How to Creatively Flip to Online Learning Environments: A Showcase of Design and Tools for an Award-Winning, Online Language Teaching Project

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Abstract

Most current language learning and teaching materials are designed for formal education settings, such as face-to-face or blended learning environments. As language education is being redefined during the pandemic, how to innovatively use multimodal tools to reach the intended learning outcomes has become imperative for language educators. The emergence of technology-mediated, task-based language teaching and communicative didactical approaches serve as a good solution for these challenges since it offers students opportunities to use the target language in authentic contexts for meaningful communication in virtual learning environments. In this study, captioned videos were innovatively introduced and played a complementary role in creating a “flipped classroom” learning environment to enhance learners’ virtual study experience during the pandemic in 2020. This paper showcases pedagogical framework and tools for online language teaching activities in the tertiary sector, with examples provided from Chinese as a foreign language setting. It considers how online language learners participate in synchronous and asynchronous learning activities and focuses on a student-centred approach while highlighting the social and communicative aspects of foreign language learning and teaching during and post-pandemic.

Keywords: Flipped classroom, technology-mediated TBLT, online language teaching, captioned videos

The Context of the Study

The swift transition to online teaching during the pandemic may fundamentally change the language educators' teaching approach and, thus, greatly influence students' learning experience (Chik & Benson, 2021; Penalver et al., 2021). Like thousands of institutions worldwide, educators at Macquarie University had to halt their classes in the middle of the semester and switch from in-person to digital teaching in 2020. Although
the language units offered at Macquarie University were mostly "online ready", the sudden shift to exclusively virtual learning environments led to a radical change in the way students learn and interact with peers and teachers. This paper showcases pedagogical designs and tools for online Chinese teaching by innovatively combining captioned videos and web-conferencing-mediated task-based language teaching to flip to an online learning environment. It provides examples from Chinese language online units and students' feedback on the student-centred approach and further highlights its implications on language curriculum design, delivery, evaluation, and implementation during and post-pandemic.

The project aims to build capacity in the development of strategies supporting the “flipped classroom” approach by embedding captioned videos to promote students’ engagement in class and facilitate their second language acquisition. It furthers explores a practice model of online language teaching and establishes an innovative approach in language curriculum design, delivery, evaluation, and implementation.

The design, implementation, and evaluation of the project have been recognised at Macquarie University by receiving the Faculty of Arts Learning and Teaching Award for outstanding contributions to student learning, specifically on implementing conversation audio/visual materials to enhance the flipped classroom experience in a task-based Chinese language teaching class.

This paper will provide more than anecdotal evidence supporting the rationale that informs this innovative online curriculum design. The design principles of the flipped classroom have proved to enhance students’ L2 acquisition (Sit & Guo, 2019) and empirical evidence has shown that the use of the captioned videos within the context of a multimedia Chinese language-learning environment can facilitate learners’ listening comprehension (Guo et al., 2020). Furthermore, the evaluation of the pedagogical values of task-based online language curriculum and its contribution to learners’ engagement has shown that it provides opportunities for negotiation of meaning, which may facilitate their second language learning (Guo & Möllering, 2016; Guo & Möllering, 2017)

**Literature Review**

*Flipped classroom*

Recent literature has shown that the flipped classroom approach can enhance students’ learning by creating a more interactive and dynamic classroom and by providing
increased flexibility of time, location, and pace of study (Mehring & Leis, 2017; Rajabi et al., 2021; Shyr & Chen, 2018; Turan & Akdag-Cimen, 2020; Zou et al., 2020). According to Bergmann and Sams (2012), the “flipped classroom” refers to the instructional approach where teacher-created materials introducing new concepts are viewed outside of scheduled teaching hours, thereby freeing teacher-student time for more collaborative efforts in class, which is primarily essential in a language learning context. In this project—different from the traditional pattern of teaching—students can access teaching contents through online captioned videos and activities prior to class and prepare themselves for group discussion and collaborative tasks at their own pace. Although research has explored the design and efficacy of a flipped approach in education and particularly language education (Mehring & Leis, 2018; Muzyka & Luker, 2016; Vaezi et al., 2019). However, most of the research is focused on teaching English as a foreign language (EFL) (Lin & Hwang, 2018; Turan & Akdag-Cimen, 2019). There is limited published evidence available that demonstrates its model on students’ engagement and success in Chinese language learning and teaching. Moreover, more detailed design techniques regarding flipped classroom practice are yet to be investigated such as what content and learning materials are to be studies out-of-class hours are is insufficiently addressed in the existing studies (Jiang et al., 2020; Zou et al., 2020).

Captioned videos

Captioned videos were originally developed as an aid to hearing-impaired individuals in the early 1970s (Taylor, 2005). Research into captioning’s usefulness as a tool for the second language (L2) learning began in the early 1980s. A spectrum of studies has shown that it helps learners connect auditory to visual input, which may aid form-meaning mapping—a key process that contributes to second language acquisition (SLA) (Kam et al., 2020; Wisniewska & Mora, 2020). Moreover, many scholars believe that it helps to improve L2 listening, reading comprehension skills (Danan, 2004; Montero Perez et al., 2013), and vocabulary acquisition (Mirzaei et al., 2017; Montero Perez et al., 2014).

Nowadays, many tertiary institutions are developing online foreign language courses. Captioned videos, which incorporate native speakers’ presence and voices, have become an effective resource that supports the online teaching platform. Winke, Gass, and Sydorenko’s (2010) study shows that, in comparison to the absence of captioned videos, the provision of captions is conducive to language learning in terms of novel vocabulary recognition and overall comprehension.
Technology-mediated, task-based language teaching and multimodality

In the current literature, the body of research examining technology-mediated TBLT has grown (Chong & Reinders, 2020; Lai & Li, 2011; Ortega & González-Lloret, 2014; Pardo-Ballester, 2019; Smith & González-Lloret, 2020; Thomas, 2013; Ziegler, 2016). TBLT not only provides a useful framework for designing and implementing instructional activities in computer-assisted language learning (CALL) contexts (Ana, 2018; Chong & Reinders, 2020; Duran & Ramaut, 2006; Rosell-Aguilar, 2005) but has also received positive reactions from learners and teachers (Hampel & Hauck, 2004; Lai et al., 2011; Tavakoli et al., 2019; Zhang, 2019). As technology has developed, researchers have realised the significant role of multiple semiotic modes in meaning-making and its influence on language learning. Studies on SLA and CALL illustrate that successful language learning embraces the co-construction of communication skills (Hafner et al., 2015; Hubbard & Colpaert, 2018; Yamazaki, 2018). Magnan (2007) suggests that “languages are best learned by a combination of talking, hearing, reading, and writing” (p. 153). In Vandergriff’s book (2016), she argues that multimodal online spaces can foster the development of an autonomous L2 self in a way that is less possible in traditional classroom settings. Moreover, the digital environments afford opportunities for L2 learners to connect with authentic discourse. In technology-mediated curriculums, multiple modes may complement each other, compensate for their shortcomings, or be in competition with each other (Hampel & Stickler, 2012; Kozar, 2015).

Project background

Chinese is considered a difficult language to learn by most Western learners due to its unique orthography and pronunciation system. When reflecting on the teaching practice, the author noticed that verbal and written instructions couldn’t sufficiently explain the activities to make students fully understand the collaborative tasks. Therefore, captioned videos that demonstrated the expected outcomes of the tasks have been created and are available on YouTube and the online learning management system (LMS, see Appendix for examples). The topics of the conversation videos were chosen in correspondence with the textbooks we use. Moreover, the scenarios are also quite relevant to their daily life outside of the classroom. The actors in the videos include not only native speakers but also some Chinese learners at Macquarie University. The project rationale is to encourage students to engage in the captioned videos before doing the activities and
prepare for the class. It establishes a learning database that students can access to watch how others speak the same Chinese they have learned in authentic contexts. Furthermore, the implementation of captioned videos can present and showcase the tasks, and therefore facilitate the completion of the tasks and learners’ second language learning.

**TBLT Design framework**

The approach to TBLT in this project was informed by Oxford’s (2006) task design framework. In her analysis of tasks, the following dimensions are taken into consideration: task goal, task types, stakes of a task, input genre and modality, linguistic complexity, cognitive load and cognitive complexity, interaction and output demands, the allowable amount of planning and timing, teachers’ and learners’ roles, and overall task difficulty.

**Task goal**

According to Oxford (2006), task goals fall into three main groups: “focus on meaning, focus on form, and focus on forms” (p. 97). To facilitate learners’ SLA, stimulate their collaboration, and foster their listening and speaking skills, a strong focus was placed on meaning and form in the task design. Other learning goals, such as culture-related activities, socio-cultural communication, and digital literacy were additionally taken into account.

**Task types**

Task types have effects on learners’ language acquisition (Blake, 2000; Keller-Lally, 2006; Smith, 2003). In jigsaw tasks, each participant holds part of the information and is required to exchange the information to achieve the task goal. Similar to jigsaw tasks, information-gap tasks provide split information, with interlocutors asked to do one-way or two-way information exchange.

**The rationale of task type selection**

Pica et al.’s (1993) task typology suggests that tasks that require information exchange, such as jigsaw and information-gap tasks, are considered to have great potential for eliciting negotiation. In this project, information-gap tasks, jigsaw tasks, and
decision-making tasks were selected (Guo, 2020).

**Stakes of task: high versus low stakes**

During the pandemic, all face-to-face classes were moved completely online from mid-March 2020. There were two-hour seminars and two-hour tutorials each week. The collaborative tasks were embedded in the curriculum for the second hour of the tutorials. Moreover, to stimulate learners’ participation and engagement, the students were asked to summarise or rewrite the online tasks as part of their major assignments.

**Input genre and modality**

The input genres of the tasks were varied and encompassed different types of modalities. As part of the flipped classroom setting, the captioned video clips were posted on the Moodle platform before the online tutorials. Further, relevant task materials of the collaborative tasks, such as pictures, texts, and instructions, were uploaded online so that students could download them before or during the sessions (see Appendix for examples). Following Scarcella and Oxford’s (1992) suggestions, the teacher and students could communicate with each other orally and visually throughout the online tutorials (Guo & Möllering, 2016). By doing so, the students were able to get the full benefit of the multimodal environment.

**Linguistic complexity**

The contents of the online sessions were aligned with the whole curriculum design. This study was conducted with first-year Chinese learners, and their language proficiency was relatively low (equivalent to HSK\(^1\) level 1-2). Oxford (2006) points out that linguistic complexity is not the same as linguistic difficulty, as “[t]he person’s familiarity with the material, the topic, or the language properties mitigates some of the difficulty even when the linguistic material is complex” (p. 104). The online tasks designed in this study consisted of different types of discourse genres (e.g., dialogue, discussion, retelling a story). However, considering students’ Chinese language levels, all the instructions, either in oral or written form, were written in English.

**Cognitive load and cognitive complexity**

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\(^1\) HSK is a Chinese proficiency test, see https://hsk.com.au/hsk-examinations/
According to Sweller (1988, 1999, cited in Oxford, 2006), people’s capacity for information processing is limited. In other words, the more complicated the information given to the learner, the harder the learning will be. The web-conferencing platform requires the participants to pay attention to multiple channels, such as video, audio, text chat, and so on. Therefore, instructions in the online sessions were made as simple as possible for the learners to understand. For example, considering their language proficiency, all the instructions were written in English rather than Chinese. The captioned videos were accessible online prior to the online sessions.

**Interaction and output demands**

Learners’ interaction and engagement play a key role in their SLA. Swain’s (1985) output hypothesis states the importance of “comprehensible output” in learners’ SLA. In this project, three types of tasks including information-gap tasks, jigsaw, and decision-making tasks, were designed and conducted with students to generate more opportunities for meaning negotiation (Long, 1985). Students are required to verbally communicate with each other in online tutorials. However, they need to rewrite the results of the tasks as part of their assignments.

**The allowable amount of planning and timing**

As Oxford (2006) has suggested, the allowable amount of planning is one of the key factors to consider in task design. Skehan and Foster (1997), who investigated the effects of different task types and task implementation conditions on learners’ L2 fluency, accuracy, and complexity, found that planning had a positive influence on language fluency and complexity. Following Willis (1996a, 1996b, 1998) and Ellis’ (2003) TBL framework and taking into account Hample’s (2006) task design framework in an audio-conferencing environment, there were three stages in the online sessions (see Table 1 below) during the one-hour task.

Table 1
Summary of task sequence and activities

<table>
<thead>
<tr>
<th>Stages</th>
<th>Main room or breakout rooms</th>
<th>Activities</th>
<th>Time limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-task</td>
<td>Main room</td>
<td>Warm-up activities</td>
<td>20mins</td>
</tr>
</tbody>
</table>
### Breakout rooms

<table>
<thead>
<tr>
<th>The task</th>
<th>Breakout rooms</th>
<th>The tasks</th>
<th>20mins</th>
</tr>
</thead>
<tbody>
<tr>
<td>The report stage</td>
<td>Main room</td>
<td>Task presentation and the teacher providing feedback</td>
<td>20mins</td>
</tr>
</tbody>
</table>

### Teacher roles

Breen and Candlin (1980, as cited in Nunan, 1989) identify the three main roles of the teacher in the communicative classroom as follows: (1) teacher acts as a facilitator, (2) teacher acts as a participant, and (3) teacher acts as an observer and learner. Others (e.g., Oxford, 2006; Richards & Rodgers, 2001) summarise teacher roles as a selector of tasks, guide, strategy-instructor, and assistance provider. In the pre-task stage, the teacher acted as a facilitator and helped the learners review grammar structures, which would be used in the task stage. In the task stage, the instructor observed learners’ interaction in groups and helped as needed. After the participants presented their tasks, the teacher gave feedback and comments based on their performance.

### Learner roles

Learners’ roles may involve being a group participant, monitor, strategy-user, goal-setter, self-evaluator, and others (Oxford, 2006). It has been acknowledged that learners are not only passive information recipients but also critical, reflective, and autonomous participants (Benson, 2002; Nunan & Phill, 2002). The participants in the current study were expected to actively contribute to task preparation, plan and implement the collaborative tasks, and communicate with their partners to solve problems in the tasks. In the end, they were required to present the tasks in the post-task stage.

### Overall task difficulty

Skehan (1996) identifies the following factors that affect task difficulty: code complicity, cognitive complexity (visual support, unexpected elements), and communicative stress factors (e.g., time, modality, scale, stakes, and control). The tasks incorporated lexical items beyond learners’ repertoire to increase the quantity of negotiation. To cater to various participants’ needs, different versions of captioned videos were provided such as full captions, keyword-only and annotated keywords, and no
captions (Guo et al., 2020). Chinese and English translations were also provided to prompt students’ language outputs.

**Project background**

Chinese is considered a difficult language to learn by most Western learners due to its unique orthography and pronunciation system. When reflecting on the teaching practice, the author noticed that verbal and written instructions couldn’t sufficiently explain the activities to make students fully understand the collaborative tasks. Therefore, captioned videos that demonstrated the expected outcomes of the tasks have been created and are available on YouTube and the online learning management system (LMS, see Appendix for examples). The topics of the conversation videos were chosen in correspondence with the textbooks we use. Moreover, the scenarios are also quite relevant to their daily life outside of the classroom. The actors in the videos include not only native speakers but also some Chinese learners at Macquarie University. The project rationale is to encourage students to engage in the captioned videos before doing the activities and prepare for the class. It establishes a learning database that students can access to watch how others speak the same Chinese they have learned in authentic contexts. Furthermore, the implementation of captioned videos can present and showcase the tasks, and therefore facilitate the completion of the tasks and learners’ second language learning.

**Research design in the pilot study**

To understand its impact on learners’ experience throughout and post-pandemic, as well as aspects that could still be improved, a project titled *External Student Success Factors in Online Language Learning* was carried out at the end of 2020. Seventy-seven students who enrolled in foreign language units (including Chinese, Japanese, French, German, Italian, Modern Greek, and Croatian) at Macquarie University were surveyed, and six were interviewed after one year of study in 2020. The U mentioned project examined how both synchronous and interactive activities (Zoom tutorials and other collaborative tasks carried out live) and asynchronous learning activities (quizzes, assignments, pre-recorded lectures, etc.) affected the development of students’ motivation and engagement. As part of the above-mentioned project, the pilot study in this paper focuses on the first-year Chinese language students’ learning experience, especially their
perceptions of the innovative curriculum design, which combined web-conferencing-mediated TBLT and captioned videos in a flipped classroom. Eight students conducted one year of Chinese study in 2020 and took the survey; of these eight two were interviewed. The first semester of 2020 was moved entirely online between Week 4 and Week 13, and face-to-face learning resumed in the second semester.

In terms of data analysis, the qualitative survey data was compared with the interview results. Due to the limited number of subjects, the survey did not provide significant data in terms of gender, age, or socio-economic background but indeed demonstrated the students’ flipped learning experience. The interview transcripts were loaded into NVivo9 (N9) to analyse qualitative textual data. The analysis assisted in identifying connections between specific themes as well as gaps and discrepancies. In addition, the information was systematically arranged and sorted by theme and concept, from which preliminary categories emerged.

Results and discussion

The results from the surveys and the interviews have shown that the design of the task-based curriculum can contribute to learners’ language study in the following perspectives.

Facilitating learners’ motivation and engagement

The results from the surveys revealed that interactions between learners and teachers have a positive influence on their language learning and enhance their motivation towards distance language learning. Students benefited most via the synchronous online tasks as they provided opportunities to practice the language and receive feedback from both language teachers and peers, which echoed previous studies such as Tavakoli et al. (2019) and Guo (2020).

“Participating in the tasks dramatically improves my understanding of Chinese. The feedback provided by my teacher and partners helps me to identify my language strengths and weaknesses and thus, enhances my knowledge. Such feedback significantly motivates me to continue studying the language” (Interviewee 1).
Moreover, watching captioned videos that incorporate native speakers’ presence and voices has become an effective resource that motivates and inspires their language and cultural study.

“The presence of native speakers is very valuable. Captioned keyword[s], subtitles and annotations, and putting [these] into the real situation by using what we have learnt in class help me better understand the context. This is quite intriguing and it is an experience I can never gain in any other way.” (Interviewee 2).

Nevertheless, the completion of the tasks gave them a sense of achievement and can encourage them to study the target language.

“It feels satisfy[ing] if you’re able to complete the tasks, like the sense of achievement.”

“The engaging tasks encourage me to contribute to the whole class.” (students’ comments in the surveys)

It inspired and motivated the students in high-level communication by implementing what they learned in class into their own daily peer interactions (González-Lloret, 2020; Ortega & González-Lloret, 2014).

**Enhancing language proficiency**

As an innovative learning and teaching approach, applying audio-visual resources can enhance and foster students’ communicative skills through designing and implementing model situational conversation videos. According to the survey result, six out of eight students believed that their speaking, listening, fluency, and interactive competence have been improved. four students mentioned that their reading and writing skills were not fully developed. As advocated by previous studies (Salwa, 2016; Tomlinson, 2011), teaching materials used in language teaching should provide students with opportunities to experience the “input to output” process. The captioned videos in this study focused on strengthening the students’ general language skills (listening, speaking, reading, and writing). By listening to the content, imitating the designed dialogue, and learning to read can finally enhance their language output.

However, some students mentioned that the natural speed videos were a bit fast for them to understand.
“The videos are good because it’s more like a real-life situation. Whereas, when we're in class, we just go at this very slow pace. Readings and things, you don't get used to.” (student’s comment in the surveys).

For the effects of the captioned videos on learners’ comprehension, please see Guo et al., (2020).

**Engaging with Chinese language and culture**

Language and culture are independent of each other. The students agreed that the videos helped incorporate more knowledge of Chinese culture into class or the group tasks to enrich learners’ understanding of the history, culture and society of China. Seven out of eight participants confirmed that the videos assisted them to better understand the situation or context in which the language is being used when they are preparing for the class. The audio-visual materials stimulate learners’ curiosity and encourage their involvement in class.

“A lot of the content [is] relevant to Chinese culture and helped to make sense of it and helped to make it interesting.” (Interviewee 1)

“The videos helped me to understand the context of the dialogue and better understand the culture behind the language. They are very useful when I prepare for my Chinese class.” (Interviewee 2)

As noted by Pritchard (2015), authentic output and meaningful social communications are emphasised in language acquisition theories and, as such, an essential goal of language learning should be to “…promote understanding across cultural and linguistic groupings and enhance international-mindedness.” (Pritchard, 2015, p. 62).

**Conclusion and Implications**

This study was limited to the perspectives of a relatively small sample. More significant results could be achieved by conducting the study on a larger scale. Due to the limited cohort, this study only focused on the Chinese beginners' perspectives and did not include higher levels of Chinese language learners. Further research with a greater number of students and institutions would provide more comprehensive data of students’
flipped classroom learning experiences.

Despite these limitations, in this award-winning project, innovative pedagogical design has been successfully implemented into the online teaching practice by applying a task-based language teaching method combined with a number of captioned videos in the first-year Chinese language units during and post-pandemic. It had a positive impact on the learners’ second language acquisition and contributed to their collaborative learning during the pandemic, including facilitating learners’ motivation and engagement, enhancing their language proficiency and engaging with Chinese language and culture. Students benefit from learning language through fresh situational dialogues. The audio-visual products enhanced learners’ flipped learning experience. The technology-mediated tasks are helpful learning and teaching activities to guide students in their learning and to facilitate their knowledge and understanding through engagement with a spectrum of authentic language materials.

It is aligned with the principle of transformative enquiry-based learning and supports the strategic goal to enhance academic quality, the student learning experience, and student-focused teaching delivery. As a result, students’ learning will be fostered in an encouraging and engaging way.

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Appendix

Example of video and a jigsaw task

Video link: https://www.youtube.com/watch?v=wK0_sKLUK5s