Intercultural communicative competence through telecollaboration. In J. Jackson (Ed.), *The Routledge handbook of language and intercultural communication* (pp. 342–358). Routledge/Taylor & Francis.

- O'Rourke, B. (2007). Models of telecollaboration (1): eTandem. In R. O'Dowd (Ed.), *Online intercultural exchange* (pp. 41–61). Multilingual Matters.
- Rahimi, M., & Fathi, J. (2022). Employing e-tandem language learning method to enhance speaking skills and willingness to communicate: the case of EFL learners. *Computer Assisted Language Learning*, 1–28.
<https://doi.org/10.1080/09588221.2022.2064512>
- Richardson, S. (2016). *Cosmopolitan learning for a global era*. Longman.
- Ryder, L., & Yamagata-Lynch, L. (2014). Understanding tensions: Activity systems analysis of transpacific collaboration. *CALICO Journal*, 31 (2), 201–220.
- Thorne, S. L. (2003). Artifacts and cultures-of-use in intercultural communication. *Language Learning & Technology*, 7(2), 38–67.
- Ware, P. (2005). 'Missed' communication in online communication: Tensions in a German-American telecollaboration. *Language Learning & Technology*, 9(2), 64–89.