Task Design to Enhance Learners' Collaboration and Engagement in an Online Chinese Learning Environment



Sijia Guo

Abstract Empirical research has shown that applying authentic tasks can create a collaborative learning environment for learners, which enables them to engage in meaningful language exchanges that promote their second language acquisition. Although new technologies make collaboration among learners possible in virtual classrooms, few studies have investigated task design in multimodal learning environments or its influence on learners' interaction and collaborative language learning. To fill the gap, this study was carried out to explore the best practice by applying a task-based language teaching approach via a web conferencing-based online Chinese class. The purpose of the current research was to answer the following questions: (1) How do communicative tasks stimulate learners' collaboration and interaction in an online Chinese language class?, (2) What are learners' perceptions of the task design in the web-conferencing-based multimodal learning environment?, and (3) What are the impacts of technology-mediated task-based language teaching on learners' learning experience? In this study, 16 university beginner learners of Chinese participated in this two-stage project. Data were collected through post-session surveys, in-depth interviews, and web conferencing archive recordings. The results confirmed that the designed communicative tasks showed great pedagogical value in facilitating learners' collaboration and interaction in an online learning environment.

Keywords Computer-assisted language learning (CALL) \cdot Collaborative learning \cdot Learners' interaction \cdot Multimodal learning

1 Introduction

Derived from both the interaction approach to second language acquisition (SLA) and sociocultural theory, task-based language teaching (TBLT) has been recognised

S. Guo (🖂)

Macquarie University, Sydney, Australia e-mail: sijia.guo@mq.edu.au

 $[\]hfill {\Bbb O}$ The Editor(s) (if applicable) and The Author(s), under exclusive license to Springer Nature Singapore Pte Ltd. 2020

W. W. K. Ma et al. (eds.), *Learning Environment and Design*, Educational Communications and Technology Yearbook,

https://doi.org/10.1007/978-981-15-8167-0_10

in abundant literature as a very effective language teaching approach in face-toface environments (Ellis, 2003; Nunan, 2004; Samuda & Bygate, 2008; Van den Branden, 2006). The fundamental driving force behind the task-based language teaching approach is based on the rationale that tasks can stimulate learners' interactions, which in turn can facilitate second language acquisition (Pica, 1994; Pica & Doughty, 1985; Pica et al., 1996). Moreover, it can provide opportunities for learners to collaboratively work with others on tasks that they are not able to complete by themselves (Vygotsky, 1978).

In the last two decades, researchers' attention has been drawn to technologymediated task-based language teaching (Chapelle, 2001; Ortega & González-Lloret, 2014; Stockwell, 2010). González-Lloret and Ortega (2014) argue that "[t]he imperative of integrating technology in education is undisputed today" (p. 1). In the field of computer-assisted language learning, a substantial body of research has focused on collaboration and interaction in multimodal learning environments and its influence on learners' second language acquisition (Abrams, 2016; Hampel & Stickler, 2012; Lin, 2015; Rouhshad et al., 2016; Stickler & Shi, 2013). Multimodal technologies, such as web conferencing, provide learners with efficient and diverse modes of communication. Although implementation of those tools in foreign language classes has become more pervasive now, the question of how multimodal software and language tasks should be integrated into a mutually informative environment remains largely under-researched. Salaberry (2000) urges language instructors to analyse how pedagogical goals can be achieved through activity design and implementation in computer-mediated communication (CMC) environments.

The current study was carried out to bridge this gap, by implementing a taskbased approach in a web conferencing-based online Chinese class to explore technology-mediated task design principles and its influence on learners' collaboration and engagement.

2 Background of the Study

2.1 TBLT and Learners' Interaction

Within the field of second language acquisition (SLA), numerous studies have been conducted on task-based language teaching. Empirical evidence has been found to support the Interaction Hypothesis in the context of face-to-face TBLT teaching practice (Ellis et al., 1994; Gass & Varonis, 1985; Long, 1985; Pica, 1994; Pica et al., 1991). In Ellis's (2009) review of TBLT literature, he provides a set of practical definitions, using language holistically to fulfil non-linguistic goals in order to achieve meaning-based communication: a) the primary focus should be on 'meaning'; b) there should be some kind of 'gap'; c) learners should largely have to rely on their own resources (linguistic and non-linguistic) in order to complete the activity; and d) there is a clearly defined outcome other than the use of language.

In his study, Long (1983) proposed a model that explained the relationship between conversational task, interaction, and second language acquisition. Further,

	INF holder	INF requester	INF supplier	INF requester-supplier relationship	Interaction requirement	Goal orientation	Outcome options
Task Type:							
Jigsaw	X&Y	X&Y	X & Y	2 way (X to Y & Y to X)	+ required	+ convergent	1
Information gap	X or Y	YorX	X or Y	1 way > 2 way (X to Y/Y to X)	+ required	+ convergent	1
Problem-solving	X = Y	$\mathbf{X} = \mathbf{Y}$	X = Y	2 way > 1 way (X to Y & Y to X)	- required	+ convergent	1
Decision-making	$\mathbf{X} = \mathbf{Y}$	X = Y	X = Y	2 way > 1 way (X to Y & Y to X)	- required	+ convergent	1+
Opinion exchange	$\mathbf{X}=\mathbf{Y}$	$\mathbf{X} = \mathbf{Y}$	X = Y	2 way > 1 way (X to Y & Y to X)	- required	- convergent	1+/-

TABLE 2 Communication task types for L2 research and pedagogy analysis based on: Interactant (X/Y) relationships and requirements in communicating information (INF) to achieve task goals

Fig. 1 Task typology proposed by Pica, Kanagy, and Falodun (1993)

he predicted that more negotiation may be generated in two-way tasks. Following that, Doughty and Pica (1986) examined the effects of task type and its influence on interaction pattern. The results suggest that tasks requiring information exchange between interlocutors may generate more interaction. Moreover, they noticed that task type played a key role in stimulating learners' conversational modifications. A communication task typology was later developed by Pica, Kanagy, and Falodun (1993), which covers interactant relationship, communication goals, and outcome options. It has since been used to locate, describe, and compare five task types— jigsaw, information gap, problem-solving, decision-making, and opinion exchange— and to assess their contributions in terms of stimulating comprehension, production, and providing feedback opportunities to L2 learners (see Fig. 1).

They note that the tasks in which the information is split into two-way flows (e.g., jigsaw) and the tasks that subsequently require interactants to exchange information (e.g., information gap and jigsaw) show higher potential in stimulating interaction and communication than other task stimuli. Tasks that require information exchange, such as jigsaw and information gap tasks, are considered to have great potential for eliciting negotiation. In jigsaw tasks, each participant holds part of the information and is required to exchange the information in order to achieve the task goal. Similar to jigsaw tasks, in information gap tasks, split information is provided, and interlocutors are asked to do one-way or two-way information exchange.

2.2 TBLT and Computer-Assisted Language Learning

In the current literature, the body of research examining technology-mediated TBLT has grown (Lai & Li, 2011; Ortega & González-Lloret, 2014; Thomas, 2013; Ziegler,

2016). TBLT not only provides a useful framework for designing and implementing instructional activities in computer-assisted language learning (CALL) contexts (Duran & Ramaut, 2006; 2005), but has also received positive reactions from learners and teachers (Hampel & Hauck, 2004; Lai et al., 2011).

According to González-Lloret and Ortega (2014), technology-mediated TBLT has long noted the importance of task design and its benefits on learners' interaction and collaboration (Chapelle, 2003; Doughty & Long, 2003). Similar to the findings in face-to-face settings, research has shown that tasks requiring information exchange have great potential in stimulating learners' interaction in technology-mediated TBLT (Blake, 2000; 2006; Smith, 2003).

In Blake's (2000) study, 50 intermediate-level Spanish language learners were asked to conduct jigsaw, information gap (one- and two-way), and decision-making tasks in a synchronous chat programme in order to compare learners' interaction and how learners' interaction was affected by different task types. Students' chat transcripts were analysed in terms of negotiation types, negotiation of miscommunication, and turn taking. The results showed that jigsaw tasks stimulated the most negotiations, whereas information gap tasks were not nearly as productive as a stimulus. In Smith's (2003) study, 14 non-native speaker dyads collaboratively conducted two jigsaw tasks and two decision-making tasks in a synchronous text chat. He found that learners' collaboration on decision-making tasks outperformed negotiation turns in jigsaw tasks. Keller-Lally 2006 investigated the impact of task type (jigsaw, decision-making, and opinion exchange) and group size (dyads and small group) on learners' frequency of negotiations and language production. In her study, 62 intermediate German language learners' online discussions were transcribed and coded in terms of L1/L2 language use and off-task communication units. The statistical results illustrated that learners' language output in decision-making tasks and opinion exchange tasks outweighed that in jigsaw tasks. In addition, no significant difference in the amount of negotiations between decision-making and jigsaw tasks was noticed in her study, which was contrary to Blake's (2000) and Smith's (2003) findings.

2.3 Learners' Interaction and Engagement in the Multimodal Learning Environment

The number of studies on multimodality learning environments is growing in the field of CALL (Guichon & McLornan, 2008; Levy & Stockwell, 2013). In multimodal environments, particularly in conferencing-based settings, how to design tasks to facilitate collaborative learning has become the interest of recent research (Hampel, 2006, 2010; Stockwell, 2010). Ciekanski and Chanier (2008), who focused on the impact of integrating audio and text on learners' collaborative writing competence, observed learners using multiple modes to make meaning and therefore facilitate collaboration. They maintained that, in multimodal environments, learners' focus and engagement with the learning activity are influenced during the process of

implementing telecollaborative tasks in which fluency may be prioritised over accuracy. Wang (2004, 2006, 2008), who examined learners' interaction via desktop video conferencing, noted that oral–visual interaction, which is facilitated by the multimodal environment, enabled real-time facial expression and gestures between learners and teachers. It provided semiotic cues for meaning making, which was conducive to task completion. Guichon and Cohen (2014), who also observed learners' interaction in video conferencing and audio conferencing, noticed that there was more overlapping interaction in the former mode and more student silences in the latter. They suggested that video conferencing could facilitate a fast and seamless interaction with paralinguistic cues for conversation.

However, some researchers point out the limitations of using conferencing tools in teaching practice. For instance, Berglund (2009), who investigated participant rates and conversational feedback strategies in a video conferencing-based class, found that, without teachers' presence, students' engagement resembled that of instructed discussion. However, long monological turns were identified in learners' contribution as well. As Salaberry (2000) argued, applying new technologies in the classroom does not automatically generate best learning outcomes. It is critical for language teachers to analyse how learners' interaction and collaboration can be stimulated through task design and implementation in multimodal online learning environments.

Despite emerging research interest in the fields of CALL and TBLT, few studies have examined how tasks can be designed to stimulate learners' collaboration and engagement in multimodal environments. This study was conducted to bridge the gap and to answer the following research questions:

- How do communicative tasks such as jigsaw, information gap, and decisionmaking tasks stimulate learners' collaboration and interaction in an online Chinese language class?
- What are learners' perceptions of the task design in the web-conferencing-based multimodal learning environment?
- What were the impacts of technology-mediated TBLT on their learning experience?

3 Context and Methodology

3.1 The Context of the Study

The intention of this study was to explore the implementation of task-based language teaching in a web conferencing-based online setting, specifically in a beginners' online Chinese class. The web conferencing tool used in this study was Blackboard Collaborate, which includes features such as real-time audio, video, chat, interactive whiteboard, share screen, polling, emoticons, main room, and breakout rooms (Guo, 2013).

The study was conducted as a two-stage project. In the preliminary stage, participants attended two online sessions in which an information gap task and a jigsaw task were applied. Learners' feedback regarding their learning experiences were collected to improve the task design in this current study (Guo & Möllering, 2016). To further explore task design in multimodal learning environments, in this study, five online tasks—including two jigsaw tasks, one information-gap task, and two decision-making tasks—were designed and conducted with the participants.

Sixteen undergraduate students who enrolled in the second semester of an introductory Chinese language class participated in this study. They all attended the online sessions remotely using their PCs or laptops and a headset. Five of them (Students 1 to 4 and 9) had participated in the preliminary study. Before this study commenced, they had learned Chinese for one semester. In this study, the participants attended five one-hour online sessions throughout the semester. An online training session was conducted in a computer lab before the treatment started. In the training session, sample interactive tasks were assigned to participants in breakout rooms to familiarise them with the multimodal learning environment.

3.2 Task Design

In this study, five fortnightly one-hour online sessions were conducted (see Table 1). The current study follows Pica et al.'s (1993) task typology. The five tasks included two jigsaw tasks, two decision-making tasks, and one information gap task. Since the information gap and jigsaw tasks were well received by students in the preliminary study, these were also implemented in this study. As learners' language abilities improved, decision-making tasks were also designed and introduced.

In the current study, the task design followed Willis's (1996a, 1996b, 1998) and Ellis's (2003) TBL framework, and it also took into account Hampel's (2006) task design framework in the audio-conferencing environment. In order to reinforce vocabulary and grammar learning and facilitate learners' collaborative learning, there were three stages in the one-hour online sessions (see Table 2).

		Task type	Торіс
1	Week 2	Information gap	Applying for a Chinese visa
2	Week 4	Decision-making	Buying clothes and sending them to China
3	Week 6	Jigsaw task	Maps and showing directions
4	Week 10	Decision-making	Planning for a trip
5	Week 12	Jigsaw	Describing an accident

Table 1 Summary of tasks implemented in the current study

Stage	Room type	Activities	Duration
Pre-task	Main room	Warm-up	20 minutes
Task	Breakout rooms	Tasks	20 minutes
Reporting	Main room	Task presentation and teacher feedback	20 minutes

Table 2 Summary of task sequence and activities

3.3 Data Collection

This study employed mixed methods, which encompasses both qualitative and quantitative methods, to answer the three research questions. Three types of data resources were employed, including web conferencing archive collections, postsession interviews, and post-session questionnaires. All five online sessions were recorded using Blackboard Collaborate and Screenflow in order to capture learners' and their teacher's interactions in a range of small-group tasks. Learner/learner interaction in the process of task completion were transcribed for the purpose of discourse analysis to identify instances of collaborative learning. Post-session surveys and indepth interviews were carried out after the fifth online sessions and task descriptions, were provided to the interviewees to help them recall the previous tasks conducted throughout the semester. Open-ended questions were designed in postsession surveys to elicit learners' perceptions on task design and the collaborative learning experience in the multimodal environment.

4 Results

4.1 Learners' Collaboration in the Online Sessions

There were a great number of examples in the data which showed that collaborative learning took place both in pairs and in groups in the current study. In example 1, student 14 explicitly requested student 3's help when she did not know how to say "study" and "apply" in the target language. When she could not finish her sentence, student 3 attempted to guess what she was about to say based on the information he had. Moreover, student 3 pointed out that student 14 should add "我要" in that sentence to express what she wanted to do. Although student 3 rendered his assistance in English, he successfully helped student 14 complete her sentence "我要去中国,我要办签证。[I'm going to China. I want to apply for a visa.]".

Example 1. (the first online task).

[Hello, how can I help you?]
[Study, apply for]
[I'm going to study in China. Apply]
[Visa]
[Right, visa. I apply for a visa.]
[I want to.]
[I'm going to China. I want to apply for a visa.]

In example 2, student 4 noticed that student 1 confused " $\mathcal{F}(day)$ " with " \exists (date)", so he asked her to clarify it. After that, he also corrected a grammar mistake in her sentence. On reviewing the current data, abundant examples of similar peer corrections were found. Part of the reason for this was because the participants were instructed by the teacher to help and provide correction to peers in the completion of the tasks. While observing the learners' group work, I consistently encouraged them to actively help their partners, which in turn fostered their own language and communication development.

Example 2. (the first online task).

St 3: 出生年月日?	[Date of birth]
St 14: 1992年6月10天	[10th June, 1992 (incorrect words for date)]
St 3: you mean 日?	[Day]
St 14: Yeah, How do I say this "I need to change money"?	
St 3: 换钱	[Change money]
St 14: 我换钱	[I change money.]
St 14: put 得, say 我得换钱	[need to. I need to change money.]
St 3: Yeah, 我得换钱。	[Yeah, I need to change money.]

In example 3, students 5 and 6 were working on a whiteboard, showing directions on a campus map. Student 5 kept saying "往下边走 [go down]", which can be understood when using a map but is not appropriate in a face-to-face conversation. Although student 6 understood the instructions, he still elaborated the correct form of the expression to student 5. This type of negotiation was not triggered by a non-understanding or unknown lexical or syntactic item. However, throughout the collaboration, both the students' attention was drawn to language form, which was conducive to their SLA.

Example 3. (the third online session).

Task Design to Enhance Learners' Collaboration ...

St 5: 你往下边走。	[You go down.]
St 6: 下边?	[Down?]
St 5:下	[Down.]
St 6: You mean down?	
St 5: Yeah, like back, down	
St 6: It's like 左, 前	[Left, front]
St 5: like 你往下边走	[You go down.]
St 6: You can say like 你往南走	[You go south.]
St 5: Oh, ok, 你往南走, 往左拐, 教室在公园对面。	[Ok, you go south, and then turn left. The classroom is opposite to the park.]
St 6: 教室. (Typing "教室" on the whiteboard)	[Classroom]

In the third task, student 10's sentences "你往北走, 你往西走 [You go north, and go west]" were grammatically correct, but lacked conjunction words. Student 1 articulated the problem and suggested that student 10 use "再 [and then]" to link the two clauses. According to Smith (2003), "metalinguistic talk may prove helpful in uncovering the root of the problem" (p. 47), although it may divert time away from task completion. In this example, "先…再… [first…, and then...]" was the key grammar structure that the students learned in class. The negotiation process indicated that the acquisition of new learning did take place.

Example 4. (The third online session).

St 10: 好。你参观图书馆	[Ok. You're going to visit the library.]
St 1: 图书馆在哪儿?	[Where is the library?]
St 10: OK, 图书馆, 你往北走, 你往西走。	[The library. You go north, go west.]
St 1: When you give the second direction, you need to say 再, like go again 再往。	[Then.]
St 10: Oh, so go first	
St 1: Yeah, so we start with 先往, and you want to give another command, 再往 direction go。	[First, and then.]
St 10: Ok, 先往北走, 再往西走	[Ok. Go north first, and then go west.]

In addition, results from the interviews and post-session surveys showed that the implementation of tasks in the web conferencing-based online environment has great potential in stimulating collaborative learning.

In the post-session survey, participants were asked to choose which one they preferred between one-to-one and group tasks. Of the 16 participants, 14 preferred group work. Their reasons are shown in the following excerpts from the survey:

• Learning a language seems to be much more effective for me when doing it with a group. That way you can feed off the other students. It works very well in group situations.

• A group discussion is more preferable due to the possibility of creating a conversation in Chinese rather than a one-on-one, which may provide improvement in writing, reading and listening ability. Furthermore, a group discussion is less confronting, as you know the other students are at a similar level to you.

According to the participants' answers in the post-session survey, they believed that peer collaboration provided them with more opportunities for feedback and explanations. Peer interactions allowed them to support each other in a similar way. Working with other students helped to create a less pressured and more engaging environment, in which they felt less distracted and more willing to contribute to group discussion. In addition, group work seemed to contribute to creating a sense of community, in which the participants felt safe to share and help each other. As student 9 mentioned in the survey, having a partner that he could work with was conducive to his task completion:

It's really great with [student 3], because I feel safe in a sense. I didn't feel a fool or anything. so maybe having someone that you do the tasks with all the time, it works. Like a buddy assisted [sic].

However, one student mentioned the disadvantage of group work; that is, having an unconfident, shy, or lower proficiency partner may not work as effectively as one-to-one (learner-teacher) interaction.

In this study as an instructor, I observed the learners' discussions in groups and occasionally intervened in their interaction when they needed technical or linguistic assistance. The degree of my intervention varied depending on the extent of the learners' participation and their achievement in the tasks. As Salmon (2003) states, the tutor's main role is to ensure "meaning making" rather than "content transmission" (p. 52). However, most of the time, I observed the learners only without intervention. Assistance was provided when it was requested by the learners or in situations when they were not able to resolve the problem by themselves.

4.2 Learners' Engagement in the Online Sessions

In terms of engagement, the majority of the participants believed that they felt engaged in the online sessions. Their feedback suggested that learners' participation increased when they were used to the online learning environment and when other participants' interactions made participation more appealing.

In the follow-up surveys, 11 out of the 16 students indicated "strongly agree" when asked if the tasks were engaging, while nine students also strongly agreed that they enjoyed doing the tasks with their peers. Results from the interviews showed that the participants enjoyed the last three sessions more as their language proficiency had gradually improved and they were more familiar with the multimodal environment. One student, for instance commented in the interview: "*I was particularly engaged talking in the last few sessions because I was more used to it*". Student 9 mentioned

that he felt engaged doing the jigsaw since "naturally you do one step, then the other person does the other step, then you swap. That was very good."

Moreover, in the post-task stage, all the groups were required to present their work in the breakout rooms, which made them pay more attention to the tasks. Student 12 commented in the interview: "even [when] my task is finished and my presentation is finished in [the] online session, you still get to listen to other people's presentation[s] and you learn from them. So, it's useful in every way". Student 2 mentioned that the teacher's questions after the presentation encouraged her and her partners to concentrate on the tasks, "because we don't know when you're going to ask us questions. I always have to be listening".

4.3 Learners' Perceptions on Task Design

In the in-depth interviews, the participants were asked their preference regarding task types. The three types of tasks that were designed in this study all received positive feedback. Most of the participants believed that tasks requiring two ways of information exchange (jigsaw and information-gap tasks) were more straightforward. The decision-making task, on the other hand, were perceived to require more discussion on task planning.

- Decision-making is good, if you have a good partner and you are a team-working person, otherwise you'll just make the decision by yourself. Doesn't foster the communication well.
- The decision-making involves more work planning. I think the combination of all of them was good, but I particularly like the [task on giving] directions which is challenging.
- Information gap and jigsaw tasks: If you're both good learners, you know what you're doing and then it's [a] good way to foster communication.
- The jigsaw task is quite straightforward; we know what we have to do.

Moreover, in the interviews, learners' perceptions on task design confirmed that participation in the study was conducive to their target language learning and confidence building, which are summarised as follows:

- It created a less pressured environment to learn and practice the target language;
- Group work motivated the students to do more practice than individual study; and,
- The positive feedback and encouragement received from peers and the teacher made them feel more confident.

Student 10 commented in the interview: "there is less pressure when you [are] in your room in front of [the] computer than in class". Student 9 stressed that the positive feedback he received from the teacher and his partner was a key influence and played an important role in building his confidence in Chinese language learning:

"Encouragement, exactly; you get that encouragement because obviously that feedback, that's sort of the presentation aspect. That's really good." Student 3 confirmed that being able to complete a task without the teacher's assistance gave him a sense of achievement: "It was positive feeling, because you just feel good about being able to complete the task, so if you complete with satisfaction, I guess, I can do it. Since you did it, you know you can do it, so you feel better because you can do the task". Student 8 stated: "I learn better in groups. It's always good to have other people whom you can talk things through. You can ask questions just when everyone else is learning, like silly questions like "How do you say nine?' It's better just to ask someone next to you."

5 Discussion and Conclusion

5.1 Collaborative Learning in Technology-Mediated TBLT

Computer-supported collaborative learning (CSCL), derived from Vygotskyan cultural psychology, concerns learners' "collaborative learning" in a multimodal environment (Kirschner, 2002). Sociocultural theories stress the pivotal roles played by language and other tools, such as computers. Previous studies report that, compared to face-to-face interaction, collaboration supported by CMC is considered weak in social presence.

The findings in the current study prove that collaborative learning did occur in learner/learner interaction in group work. It takes place between a more competent learner and a lower proficiency learner. The findings in this study showed that when working together as a group, a more competent learner tended to help their partners by providing corrective feedback or even grammatical explanations, which echoes previous studies (e.g., Smith, 2003). It contributed to creating a less stressful learning environment and the participants felt more engaged when working with other students.

Secondly, when the students encountered breakdowns or problems that they could not resolve by themselves, it was important to have at least one teacher monitoring their interaction and providing timely assistance. The participants felt safe and comfortable having the teacher move around and liked to let the teacher know when they had language or technical issues.

5.2 Implications for Online Language Learning and Teaching

To create an online collaborative learning environment, according to the findings of this study, language instructors need to consider the following aspects. Firstly, give students freedom to pair with others since some of them may have someone with whom they feel comfortable working. Secondly, teachers should act as moderators and need to keep an eye on students' interactions and provide assistance when necessary.

5.3 Learners' Engagement and Task Design in Technology-Mediated TBLT

According to the results, learners' participation in the tasks and task type were interrelated. The participants felt more engaged doing the tasks with their partners when they were able to use Chinese to communicate with others and were fully comfortable with the online environment and the interaction pattern.

5.4 Implications for Online Language Learning and Teaching

To design tasks that engage learners in technology-mediated TBLT requires language instructors to consider the following aspects. First of all, choose appropriate tasks that suit learners' language proficiency. Oxford (2006) states that "task-based teaching and learning potentially offer great riches if explored by teachers in their dual roles as instructor and action researcher" (p. 114). In the current study, as both teacher and researcher, I explored three different task types in the beginners' online Chinese task design. The results showed that the first-year students were more familiar with information gap and jigsaw tasks, which require producing only a certain outcome. However, tasks such as decision-making tasks, in which students can reach different outcomes, require relatively higher language proficiency. It may be challenging for beginners. Secondly, in the post-task stage, language teachers can ask students to present their work in groups. Similar to low-risk competition, students may feel less pressure in this scenario and hence are more likely to contribute more in their group work.

Moreover, the findings in the current research confirmed that the online tasks were conducive to learners' target language learning. To achieve such a goal, it may be useful for language teachers to consider implementing the following strategies. Firstly, creating a less pressured learning environment is vital for online language learning. Students, especially beginners, may feel more nervous at first when they attend online sessions. Working with students they already know or helping them become familiar with the tool can help alleviate their nervousness and boost their confidence. Secondly, providing more positive feedback and encouragement can make students, especially less competent learners, more willing to communicate and express themselves. Thirdly, teachers need to help familiarise students with the online learning environment as early as possible.

5.5 Contributions of this Study

This study aimed to explore the implementation of TBLT in a web conferencingbased beginners' online Chinese unit and to determine its influence on learners' collaboration and interaction. Moreover, it also shed light on how task design can stimulate peer-to-peer interaction to facilitate target language learning.

The findings confirmed the potential of technology-mediated TBLT for facilitating peer-to-peer collaboration and interaction. In other words, tasks designed in the web conferencing environment may provide learners with opportunities to modify their interaction when language breakdown takes place in conversation and in turn facilitates learners' SLA. Further, the study has notable implications on task design for online learning environments. However, since all the participants in the current study were on-campus students, a further study comparing the learning experiences of on-campus students and distance students may produce different results in terms of negotiation routines.

References

- Abrams, Z. I. (2016). Possibilities and challenges of learning German in a multimodal environment: A case study. *ReCALL*, 28(3), 343–363.
- Berglund, T. Ö. (2009). Multimodal student interaction online: An ecological perspective. *ReCALL*, 21(2), 186–205.
- Blake, R. (2000). Computer mediated communication: A window on L2 Spanish interlanguage. *Language Learning & Technology*, 4(1), 120–136. Retrieved from https://llt.msu.edu/vol4num1/blake/default.html.
- Chapelle, C. (2001). Computer applications in second language acquisition: Foundations for teaching, testing and research. Cambridge, UK: Cambridge University Press.
- Chapelle, C. (2003). English language learning and technology: Lectures on teaching and research in the age of information and communication. Amsterdam, The Netherlands: John Benjamins Publishing.
- Ciekanski, M., & Chanier, T. (2008). Developing online multimodal verbal communication to enhance the writing process in an audio-graphic conferencing environment. *ReCALL*, 20(02), 162–182.
- Doughty, C., & Pica, T. (1986). "Information-gap" task: Do they facilitate second language acquisition? *TESOL Quarterly*, 20(2), 305–325.
- Doughty, C. J., & Long, M. H. (2003). Optimal psycholinguistic environments for distance foreign language learning. *Language Learning & Technology*, 7(3), 50–80.
- Duran, G., & Ramaut, G. (2006). Tasks for absolute beginners and beyond: Developing and sequencing tasks at basic proficiency levels. In K. V. d. Branden (Ed.), *Task-based language education: From theory to practice* (pp. 47–75). Amsterdam, The Netherlands: John Benjamins Publishing.
- Ellis, R. (2003). Task-based language learning and teaching. Oxford, UK: Oxford University Press.
- Ellis, R. (2009). Task-based language teaching: Sorting out the misunderstandings. *International Journal of Applied Linguistics*, 19, 221–246.
- Ellis, R., Tanaka, Y., & Yamazaki, A. (1994). Classroom interaction, comprehension, and the acquisition of L2 word meanings. *Language Learning*, 44(3), 449–491.

- Gass, S. M., & Varonis, E. M. (1985). Task variation and nonnative/nonnative negotiation of meaning. In S. M. Gass & C. G. Madden (Eds.), *Input in second language acquisition* (pp. 149–161). Rowley, MA: Newbury House.
- Guichon, N., & Cohen, C. (2014). The impact of the webcam on an online L2 interaction. Canadian Modern Language Review/La Revue Canadienne Des Langues Vivantes, 70(3), 331–354.
- Guichon, N., & McLornan, S. (2008). The effects of multimodality on L2 learners: Implications for CALL resource design. System, 36(1), 85–93. https://doi.org/10.1016/j.system.2007.11.005
- Guo, S. (2013). Applying web-conferencing in a beginners' Chinese class. In Proceedings of the annual conference of ASCILITE, "Electric Dreams" (pp. 345–349). Sydney, Australia: Australasian Society for Computers in Learning in Tertiary Education.
- Guo, S., & Möllering, M. (2016). The implementation of task-based teaching in an online Chinese class through web conferencing. System, 62, 26–38. https://doi.org/10.1016/j.system.2016.07.003
- Hampel, R. (2006). Rethinking task design for the digital age: A framework for language teaching and learning in a synchronous online environment. *ReCALL*, 18, 105–121.
- Hampel, R. (2010). Task design for a virtual learning environment in a distance language course. In M. Thomas & H. Reinders (Eds.), *Task-basked language learning and teaching with technology* (pp. 131–153). Bloomsbury, UK: Bloomsbury Academic.
- Hampel, R., & Hauck, M. (2004). Towards an effective use of audio conferencing in distance language courses. *Language Learning & Technology*, 8(1), 66–82.
- Hampel, R., & Stickler, U. (2012). The use of videoconferencing to support multimodal interaction in an online language classroom. *ReCALL*, 24(02), 116–137.
- Keller-Lally, A. (2006). Effect of task-type and group size on foreign language learner output in synchronous computer-mediated communication (Unpublished doctoral dissertation). Austin, TX: University of Texas.
- Kirschner, P. (2002). Can we support CSCL? Educational, social and technological affordances for learning. In P. Kirschner (Ed.), *Three worlds of CSCL: Can we support CSCL* (pp. 7–34). Heerlen, The Netherlands: Open Universiteit Nederland.
- Lai, C., & Li, G. (2011). Technology and task-based language teaching: A critical review. *CALICO Journal*, 28(2), 1–24.
- Lai, C., Zhao, Y., & Wang, J. (2011). Task-based language teaching in online ab initio foreign language classrooms. *The Modern Language Journal*, 95, 81–103.
- Levy, M., & Stockwell, G. (2013). Call dimensions: Options and issues in computer-assisted language learning. Oxon, UK: Routledge.
- Lin, H. (2015). A meta-synthesis of empirical research on the effectiveness of computer-mediated communication (CMC) in SLA. *Language Learning & Technology*, 19(2), 85–117. Retrieved from https://llt.msu.edu/issues/june2015/lin.pdf.
- Long, M. (1983). Native speaker/non-native speaker conversation and the negotiation of comprehensible input. *Applied Linguistics*, 4(2), 126–141.
- Long, M. (1985). A role for instruction in second language acquisition: Task-based language training. In K. Hyltenstam & M. Pienemann (Eds.), *Modelling and assessing second language* acquisition (pp. 77–79). Clevedon, UK: Multilingual Matters.
- Nunan, D. (2004). Task-based language teaching. Cambridge, UK: Cambridge University Press.
- Ortega, L., & González-Lloret, M. (2014). *Technology-mediated TBLT: Researching technology and tasks*. Amsterdam, The Netherlands: John Benjamins Publishing.
- Pica, T. (1994). Research on negotiation: What does it reveal about second language learning conditions, processes, and outcomes? *Language Learning*, 44(3), 491–527.
- Pica, T., & Doughty, C. (1985). Non-native speaker interaction in the ESL classroom. In S. Gass & C. Madden (Eds.), *Input in second language acquisition* (pp. 115–132). Rowley, MA: Newbury House.
- Pica, T., Holliday, L., Lewis, N., Berducci, D., & Newman, J. (1991). Language learning through interaction. *Studies in Second Language Acquisition*, 13(03), 343–376.

- Pica, T., Kanagy, R., & Faloudon, J. (1993). Choosing and using communication tasks for second language instruction and research. In G. Crookes & S. M. Gass (Eds.), *Tasks and language learning: Integrating theory and practice* (pp. 9–34). Clevedon, UK: Multilingual Matters.
- Pica, T., Lincoln-Porter, F., Paninos, D., & Linnell, J. (1996). Language learners' interaction: How does it address the input, output, and feedback needs of L2 learners? *TESOL Quarterly*, 30(1), 59–84. https://doi.org/10.2307/3587607
- Rosell-Aguilar, F. (2005). Task design for audiographic conferencing: Promoting beginner oral interaction in distance language learning. *Computer Assisted Language Learning*, 18(5), 417–442.
- Rouhshad, A., Wigglesworth, G., & Storch, N. (2016). The nature of negotiations in face-to-face versus computer-mediated communication in pair interactions. *Language Teaching Research*, 20(4), 514–534. https://doi.org/10.1177/1362168815584455
- Salaberry, M. R. (2000). L2 morphosyntactic development in text-based computer-mediated communication. *Computer Assisted Language Learning*, 13(1), 5–27.
- Salmon, G. (2003). *E-moderating: The key to teaching and learning online*. London, UK: Kogan Page.
- Samuda, V., & Bygate, M. (2008). *Tasks in second language learning*. New York, NY: Palgrave Macmillan.
- Smith, B. (2003). The use of communication strategies in computer-mediated communication. *System*, 31(1), 29–53.
- Stickler, U., & Shi, L. (2013). Supporting Chinese speaking skills online. System, 41(1), 50-69.
- Stockwell, G. (2010). Effect of multimodality in CMC tasks. In M. Thomas & H. Reinders (Eds.), *Task-based language learning and teaching with technology* (pp. 83–104). Bloomsbury, UK: Bloomsbury Academic.
- Thomas, M. (2013). Task-based language teaching and CALL. In M. Thomas, H. Reinders, & M. Warschauer (Eds.), *Contemporary computer-assisted language learning* (pp. 341–358). London, UK: Continuum.
- Van den Branden, K. (2006). Task-based language education: From theory to practice. Cambridge, UK: Cambridge University Press.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes.* Cambridge, MA: Harvard University Press.
- Wang, Y. (2004). Supporting synchronous distance language learning with desktop videoconferencing. Language Learning & Technology, 8(3), 90–121.
- Wang, Y. (2006). Negotiation of meaning in desktop videoconferencing-supported distance language learning. *ReCALL*, 18(1), 122–145.
- Wang, Y. (2008). Distance language learning and desktop videoconferencing: A Chinese language case study. Saarbrücken, Germany: VDM Verlag Dr. Müller.
- Willis, J. (1996a). A flexible framework for task-based learning. In J. Willis & D. Willis (Eds.), Challenge and change in language teaching (pp. 52–62). Oxford, UK: Heinemann.
- Willis, J. (1996b). A framework for task-based learning. Harlow, UK: Addison Wesley Longman.
- Willis, J. (1998). Task-based learning? What kind of adventure? Retrieved from https://www.edu cation.auckland.ac.nz/webdav/site/education/shared/about/centres/lipis/docs/Task-Based%20L earning-What%20Kind%20of%20Adventure.html.
- Ziegler, N. (2016). Taking technology to task: Technology-mediated TBLT, performance, and production. *Annual Review of Applied Linguistics*, *36*, 136–163.

Sijia Guo is a Lecturer in Chinese Studies, Department of International Studies at Macquarie University. Her PhD study was on online Chinese teaching in web-conferencing environments. Her research focuses on technology-enhanced language learning (TELL), technology-mediated task-based language teaching, and second language acquisition. She also published on captioned videos for L2 comprehension and design principles to enhance students' L2 acquisition in flipped classes.