Effectiveness Analysis of One-to-One Chinese Online Teaching: A Qualitative Study from the Perspective of Students*

Liqiang Xu
Research Institute of International Chinese Language Education
Beijing Language and Culture University
Beijing, China
806734494@qq.com

Yanqun Zheng*(Corresponding Author)
Research Institute of International Chinese Language Education
Beijing Language and Culture University
Beijing, China
zyq@blcu.edu.cn

Abstract—**Synchronous Chinese Online Language Teaching (SCOLT) is a one-to-one Chinese Online Teaching program jointly designed and implemented by Beijing Language and Culture University and Massey University in New Zealand, aiming at achieving individualized teaching and improving students' Chinese communicative skills. The SCOLT has been successfully implemented for six cycles. This study adopts the qualitative method to explore the effectiveness of one-to-one Chinese online teaching in terms of Chinese learners' attitudes, experiences, comments, growth, and suggestions on SCOLT by collecting and analyzing students' reflection logs. The study found that SCOLT is popular among Chinese learners and that students who participated in SCOLT have improved their effects of Chinese learning in various aspects, including knowledge, skills, and emotions. Finally, we discuss students' suggestions for SCOLT with a view to benefiting more learners in the future of Chinese online teaching.**

Keywords—SCOLT, qualitative research, student logs, teaching effectiveness

I. INTRODUCTION

The progress of science and technology promotes the innovation of a technology-enhanced language learning environment, which opens up different ways of researching and enhancing language learning [1]. The main goal of language teaching is to cultivate students' ability to communicate in the target language and cross-cultural competence. In previous language teaching, people only paid attention to the linguistic and cultural facts of the target language. However, the cultivation of intercultural competence was not entirely reflected [2]. According to a 2020 report by the World Economic Forum, Education 4.0 requires learners to have global citizenship skills, including building an understanding of the wider world [3]. Therefore, the trend of talent cultivation of future education is international. It is necessary to cultivate international talents with intercultural communication abilities in second language education. Using information technology to develop language education, carry out international long-distance cooperation, and provide a large number of second language learners with the opportunity to use the target language for international communication, so as to cultivate their intercultural competence, is a teaching approach worth exploring.

Distance education in New Zealand has a long history and rich experience. Distance Chinese language education is widely accepted and prevalent in New Zealand, which is formed by the geographical characteristics and educational traditions of New Zealand. In recent years, the number of Chinese language learners in New Zealand has increased. However, distance Chinese language learners have different backgrounds, resulting in different learning needs and limited practice time in class. However, they all need and desire to improve their Chinese listening and speaking skills [4]. Under such a background, Beijing Language and Culture University (BLCU) and Massey University (MU), through their Joint Research Centre, designed and implemented a project to optimize the structure of distance Chinese courses. That is, synchronous Chinese online language teaching of one-to-one videoconferencing (SCOLT) is added to the original general curriculum of Massey University for tutoring Chinese learning.

As a micro spoken Chinese language tutoring course that accompanies the general curriculum, the effectiveness of SCOLT will directly affect the effectiveness of the entire distance Chinese course structure optimization project. From the perspective of students, this study makes a follow-up survey of SCOLT through students' reflection logs, discusses the effectiveness of one-to-one Chinese online teaching on talent cultivation, and puts forward the following two research questions:

(1) What is the attitude of students towards SCOLT?

(2) Do students think SCOLT is helpful for their Chinese learning? If so, in what areas?

II. RESEARCH DESIGN

A. Research object: the SCOLT

The SCOLT brings together BLCU teachers (BLCU-Tutor) and distance students from MU (NZ-Student) in one-to-one learning sessions. The tutoring content of SCOLT is decided by both teachers and students independently. Each pair should complete five sessions within the schedule time. The communication tools are ZOOM or Skype. Each session lasts 15 to 20 minutes, and the whole process is recorded on audio or video media. After class, NZ-Students need to repeat the learning process through the audio or video recording and

fill in the "Student Feedback" , which can ensure the comprehensiveness and reliability of reflection materials. There have been carried out six cycles of cooperation by 2020 [4].

The characteristics of SCOLT can be summarized in the following three aspects: (1) NZ-Students have already received general Chinese language courses before taking SCOLT; (2) The task of SCOLT is to meet individual needs and improve Chinese communicative competence; (3) SCOLT is usually carried out in teacher-student conversation, which is communicative language teaching.

B. Data collection and analysis

To fully understand the students' experience of SCOLT, BLCU-Tutor not only assigned a reflection log task (English) but also provided a writing outline, including the following dimensions: the learning content of SCOLT, favorite teaching content, gains, difficulties, attitudes, and suggestions on SCOLT. In order to better aquire students' honest thoughts, students could fill in the reflection logs in English. A total of 83 students (at the elementary Chinese language level) participated in the SCOLT, and 331 logs of 73 students, with a total of about 55,000 words, were collected.

This study conducts a thematic analysis of students' logs based on grounded theory. Firstly, on the basis of being fully familiar with the contents of students' logs, we searched for conceptual categories, extracted keywords from the logs, then conceptualized them and formed open coding. Secondly, we analyzed the open coding, found and established the relationships between each concept category, and summarized them to form the axial coding. Thirdly, we examined the categories of axial coding and selected the "core category" from all the discovered concept categories through systematic analysis, and then extracted the theme to form the core coding (as shown in Table 1).

TABLE I.   CODING EXAMPLES OF LEARNERS' PARTICIPATION IN SCOLT GROWTH

Open Coding	Axial Coding	Core Coding
a. Practiced and corrected Chinese pronunciation	1. Learned language knowledge	Students who participated in SCOLT have improved their effect of Chinese learning in various aspects.
b. Reviewed and learned words		
c. Learned and practiced grammar and sentence structure		
d. Learned Chinese characters		
a. Have Improved listening skills	2. Improved language skills	
b. Have Improved oral ability		
c. Have Improved reading ability		
d. Learned how to write emails in Chinese		
a. Learned knowledge about Chinese culture	3. Increased cultural knowledge	
b. Talked about the cultural differences between different countries like China and New Zealand		
a. Have more confidence in speaking Chinese	4. Mobilized emotions	
b. Very enjoyable and excited		
c. Give motivation		

III. RESEARCH FINDINGS

Three distinct themes were identified: Students' attitudes toward SCOLT were mainly positive; Students who participated in SCOLT have improved their effects of Chinese learning in various aspects; Suggestions from students for SCOLT.

A. Students' attitudes toward SCOLT were mainly positive, supplemented by negative

1) Students' overall attitude towards SCOLT
The statistical results of NZ-Students' overall attitudes toward SCOLT are shown in Figure 1.
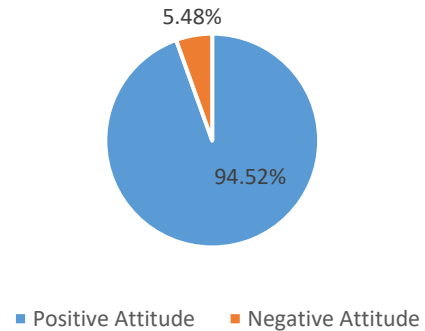

Fig. 1.   Statistical chart of NZ-Students' attitudes toward SCOLT

As shown in Figure 1, the vast majority of NZ-Students have a positive attitude toward SCOLT (94.52%). NZ-Students said in their reflection logs that "SCOLT provides them with a rare opportunity to communicate with native Chinese speakers", "It is a great cultural exchange opportunity", and "It is just like the real-life conversations". They even said they "enjoyed this free talk" and "enjoyed these classes". It is evident that SCOLT is popular among NZ-Students. They can learn many aspects of knowledge in the process of communicating with teachers, and they enjoy the process of cross-cultural communication.

A small number of NZ-Students' feedback contains negative attitudes (5.48%). These students said that "SCOLT just made small talk, did not practice anything", "It had no new information", and "The teacher could only help in a short time". However, we found that all these feedback came from the first session. With the increasing number of communication with teachers, these students' attitudes toward SCOLT have also changed and become positive.

2) Students' specific comments on SCOLT
The specific comments made by students about SCOLT in their reflection logs can be broadly divided into two categories: comments on the teacher's teaching style and comments on the teacher's teaching content. 79.5% of the students evaluated the teaching methods. Students said they liked the teacher's questions, which could exercise their quick response-ability. They were glad to get the teacher's immediate feedback and corrections to help them study more effectively. They liked the PPT produced by the teacher, especially the pictures, which were very useful for them in learning Chinese. Moreover, teachers patiently explained to students. Another student said, "I like my tutor to teach based

on her understanding of my level." In addition, 39.7% of the students responded to the teaching content, saying that "I learned many new words from the teaching content prepared by the teacher", "The materials prepared by the teacher are beneficial and can just meet my needs", "We discussed a topic that I like very much", "The teacher was able to teach me something I did not know", "We can talk about the prepared topic more naturally, which is especially useful and enjoyable", and so on.

SCOLT is an approach to language teaching which is built on an openness to language learners' lives and life-world [1]. It is personalized, flexible, and accessible. This means that SCOLT always follows the learner-centered principle. Teachers can give individualized guidance to students according to their interests, past learning experiences, current learning needs, learning plans, and learning methods suitable for them. That is tailor-made teaching methods and content for learners instead of requiring students to adapt to the pre-established content of teachers.

3) Difficulties that students encountered during the SCOLT process

We found that 50.68% of the students mentioned problems they encountered in SCOLT, including language barrier, network failure, busy practice, and inattention, accounting for 39.73%, 12.33%, 8.22%, and 2.74%. (1) Language barrier. It was the most critical problem that students encountered when they participated in SCOLT, mainly manifested in insufficient vocabulary, limited-expression ability, inability to understand the teacher's words, and many language errors when speaking Chinese. (2) Network failure. The main manifestations were power failure, lack of network, inability to hear the teacher's voice, unclear call video, slow network speed, etc. (3) Busy practice. some of NZ-Students are full-time students, some are company employees, some are housewives and so on. Due to busy work, business trips, exams, and family affairs, they often did not have enough time to finish their learning on time. Some students even forgot the schedule. (4) Inattention. The main reasons were "I was too tired to concentrate" and "I did not know whether to focus on dialogue or new words, so I didn't learn well".

B. Students who participated in SCOLT have improved their effects of Chinese learning in various aspects

Regarding the effectiveness of NZ-Students' progress in SCOLT, the specific results are shown in Table 2.

From Table 2, it can be seen that NZ-Students have improved the Chinese learning effect in many ways, specifically by learning language knowledge, improving language skills, increasing cultural knowledge, and mobilizing emotions, accounting for 98.63%, 67.12%, 47.95%, and 24.66%.

1) Learned language knowledge

It can be seen from Table 2 that: (1) The number of students who have gained a lot in vocabulary knowledge is the largest (71.23%). In their reflection logs, students said that communicating with the teacher could "help me recall the words I had learned before" and help them learn some new words. (2) The number of students who have gained some

knowledge in grammar comes next (54.79%). Students said that they not only learned the common sentence structures, such as "S+V+O", "S+不+V+O", "从……到……" "就……了" "越来越……", and so on, but also "were able to review the grammar they learned", especially "using the target language in a real environment can combine the grammatical point form with semantics, which I can better master these concepts and become easier to remember". (3) The number of students who have gained some knowledge in pronunciation is a relatively lower (32.88%). In the reflection logs, the students reported that they "learned to speak new Chinese words with correct tones", "increased the accuracy of tones", and "practiced my pronunciation well". (4) The number of students who have gained some knowledge of Chinese characters is the least (10.96%). Students said in their logs, "The teacher explained radicals information to help me learn and memorize Chinese characters", and "Using the slides with Chinese characters and pinyin helps me to recognize Chinese characters more easily."

TABLE II.   SCOLT CHINESE LEARNING RESULTS OF NZ-STUDENTS

Chinese Learning Effects		Percentage (%)	Total Proportion (%)
Learned language knowledge	Vocabulary	71.23	98.63
	Grammar	54.79	
	Pronunciation	32.88	
	Chinese characters	10.96	
Improved language skills	Speaking	57.53	67.12
	Listening	17.81	
	Reading	10.96	
	Writing	1.37	
Increased cultural knowledge		47.95	47.95
Mobilized emotions		24.66	24.66

As a result, NZ-Students have developed their knowledge of vocabulary, grammar, pronunciation, and Chinese characters by participating in SCOLT. This is because the learning of language skills is inseparable from the mastery of language knowledge. SCOLT aims to improve Chinese skills, but language skills training is based on knowledge of the target language. At the same time, in the process of students' interaction with teachers, teachers help students correct language errors, which is conducive to promoting students' mastery of language knowledge. In addition, in interaction, students' perception, understanding, imitation, memory, consolidation, and application of different language knowledge reflect the precise growth of students in personalized interaction.

2) Improved language skills

Table 2 shows that: (1) The number of students who have improved their speaking skills in Chinese is the largest (57.53%). Students said in the reflection logs that through communication with teachers, they could learn considerable useful Chinese expressions, such as "how to introduce themselves", "how to express time", and so on. Some students said that "the dialogue became more natural after several communications with the teacher." (2) The number of

students who have improved their listening skills in Chinese came next (17.81%). Students said, "I feel that my listening has improved a lot", "I get more listening training in conversations with teachers", "This is a good opportunity to practice my listening", and so on. (3) The number of students who have improved their reading skills in Chinese is insignificant (10.96%). "I found the reading skills taught to me very useful", students said in the reflection logs, while some students said that teachers helped them exercise their reading skills by using PPT and sending feedback emails. (4) The number of students who have improved their Chinese writing skills is the least (1.37%). The students said in the reflection logs that they "learned how to write emails in Chinese".

Therefore, NZ-Students have improved their language skills in speaking, listening, reading, and writing by participating in SCOLT, which is closely related to the way and content of teachers' guidance. Among them, the vast majority of students have been trained in speaking skills, which is in sharp contrast to the traditional language teaching tendency of emphasizing input over output. In addition, students interact with teachers in Chinese based on a specific topic, get written feedback from teachers when necessary, and exercise their input and output skills with high intensity, thus realizing the learning process that input mode promotes output growth. The different communication topics and teaching methods of SCOLT also show the characteristics of respect for students' individuality and differentiated teaching.

3) Increased cultural knowledge

As can be seen from Table 2, 47.95% of the students said that they had learned Chinese cultural knowledge and understood the difference between Chinese culture and their own culture. For example, many students said that teachers could explain the cultural knowledge that students are concerned about, such as Chinese traditional festivals, social customs, and so on. Some students even said, "After communicating with teachers, I believe I have a better understanding of Chinese culture than ever before." Another student said, "We discussed the differences between life in New Zealand and China, and I found it helpful to understand through the combination of language and culture."

SCOLT teachers adhered to the "learner-centered" teaching philosophy and chose topics or communication projects based on NZ-Students' needs. In this process, teachers did not only pay attention to the teaching of language knowledge timely but also enabled students to understand and learn relevant Chinese culture, which embodied the teaching concept of "structure-function-culture". SCOLT can be used for cross-cultural communication between students and teachers. It can help students understand different cultures and develop sensitivity to the similarities and differences between Chinese and foreign cultures.

4) Mobilized emotions

According to Table 2, 24.66% of the students said that in the process of SCOLT, they gained not only knowledge and skills but also emotional improvement. Students' reflection logs showed that SCOLT had improved their confidence and courage in using Chinese, and they would no longer be afraid to speak Chinese because they were not afraid of making

mistakes or speaking poorly. "Keep trying in the process of learning a new language" had reduced the anxiety of communicating in Chinese, and "Getting to know each other better and better, the class will become more and more comfortable and I have a sense of accomplishment". Some students were also aware of the importance of Chinese listening and speaking ability, so they became more active.

In SCOLT, the one-to-one teaching environment creates a learning atmosphere of mutual respect, equality, and relaxation for teachers and students. Teachers are not only "higher-ability" demonstrators but also leaders who provide the lowest level of guidance required by learners, and even companions who help learners overcome psychological barriers, encourage learners and enhance their learning enthusiasm. Compared with the large-scale traditional teaching, the psychological distance between teachers and students in one-to-one teaching is much closer, which is more conducive to the generation of friendly, close, trustworthy, and sincere feelings between teachers and students, thus more effectively mobilizing students' enthusiasm, improving students' self-confidence and stimulating students' interest in learning [5]. That is beneficial to improving students' Chinese learning effect.

Communicative language teaching emphasizes authentic and meaningful communication. Learners learn a language by using it to communicate based on the needs for information exchange and emotional exchange between teachers and students. Moreover, learning is a process of creative construction and involves trial and error [6]. From students' reflection log analysis, SCOLT can improve students' language knowledge, language skills, cultural knowledge, and emotion, which embodies the concept of communicative language teaching. In addition, the growth of students' learning shows that the goal of international Chinese education should not be limited to cultivating students' comprehensive Chinese abilities but also emphasize the cultivation of students' social-cultural abilities. SCOLT builds learning on the emotional communication needs of teachers and students, creates a teaching atmosphere of mutual respect and equal cooperation for learners, and effectively mobilizes enthusiasm, initiative, and persistence in learning Chinese. Meanwhile, SCOLT, as the content of Massey University's Chinese course structure optimization project, is helpful to promote the transformation of international Chinese education into a multi-dimensional and diversified language talent training structure, and cultivate more high-level Chinese talents with intercultural communication skills.

C. Suggestions from students for SCOLT

1) Arrange appropriate teaching content based on students' individualized demands

In the student reflection logs, students proposed to the teacher what they wanted to learn in the next class after each class. It is found that many students wanted topics close to their life and work, such as "how to introduce myself", "learn more vocabulary related to my job", etc. Some students wanted to know the skills of learning Chinese, such as "how native speakers memorize Chinese characters", "practice more listening skills", and so on. Some students wanted to

know about Chinese culture, such as Chinese songs, movies, food, Spring Festival, and so forth. It can be seen that personalized teaching can select learning content according to students' needs, knowledge background, personal preferences, and learning styles, thus effectively enhancing the pertinence of learning, stimulating their potential, finding problems and solving them in time, and significantly improving their learning interest and efficiency. Therefore, in the process of SCOLT tutoring, teachers should adhere to the "student-centered" teaching concept, respect the individuality of students, fully consider the learning interests and hobbies of students, give learning support in terms of topic content and learning strategies that meet their learning abilities, and give full play to students' enthusiasm, so that students can develop and enhance their language learning under the joint action of various aspects.

2) Improve the professional quality of teachers

By examining students' reflection logs, it was found that NZ-Students had many personalized demands on teachers' teaching, including different aspects. For example, when it comes to teachers' selection of teaching materials, some students said, "The content is a bit easy this time; next time I want to learn something harder." In terms of teacher-student communication, some students said, "You need to be careful not to let me stray too far from the topic, otherwise you will deviate from the goal of the lesson." In terms of teachers' teaching methods, students said that teachers should "use more pictures to explain new words", "timely input Chinese characters with pinyin on the screen", "add some pinyin in PPT courseware", and so on. Thus, one-to-one Chinese teaching is more flexible than traditional large-scale teaching, and thus requires more professionalism from Chinese teachers. One-to-one teaching requires special skills, including building friendly relationships, fostering teacher-student relationships through communication, and being approachable, flexible, and insightful [7]. Therefore, as a Chinese teacher in SCOLT, it is vital to consider not only the learners, but also what aspects of the students to focus on and how teachers should respond to unexpected situations that may arise during the communication process. During the communication process, the teacher needs to take the initiative at all times, not to be "led by the nose" by the students, and focus on the task of language teaching, to timely excessive release of the scene gathered back. In addition, teachers should consciously mobilize students' enthusiasm and initiative through flexible and diversified teaching methods and approaches to avoid an awkward, monotonous and boring atmosphere in one-to-one teaching. In short, SCOLT teachers should continuously improve their professional skills in language ontology, language teaching, technology application, online education psychology, and so on.

3) Pay attention to the connection between SCOLT and the general curriculum

Many students suggested in their reflection logs that teachers should review content from Chinese courses of Massey University for them, and many students expressed their desire to "use lessons I learned in my own Chinese courses in conversation", all of which were met in the SCOLT.

As mentioned earlier, in this curriculum optimization project, the general Chinese curriculum is the foundation and core objective for all students, while the motivation and needs of different learners and their learning abilities can be enhanced and met through SCOLT. In this way, NZ-Students can achieve consolidation of the original curriculum and better translate knowledge into skills, and also avoid the time and expense of Chinese for special purposes. Therefore, SCOLT teachers should pay attention to the connection between the SCOLT and the general curriculum, be familiar with the general Chinese language curriculum of Massey University in advance, and use it as a reference for selecting teaching content, so that the SCOLT content can be more closely linked to the general course, while also achieving the goal of complementing and emphasizing the development of students' practical Chinese skills.

4) Expand the scale of international cooperation and promote the combination of teaching and research

Many students expressed in reflection logs that they hoped to extend the SCOLT time and continue their studies. In addition, with the implementation of the project, this model has begun to spread to other countries or regions, such as Japan and South Korea, and continuously more countries have joined the project [4]. Personalized learning through the Internet is the direction of future educational development. "One-to-one" teaching model is imperative. Therefore, expanding the scale of international cooperation and promoting one-to-one Chinese teaching is of great significance to developing international Chinese education in the future. We have built various databases during the implementation process, which provide a large amount of data support for the research and remote Chinese teaching. It will attract more teachers who explore the combination of teaching and research, establish international academic teams for cooperation, and carry out more teaching research to improve the effectiveness and promote the development of one-to-one online language teaching model.

IV. CONCLUSION

This study adopts a qualitative method and conducts in-depth research on students' attitudes, experiences, comments, gains, and suggestions for SCOLT through student logs, which provides empirical support for SCOLT improvement and helps improve the effectiveness of the Chinese language curriculum structure optimization project. According to the study, SCOLT is popular among NZ-Students, and SCOLT have improved students' basic knowledge and skills in the Chinese, enhanced their intercultural communication competence, stimulated students' interest in learning it and confidence in using Chinese, and reduced language anxiety when communicating in Chinese. But some students encountered several difficulties, mainly reflected in the language barrier, network failure, busy practice, and inattention. We hope that SCOLT will be further improved in teaching content arrangement, teachers' professional quality, curriculum cohesion, international cooperation, and teaching and research integration in the future. Furthermore, more Chinese language learners will benefit from this international cooperation teaching mode.

REFERENCES

[1] C. White, Y. Zheng, and G. Skyrme, "PPTELL issue: developing a model for investigating one-to-one synchronous Chinese online language teaching via videoconferencing," Computer Assisted Language Learning, vol. 000, no. 2, pp. 1-22, 2020.

[2] O' Dowd, Robert, "A transnational model of virtual exchange for global citizenship education," Language Teaching, vol. 53, no. 4, pp. 477‑490, 2019.

[3] Y. Wang, J. Xu, and J. Ding, "The Global Framework of Education 4.0: Future School Education and Mode Transformation: An Analysis of the World Economic Forum Report of Schools of the Future: Defining New Models of Education for the Fourth Industrial Revolution," Journal of Distance Education, vol. 38, no. 3, pp. 3‑14, 2020.

[4] Y. Zheng, and C. White, "Design and Practice of The Integration of Distance Chinese Language Teaching and Teacher Training: Discussion on the Overall Design of SCOLT", International Chinese Language Education, vol. 6, no. 1, pp. 31‑39, 2021

[5] C. Cao, and G. Wang, "The One-to-one Education of Foreign Chinese," Heilongjiang Researches on Higher Education, no. 4, pp. 119‑121, 2004.

[6] J. C. Richards, and T. S. Rodgers, Approaches and methods in language teaching, 2nd ed., Cambridge University Press, 2001.

[7] T. Bleistein, and M. Lewis, One-on-one teaching and learning: Theory and practice, Basingstoke, UK: Palgrave Macmillan, 2015.