Optimizing Remote Synchronous Learning in A Chinese Language Class: Theory and Practice
(优化中文语言课堂的远程同步学习：理论及实践)

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Abstract: During the COVID-19 pandemic, remote synchronous teaching became the mainstream form of online instruction. However, reducing transactional distance – the psychological and communicational distance between instructors and students is one of the main challenges. Drawing from the Theory of Transactional Distance (TTD), this study describes the design and implementation of a remote synchronous class with high structure, high dialogue, and high autonomy for a second-year Chinese course at the post-secondary level. High structure is reflected in the organization of teaching content as well as the content delivery methods. High dialogue denotes a high degree of learner-content, learner-instructor, and learner-learner interaction within the course. Additionally, learner autonomy is increased through the presence of reflection tasks. Findings from surveys show students' high level of satisfaction with this design. However, due to the nature of language courses and the alienation caused by distance learning, most students still prefer face-to-face or hybrid courses. We hope this case study can shed light on how to integrate the strengths of synchronous and asynchronous teaching in future course design.

摘要：疫情期间，远程同步教学成为了网上教学的主流形式。网上教学的一大难题就是如何减少交互距离，即师生交流时在心理及沟通上的距离。本文借鉴交互影响距离理论，以大学中文二年级课程为对象，设计了一门高结构性、互动性及自主性的远程同步课。具体来说，高结构性主要表现在教学内容组织、内容传递方式等方面。高互动性则包括学生与内容的互动、学生与老师的互动、以及学生与学生的互动。同时通过反思任务加强学习自主性。从学生的问卷调查及反馈来看，学生对于课程的设置高度满意。尽管如此，由于语言课程的性质、网课对学生自主性的要求、加上疏离感等原因，多数学生也表示更倾向于面对面授课或者混合授课方式。本文希望通过对交互影响距离理论的实践，可以启发老师设计出融合同步与异步教学优势的课程。

Keywords: Transactional distance, structure; dialogue, learner autonomy, synchronous, asynchronous

关键词: 交互距离、结构、对话、学习自主性、同步、异步

1. Introduction

As the COVID-19 pandemic spread worldwide in early 2020, many courses were forced to shift from face-to-face (FTF) instruction to online instruction. Hodges et al. (2020) referred to this type of teaching as "emergency remote teaching" (ERT). During this period, instructors had to adjust their expectations in response to challenges such as learning new technologies, accommodating accessibility requirements, and implementing measures for testing security. However, with these experiences of ERT, we have gained insights into the affordances of online teaching. As the effects of the pandemic are still ongoing, programs have started to make more conscious decisions in planning and implementing courses in online formats.

The primary modes of online teaching are synchronous, asynchronous, and hybrid. Synchronous teaching involves regularly scheduled live Zoom sessions that students are required to attend to receive instruction. In contrast, asynchronous teaching refers to an online context where all interactions take place asynchronously, whether that be through discussion forums, recorded videos, or chats. Hybrid teaching may fall anywhere between the two previously mentioned modes. For example, instructors and students may meet regularly through live Zoom sessions, with additional instruction completed asynchronously outside of class time. Though these modes of online instruction may differ significantly, in all cases, instructors and students are physically separated. Distance thus becomes a salient issue in remote online teaching. Moore's (1993) Theory of Transactional Distance (TTD) offers a useful way to conceptualize and comprehend distance education in general (Jung, 2001). In this paper, we apply this theory in evaluating an online course with low transactional distance and explore how its design affects learners' sense of autonomy and overall satisfaction with the course.

2. Theory of Transactional Distance (TTD)

Moore (1993) posits that there is a substantial physical and temporal distance between instructor and student in remote learning, which may lead to significant communication gaps. Distinct from physical and temporal distance, transactional distance (TD) refers to the psychological or communicative space that separates instructor from learner in the transactions between them. In a traditional classroom setting, the instructor typically has a high degree of control over the learning process and is able to provide immediate feedback and support to learners. In a distance learning environment, however, the instructor may not be able to provide immediate feedback or support when learners need it. This can create a sense of psychological and emotional distance between the learner and instructor, which can impact the effectiveness of the learning experience. Moore identifies three major factors that influence the extent of transactional distance: structure, dialogue, and learner autonomy.

2.1 Factors of Structure, Dialogue, and Learner Autonomy

Structure describes "the rigidity or flexibility of the course's educational objectives, teaching strategies, and evaluation methods" (Moore, 1993, p. 26). It describes the degree to which a course can adapt to accommodate each learners' distinct needs. In a more structured course, students need to follow the same sequence of activities and assessments. By comparison, in a course a with loose structure, students can follow different pathways through the content or request accommodations from instructors.

Dialogue refers to two-way communication and interaction. In Moore's original theory, dialogue is confined to the interaction between an instructor and learner. However, as this theory has developed, the definition of dialogue has expanded to include learner-instructor, learner-learner, and learner-content interactions (Haythornthwaite, 2002; Zhang, 2003). Many studies have shown that learner-instructor interaction and learner-learner interaction are the main factors contributing to perceived learning effectiveness and student satisfaction (Dennen et al., 2007; Zhang, 2003).

The third factor, learner autonomy, refers to the individual learner's self-directedness – or sense of personal responsibility – in terms of what one learns, how one learns it, and how one evaluates their learning. It is contingent on factors like structure and dialogue. Autonomous learners are comfortable with classes with greater transactional distance, that is, less dialogue and more structure. In other words, if targeted learners show characteristics of high autonomy, it is possible to design a course with high structure and minimum dialogue to best meet their needs.

2.2 Relationship among the Three Factors

Regarding the relationship between these three factors and TD, it is generally agreed upon that an inverse relationship exists between dialogue and TD (Benson & Samarawickrema, 2009; Moore, 1993). However, there is no consensus on the relationship between structure and TD. It is hypothesized that a high level of structure limits dialogue, thus increasing TD (Moore, 1993; Saba & Shearer, 1994). However, it is noteworthy that earlier work on the subject mainly involves the use of asynchronous communication systems for course delivery and communication (e.g., Moodle, Blackboard). With the development of new technologies, interactions can now be enhanced through the use of synchronous systems. Previous research has shown that synchronous communication diminishes feelings of isolation, facilitates interaction and engagement, and contributes to group identity and community formation (Chou, 2002; Collis, 1996; Falloon, 2011; Haythornthwaite & Kazmer, 2002; McBrien, Jones, & Cheng, 2009; Pan, & Sullivan, 2005; Schullo, Hilberlink, Venable, & Barron, 2007; Yang & Liu, 2007). These studies suggest that course structure may not necessarily limit dialogue. Instead, dialogue may even be enhanced through an increase in course structure when combined with well-designed learning objectives and careful planning (Kearsley & Lynch, 1996; Wikeley & Muschamp, 2004).

Depending on the presence or absence of structure (S) and dialogue (D), there exist various ways of managing transactional distance, including –S–D, –S+D, +S–D, +S+D. Learner autonomy (A) can vary widely from full autonomy to no autonomy. Several studies focusing on aspects of structure and dialogue suggest that high structure and high dialogue reduce transactional distance (Huang, et al., 2016; Stein et al., 2005; Wikeley & Muschamp, 2004). This is aligned with findings that in contexts where transactional distance is high (e.g., off-campus or transnational context), high support in both venues of structure and dialogue must be built into the e-learning design (Benson & Samarawickrema, 2009).

In the field of Chinese teaching, synchronous remote classes were widely adopted by instructors during the pandemic (Wang, 2020). While synchronous teaching is still quite common in practice, there is little discussion on how different programs implemented this and how effective their strategies were. In this paper, we address a course design that features high structure and high dialogue (+S+D) in a second-year online synchronous Chinese class at the post-secondary level. We further discuss the impact of such a course design on learner autonomy and overall satisfaction based on student surveys and open-ended questions.

We choose this case because high structure and high dialogue formats are typical of many language courses. By elaborating upon what we define as high structure and high dialogue, coupled with concrete examples from our remote teaching practices, we show how this design is effective in reducing transactional distance and achieving student satisfaction. This study is significant as research is still scant on synchronous distance education, particularly in language education. Though this study is limited in scope and empirical evidence, we hope our findings will show instructors new areas of inquiry and new possibilities for future courses.

3. Design of Remote Synchronous Instruction: A Chinese Language Class

This study is situated within a Chinese language program at Indiana University Bloomington. With federal funding, this program hosts a Chinese Flagship Program, which is a national initiative in the United States that aims to improve students' language proficiency and cultural competencies needed to succeed in a globalized world. Proficiency-oriented language instruction is thus provided across all levels. Flagship students take courses with non-Flagship students but receive additional tutoring outside of class. Following ACTFL guidelines, we aim to achieve the benchmark as shown below (Table 1).

Table 1 Benchmarks of language proficiency for each level

	Non-Flagship/Flagship
First-year	Novice High/ Intermediate Low
Second-year	Intermediate Low/ Intermediate Mid
Third-year	Intermediate Mid/ Intermediate High
Fourth-year	Intermediate High/ Advanced Low
Fifth-year	Advanced Low~ Advanced Mid

In the first- to third-year levels, we adopt the lecture-drill mode of teaching, introducing the main content of the lesson and key language usages in lecture, while providing more targeted practice and individualized feedback in drill. Throughout each week, our teaching transitions from a more controlled manner to a less controlled one, with increased interaction among students. Student-instructor ratios are roughly 25 to 1 for lectures and 15 to 1 for drills. These courses rely on team teaching, where lectures are taught by full-time faculty and drills by graduate students. In this paper, we focus on a second-year Chinese course taught by the first author in the Fall 2020 semester. The total enrollment was 58, similar to previous years. In the following sections, we will describe our course design in terms of its structure, dialogue, and learner autonomy.

3.1 High Structure

Drawing from Sandoe (2005), we analyze course structure with regards to 1) content organization (e.g., syllabus, sequence, schedule), 2) delivery organization (e.g., layout, consistency, flexibility), and 3) course interactions delivery (e.g., communication methods).

3.1.1 Content organization

In general, content organization remained similar to FTF classes after we moved online. We covered a total of nine lessons in *Integrated Chinese Textbook (vol. 3)*. In a typical week of this second-year class, a new lesson was covered in five 50-minute sessions, starting with Tuesday's lecture and ending on the following Monday's drill (Table 2). While we covered the same number of lessons (9 lessons in total), we slightly lowered the pace by incorporating additional review sessions and assessments. In terms of pedagogy, lectures provided a "bite-size" expository and practice environment, while drills had more opportunities for learner-learner interaction and collaboration.

Table 2 Weekly class routine

	Before class Asynchronous online components	**In class** Synchronous meetings on Zoom	**After class** Online assignments and assessments
Tuesday (lecture 1)	Do preview (textbook & lecture slides) Complete dictation	Go over key vocabulary and grammar and first part of text	Workbook + audio recording or video quiz (alternative) due by completion of the chapter
Wednesday (drill 1)		Further practice key vocabulary and grammar in first part of text	
Thursday (lecture 2)	Do preview (textbook & lecture slides) Complete dictation	Go over key vocabulary and grammar and the second part of text	
Friday (drill 2)		Further practice on key vocabulary and grammar in the second part of text	
Monday (drill 3)		Apply new language forms in comprehensive tasks and activities	

One major adjustment we made in this course was transitioning from synchronous to asynchronous assessments. In FTF classes, students typically took a dictation quiz at the beginning of each lecture. However, it was time-consuming to do so in an online setting due to unstable audio quality and complications with uploading handwritten files. Therefore, we decided to set up timed dictation quizzes in the learning management system (LMS) called Canvas, allowing students to take them before class in an asynchronous manner. Likewise, all the written tests were set up in a similar way, providing students with slightly more flexibility in when and where to complete them.

3.1.2 Delivery organization

In an online setting, Canvas plays a much more important role in the delivery of a course. In addition to storing course materials and recording grades, it also serves as a platform for establishing goals and expectations as well as organizing content. Taking this into account, we redesigned our course site by updating the homepage and structuring the course in modules accordingly.

The homepage is the default page for the course on Canvas and is where every student first learns about the course. Our redesigned homepage included the following components:

- Course expectations: Syllabus and modules
- Instructor information: video recording of instructors' self-introduction, contact information, office hours, and Zoom links
- Learning goals: expectations for students' performance by the end of course
- Language learning resources: useful websites, tools, or apps for language learning
- Guidelines for online coursework: rules of netiquette
- Tools: common tools used in the course (e.g., Zoom, Canvas, Kaltura, Google at IU, etc.)

The course content was divided into modules, as seen in Figure 1. In each module, an overview page described the learning objectives and to-do list in English. Students had a clear idea of what they should be able to accomplish with language after completing each chapter. The to-do section listed what students were expected to do before and after class to achieve these objectives. It showed a learning path that instructors found effective while providing students flexibility in completing tasks out of sequence and finding a learning path that worked for them. As shown here, the overview page served as a hub for students to find all the materials needed for completing that particular chapter. This structure made it easy for students to navigate through the material and provided consistency within the course.

Another benefit of using modules was the adaptive release function in Canvas (Figure 2), which allowed instructors to set requirements to be enforced by the website. Students would have to either complete some or all of the requirements before they could access content in the following modules. This helped both instructors and students track their learning progress.

L3 | Overview

Weekly Learning Objectives

1. Order food and drinks

2. Talk about what tastes you like and dislike

3. Describe your dietary restrictions and preferences

4. Name principal regional Chinese cuisines and tastes

To-Do

- PREVIEW
  - Read vocabulary and text
  - Listen to audio recordings ↗ on CELT website and repeat after it
  - Read grammar explanations
  - Watch the video titled 20FA C201 L3 在饭馆儿 - (no quiz) in Kaltura:Media Gallery.
- ASSIGNMENT
  - Review lecture slides (Tuesday 🖹, Thursday 🖹) & drill slides (Wednesday 🖹, Friday 🖹, Monday 🖹)
  - Check video recordings of class on Kaltura Media Gallery.
  - Contact Laoshi if you have questions (see homepage for Laoshi's email & office hours information or send message on Canvas)
  - Complete L3 assignment, including 1) assigned parts in workbook and 2) audio recording
  - Complete the video quiz titled 20FA C201 L3 在饭馆儿 - (quiz) by the end of last drill.

Figure 1 Lesson overview page

Week 1 Welcome

☐ Lock until

Requirements

◉ Students must complete all of these requirements

    ☐ Students must move through requirements in sequential order

○ Student must complete one of these requirements

[Cultural artifact ▾] [submit the assignment ▾] ✕

+ Add requirement

Figure 2 Module adaptive release function

3.1.3 Course interactions organization

In terms of communication, we use Zoom as the platform for holding synchronous teaching, office hours, and other extracurricular activities. Canvas was the main site for sharing course materials, setting up assignments, quizzes, and tests, providing feedback, and making announcements. Other ways of communication included email, Canvas messages, and social media apps (e.g., GroupMe, WeChat). Creating a class GroupMe was helpful for instructors to send quick reminders and clarifications. It also became a useful platform for timely communication in cases when Zoom or Canvas failed during class.

According to TTD, our course was highly structured and class-paced. In a class-paced course, the content was predetermined by the instructor and delivered in a certain sequence. Students were expected to progress through the material at a specific rate. Taking into consideration the affordances of Canvas, we provided sufficient guidance and direction to students in the learning process. The adjustments we made regarding dictations facilitated asynchronous learning, giving students more flexibility. In the following section, we will discuss how our course design helps learners to engage in dialogue with content, instructors, and peers.

3.2 High Dialogue

Communication medium has a direct bearing on the quantity and quality of dialogue. As synchronous communication technology (e.g., video conferencing and chat tools) progresses, it is easier than ever to achieve synchronous learning, greatly reducing the psychological and communicative space existing in traditional forms of online learning. In addition, as recent LMS (e.g., Canvas, Blackboard, Google classroom) can integrate various tools/APPs and provide more sophisticated functions, instructors can create and customize course design to suit their teaching needs, which contributes to effective asynchronous learning. Thus, the question is not how we can incorporate dialogue into distance learning, but rather how communication medium changes dialogue, and how we can make full use of technology to interact with one another in class. In the next section, we focus on three types of interaction in the learning process: learner-content interaction, learner-instructor interaction, and learner-learner interaction.

3.2.1 Learner-content interaction

Learner-content interaction refers to the process of accommodating new understanding into one's cognitive system and constructing knowledge. This is considered a crucial form of interaction because it is where learning takes place. Below are the practices we adopted to enhance this type of interaction.

Presenting content in multi-modalities

Previous research showed that multimodal teaching helps learners gain nuanced understanding of subject-matter content knowledge (Choi & Yi, 2016). In our context, the textbook and its accompanying audio recordings were the main sources for students to gain knowledge about language use. To help learners construct meaning in multiple modes, we also uploaded course slides and instructional videos to Canvas in advance. Besides, since Zoom can record synchronous classes, we shared the archived video recordings of each class with students afterward. As a result, students could review the content through various formats such as text, graphics, audio recordings, and videos.

Using various assessments to check students' mastery of content

In a traditional class, students usually have to wait multiple days to get instructor feedback on assignments and exams. While this type of feedback is still provided electronically in remote classes, technology can afford another source of feedback: automated feedback. This type of feedback is instant and consistent, allowing students to identify their mistakes without the presence of instructors.

For all the dictation quizzes, students were able to view the correct answers to objective questions after submitting the quiz (Figure 3). This helped students judge how well they were prepared for the class. In another example, the first author developed a series of close-to-life videos that were based on the themes in the second-year Chinese textbook. These videos were 5-7 minutes long and included narratives, conversations, and

interviews using key vocabulary and patterns from that chapter. The instructor created embedded quizzes about the videos on Kaltura, which were integrated into the Canvas site. By taking the quiz and receiving automated feedback, students could know how well they mastered the new content. The auto-generated statistics for each quiz also allowed instructors to identify areas in which students needed further practice.

In addition to the dictation quiz mentioned earlier as a form of asynchronous assessment, instructors also incorporated live activities using apps like Kahoot and Poll Everywhere in synchronous classes. Instructors created questions in advance and published them during class. Question formats were diverse, including, but not limited to, (a) word collocation, (b) filling-in-the-blank, (c) true or false, (d) matching images with descriptions. Instructors could view students' responses immediately and adjust their pace of teaching accordingly.

Figure 3 Canvas dictation quiz with auto-feedback

3.2.2 Learner-instructor interaction

Learner-instructor interaction is defined as assistance and support instructors provide to learners in helping them develop a new understanding of content. As experts in the subject matter, instructors help learners assess their understanding of new knowledge as they apply it. In language classes, instructors play a critical role in providing language input as well as giving feedback on students' language output. Below, we will discuss what we have done in these regards.

Using multi-modal input to scaffold learning

According to Krashen (1981), comprehensible input is a prerequisite to language acquisition. In an online setting, verbal input may be constrained due to unstable sound quality and audio cutoff. On the other hand, non-verbal input such as facial expression and body language is limited to a small window within Zoom. During classes, students sometimes complained that they had difficulty hearing the teacher's language modeling. Therefore, it is important to provide multi-modal input, that is, a combination of input in

text, image, audio, video, gestures, etc. (Figure 4). Drawing from Mayer's (2001) multimedia learning design principles, we presented words and images together rather than words alone to foster generative processing. We also used signaling (i.e., highlighting essential material by color-coding and annotation techniques such as underlining/drawing/circling) to help students notice, attend to, and process the input. The teacher's questions and modeling examples were also displayed on slides to maximize the total amount of input students could receive. Ultimately, the redundancy of course input in multiple formats served to enhance comprehension and learning.

Figure 4 In-class slides with multimodal input

Utilizing tools to support language output

Output plays just as much a role as input does in language learning. According to Swain's (1985) Output Hypothesis, learners need to be pushed to produce language in order to notice gaps in their output and test tacit hypotheses about language rules. However, it usually takes more time to switch between speakers in an online setting. As a result, opportunities for each student to verbally apply language were not as frequent as in FTF classes. One way to compensate for the loss of speaking opportunities was to use GroupMe as a platform for students to video record their oral output, especially after the instructor's modeling or a group discussion. Using this method, everyone had a chance to speak, and instructors could quickly check students' output and provide feedback.

Adopting interactive tools to increase engagement

Many instructors have noticed students' lack of concentration in online settings. Whether at home or in a dorm, students seem to be more easily distracted by their surroundings and other electronic devices. To counter this phenomenon, we aimed to check in with students more frequently about their learning process during class. For example, we often used the "thumbs-up/thumbs-down" function in Zoom to conduct quick polls. Virtual whiteboard annotations and in-discussion chats were also useful tools for brainstorming, sharing thoughts, and providing responses to prompts.

Offering various forms of feedback

As learners may lack the ability to judge if they are applying new language forms correctly, instructors' feedback is critical in solidifying language acquisition. Similar to FTF classes, instructors provided feedback verbally and used traditional whiteboards during a synchronous online class. Furthermore, Zoom's in-meeting chat feature allowed instructors to record students' errors, supply language forms they needed, or recycle what was previously learned. With notes in the chatbox, students could work on appropriate ways of expressing language either individually or collaboratively. Many students indicated that these notes were useful learning resources and downloaded them to their own devices for future reference.

Regarding asynchronous feedback, in addition to setting up automated feedback for objective questions, we added clear and detailed grading rubrics for larger assignments, such as the final project and essays. Rubrics helped instructors communicate with students what they regarded as quality work, which in turn allowed students to assess their own work accordingly.

3.2.3 Learner-learner interaction

Learner-learner interaction refers to the interaction between one learner and other learners. It can take place in the form of one-on-one or group interactions. In this process, peers play an important role in helping one check their understanding of new knowledge. In this case, knowledge is not transmitted from instructor to student but instead constructed by the learners themselves. Instructors do not assume an authoritative role but rather acknowledge and encourage the development of expertise among students.

Designing interactive tasks by using annotation and chat

Techniques for designing interactive tasks are diverse, including think-pair-share, hot seat, jeopardy, role-play, debate, and more. The key principle is to create "gaps" in communicative activities (e.g., information gaps, reasoning gaps, or opinion gaps) to help speakers engage in the process of meaning negotiation. For example, when learning the chapter of Choose Classes in *Integrated Chinese 3*, students worked in pairs to share information on their course schedule and progress toward their degree, thus bridging an information gap. Other activities targeting reasoning gaps asked students to propose a solution to a problem or provide advice on a complicated situation. For example, students discussed in groups whether to live in a dorm or rent an apartment when planning for accommodations during study abroad.

While it took longer to assign groups and explain task instructions online, annotation and chat functions allowed for interaction in the written modality (Figure 5 & Figure 6) in addition to oral interaction. In the lesson covering the Education chapter, for example, we discussed whether or not parents should take an active role in arranging for their children's life. At first, students immediately agreed upon a single perspective. However, the instructor then guided students in asking follow-up questions about arguments for the opposing side, which aimed to facilitate further conversation and critical thinking. After oral discussion, students built upon each other's responses to develop a

more sophisticated argument in the chat box. Finally, instructors selected some students to share what they wrote. By following these steps, students engaged in all three modes of communication, and their language output progressed from discrete sentences to extended strings of sentences.
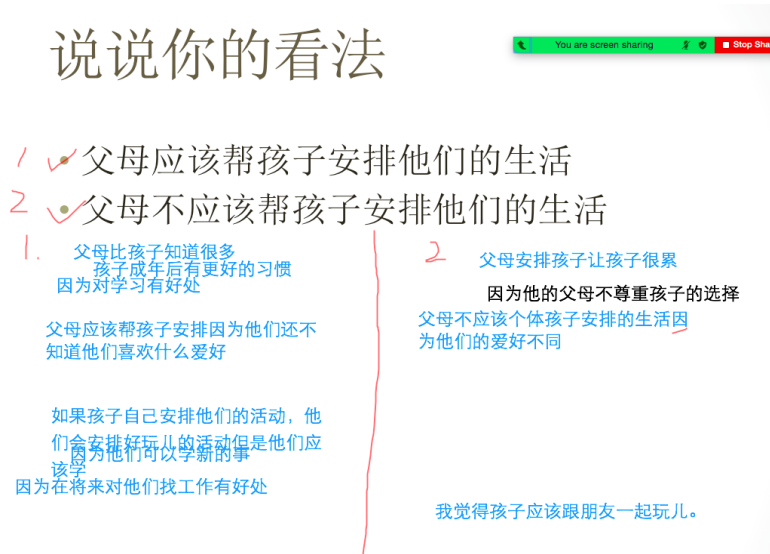
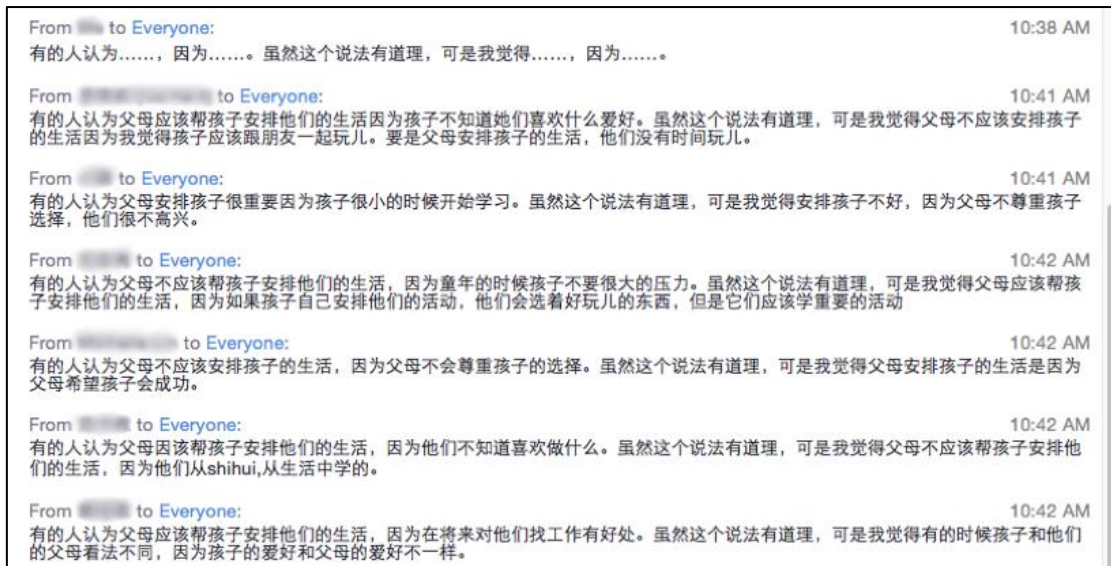

Figure 5 In-class discussion using Zoom annotation

Figure 6 In-class discussion using Zoom in-meeting chat

Using Zoom breakout rooms or discussion board for interaction

In an online setting, each breakout room can be conceptualized as an individual workstation with shared or different tasks. Students assigned in one room need to work collaboratively to complete the relevant task. However, interactions in breakout rooms may not be as effective as in an FTF class since instructors cannot simultaneously monitor all interactions. Therefore, we strived to include detailed instructions and all relevant

vocabulary/grammar on the slides or handouts. Furthermore, instructors sometimes set up Google documents for students to update during their discussions. This way, instructors could still provide timely feedback and enter rooms that seemed to be stuck.

In addition to synchronous interaction, we also used discussion boards on Padlet to facilitate asynchronous interaction (Figure 7). In the example below, students posted a picture of their living space and appended a written description. Classmates were instructed to make comments on their peers' posts.

Figure 7 Student post on Canvas discussion board

Promoting collaborative learning through student project

Previous studies have shown that learning in small groups can have significant positive effects on students' individual achievement (Lou, et al., 2001). Designing assignments or assessments that require interaction and collaboration is another useful way to increase learner-learner interaction. At the end of our semester-long course, we asked students to complete a final project in the form of a video or e-book. The project required collaboration throughout each step, including 1) writing an outline, draft, and revised script, 2) collecting images and audio/video clips or shooting video footage, 3) rehearsing and recording the script, 4) editing the e-book or video, and 5) presenting and conducting a Q&A. Since this was a significant assignment accounting for 10% of students' final grades, it was helpful to split labor and expertise among group members. To ensure student accountability, students were asked to rate their team members on their attitude, engagement, and contribution to the final product. Many students gave very positive

feedback on the final project and described it as simultaneously challenging yet creative and fun. They also enjoyed how this experience brought them closer to some of their classmates.

3.3 Learner Autonomy

As discussed in the above sections, our synchronous online Chinese classes were highly dialogic and had a high level of structure. According to the hypothesized relationship between learner autonomy and transactional distance, our course should theoretically be able to accommodate students with lower levels of learner autonomy.

Furthermore, we made efforts to cultivate learner autonomy by incorporating a series of student self-reflection assignments in our course. Throughout the semester, students wrote three reflection posts based on the detailed prompts and replied to at least two classmates' posts. In general, students reflected on their learning progress, set personal learning goals, and exchanged ideas on learning resources and learning strategies with peers. Highlights of each reflection assignment are summarized below (Table 3).

Table 3 Self-reflection post assignments

	Main tasks	**Timeline**
Reflection 1	1. Check one's current proficiency level and identify areas that need improvements in three modes of communication 2. Find out reasons for difficulties you have encountered 3. Set up three micro goals following SMART rule	beginning of semester
Reflection 2	1. Check on your progress toward goals 2. Read learning tips shared by the instructor and choose some to incorporate into your learning routine 3. Use checklist prepared by the instructor to evaluate your readiness to move on	mid-semester
Reflection 3	1. Share learning strategies/habits/resources you plan to keep in future learning 2. Comment on pros & cons of different modes of learning (online vs. in-person, synchronous vs. asynchronous) 3. Evaluate the level of learner autonomy required of this course	end of semester

Students could choose to answer in English or Chinese, and the assignments were graded on completion. In response to some heated online discussions, the instructor also summarized common problems and useful learning tips mentioned by students and provided further resources or suggestions during synchronous classes. Overall, it was a useful way to help students assess where they were, where they hoped to go, and how to get there. In the process, they gained a sense of learner responsibility and a sense of empowerment. More importantly, by exchanging ideas and providing emotional support, students developed a sense of connectedness and belonging in the classroom community.

4. Students' Feedback

4.1 Survey Results

In order to better understand students' views on the components of structure, dialogue, and learner autonomy in relation to their overall satisfaction with the course, we created a survey of student perception of synchronous online classes based on Zhang's survey (2003) (Appendix A). The questions included perceptions of the course structure, course content, instructors and students in the class, learner autonomy, and overall satisfaction. The survey was sent out to the whole class after the final grade for this course was posted. Among 58 students enrolled in the class, we received 16 responses.

Course structure. 93.75% of participants agreed on the statements that 1) the course was organized in a clear manner, 2) the course site was informative, and 3) the course site was easy to navigate. Most participants also agreed that course objectives and outcomes (87.5%), assignment requirements and schedules (81.25%), and grading policy (81.25%) were clearly stated.

Course content. All respondents agreed that the course content was of great interest to them. Most of them (93.75%) also felt that the course materials were at a level appropriate for them. 87.5% of respondents agreed that they knew the learning objectives. Likewise, 87.5% of participants responded agreed with the two statements that the coursework facilitated their learning and that the exams in this course challenged them to do their best.

Interaction. In terms of instructor-learner interaction, all participants agreed that the instructor paid attention to students. They all felt that they could turn to the instructor when they needed help in the course. 93.75% of participants agreed that the instructor answered students' questions and was helpful to them. When asked about feedback, 87.5% agreed that the instructor provided frequent feedback in class. All of them were in agreement with the statement that they received prompt feedback from the instructor on their academic performance. Overall, they felt the interaction between the instructor and the whole class was high (87.5%).

Most participants agreed that their classmates were supportive (93.75%) and that they felt respected by other class members (87.5%). However, there was a lower percentage of agreement on the effectiveness of learner-learner interaction. Half of the participants agreed that they learned a lot from interacting with other students. 43.75% of respondents agreed that their classmates challenged them to do their best work. However, only 37.5% felt a sense of kindred spirit with their fellow classmates.

Autonomy. Students indicated that the course could accommodate their learning goals (93.75%) and learning path (87.5%), as well as evaluate various types of learning (81.25%). Yet, they hoped to have more autonomy in identifying their learning goals and objectives (68.75%), determining the pace and sequence of learning (62.5%), and evaluating the usefulness and quality of learning (68.75%).

Overall satisfaction. When asked to rate their level of agreement with statements expressing overall satisfaction with the course, a high percentage of respondents indicated that they enjoyed learning in this class (93.75%) and felt they learned a great deal in this course (93.75%). Besides, 75% of respondents agreed that, overall, they were extremely satisfied with this course. Yet, there was a split on the effectiveness of online classes as opposed to face-to-face classes. 37.5% agreed that they learned as much in the online class as in face-to-face class, while over half (56.25%) showed disagreement. Overall, we believe that the high degree of student satisfaction can be attributed to our current course design. The preference for an alternative course design is further explored and discussed in the next section.

4.2 Open-Ended Questions

In addition to the survey, the first author also asked students to share their thoughts on the level of learner autonomy required during the course and their preferences for course design in the reflection post. Below we will report student opinions in these two regards.

4.2.1 Learner autonomy

Most students reported that the synchronous Chinese course required a high level of learner autonomy. They mentioned that they needed to complete previews, dictations, workbooks, reviews, and tests on their own. In fact, many of these requirements were the same as in an FTF class. As stated by one student,

> You can't really fake your way through it (i.e., learning Chinese). You have
> to come to class/the test knowing the vocab and past grammar in order to
> build on it for the class that day. Even in-person, this course would require
> a much higher level of learner autonomy than most others.

In other words, this Chinese class required more learner responsibility regardless of the medium. Students needed to undertake a more active role in preparing for the class and reviewing regularly. One student put it this way, "If you fall behind, it can be really hard to keep up with assignments or to actively participate during class. I have to frequently review content in order to make the learning more concrete."

Out of the areas of setting goals, learning experiences, and evaluation, students most strongly indicated that our course supported autonomy in learning experiences. As one student said, "I think this class has a high level of learner autonomy in terms of how to learn the material, but not in terms of what to learn." In the case of writing characters, we did not restrict students to one way of practicing. They could either write characters over and over on a piece of paper or use apps like Skritter. Similarly, when learning vocabulary, they could either make paper or electronic flashcards, use mnemonics, or practice new words in context. Thus, while learning goals and evaluations were mainly determined by instructors, students could choose learning strategies or tools that worked best for them.

When compared with other non-language online courses – particularly asynchronous ones – our synchronous Chinese courses seemed to be manageable for students. As one pointed out,

> The learner autonomy for this class isn't nearly as high as the classes I have that are mostly asynchronous. It's up to me to have the motivation to watch all the lecture videos on my own time rather than being scheduled and expected to show up to class for lectures. Chinese class still has autonomy in the fact that we have to preview, but that's still the same expectation as when we were in person.

Many students felt that daily meetings greatly helped them keep up with the class's pace and reduced excessive self-autonomy requirements. One student wrote,

> I think this class does have a higher level of learner autonomy than many other ones, but since it's every day (sic) and synchronous, it requires less than other online classes I've taken. Seeing 老师 everyday holds us as students much more accountable than a fully asynchronous course, and that helps to keep me engaged. The current mix of autonomy and support seems reasonable.

In summary, while many students felt that our course did require a high level of autonomy, they also recognized that it was necessary and beneficial for language learning. As one student said,

> At the end of the day, I think that people get out of this class what they put into it. It is pretty hard to learn nothing from this class, but people still have to put in work to really learn the material.

All the students showed great appreciation for the instructors' strong support throughout the semester. The mix of learner autonomy and teacher support seemed to be appropriate for this class.

4.2.2 Course design

Ultimately, the results showed that a majority of students preferred face-to-face classes. Many students felt that they did not learn as much online as in person. However, this seemed to be more of an issue due to the nature of language courses and the instructional modality than course design. In a language class, language is both the objective of learning and the medium through which we communicate. As stated by one student, "When it comes to learning languages, face to face is often better because you get to really interact with people. It's weirder to do it online." While synchronous communication is comparable to in-person communication in many regards, it is overall not as effective due to technical limitations such as audio quality or lagging issues. One student mentioned, "The lag is the worst part, because it often causes me to miss what Laoshi is saying or not being able to hear clearly, which are both very important for a language class." It also made chorus response after instructors' modeling undesirable.

Another major reason for students' preference for in-person teaching is related to the level of teacher support and engagement in pair and group work. While Zoom breakout rooms allowed for student interaction, it was not as easy as in an FTF class for instructors to monitor each group's progress and provide timely support when needed. Students commented that "getting assistance in the breakout rooms was much harder because the teacher could only be in one breakout room at a time, instead of overlooking the entire class like in an actual classroom". Additionally, as pointed out by another student, "I also think that the level of engagement in breakout rooms depends vastly on the mood of the day, the people you're partnered with, or other factors". While this issue also occurs in FTF classes, instructors are able to motivate students more easily or clarify any confusing points.

The third common issue with online learning was a sense of isolation. In FTF class, both frequency and quality of interaction were higher because learners were more likely to interact with each other outside the classroom. However, in online classes, most interactions were constrained to Zoom meetings. As one student mentioned, "There is no talking with classmates before/after class." In general, the liveliness and feeling of community were weaker in online classes. As another student said, "I miss laughing together during class." As a result, many students felt that they could not have the same bond with classmates as they could have in person.

Nonetheless, hybrid classes (i.e., combination of face-to-face and online class) seemed to be a possible option for many students. A course design option supported by students was differentiating teaching modality for lecture and drill. As explained by one student,

> I would prefer hybrid classes where lecture classes are online and drill is in person. Since lectures are more focused around sentence structures, it would be nice to go back to the recording and watch them again in case I forget how to use them.

The student did not specify whether they preferred the online lecture to be synchronous or asynchronous, but several students echoed their stance on the usefulness of video lecture recordings. In another post, one student stated,

> I believe that there could be a good balance of both types in order to experience the two different learnings. Watching videos and instructional materials such as videos and audio recordings can be done best for asynchronous learning. The synchronous learning could be best used for presentations, teacher interaction and more lecture time for any material not fully understood online.

This is in line with the rationale for a flipped classroom model, in which students watch the prerecorded lecture on factual knowledge outside of class and engage in applying knowledge and discussions during class time.

5. Discussion

When reflecting on Moore's theory in relation to our practices, we found that our synchronous course design allowed for quality dialogue. Along with practices to provide structure, we managed transactional distance to an extent that was appropriate for students with the current level of learner autonomy. As stated by Yang & Liu (2007), a synchronous online learning environment "not only delivers course materials, but also provides a live, contextual, and interactive environment for learners" (p. 171).

More specifically, as many learners had no or little prior experience with language courses at the college level, they were satisfied with our highly structured course because it helped them gain a better understanding of course goals and organization, as well as keep up with the pace of our class. As suggested by Moore (2004), instructors should err on the side of providing too much structure than too little because it is easier to take away structure than to add structure. Besides, creating channels for dialogue allowed for the negotiation of structure, which was also important for any kind of teaching, particularly online teaching. Even for highly structured courses like ours, instructors were still open to receiving feedback from students and making adjustments to accommodate students' needs.

It is also noteworthy that the LMS utilized in our course made it easy to structure and deliver course content in an organized way. In the past, our FTF class was enhanced by Canvas. After moving online, Canvas has become the home base for our course. Thus, in the future, even when we return to in-person instruction, it is still worth making an upfront investment in setting up the LMS as a central place where students access course materials, receive information and general help with the class format and technology, and complete various forms of assessments.

In terms of dialogue, our study confirmed the important role of interaction in successful distance learning (Bernard et al., 2009; Haythornthwaite, 2002). Learner-content and learner-instructor dialogue were high, contributing to overall satisfaction with the course. In the current context where teaching occurred 100% online, maintaining high dialogue was crucial to bridging the transactional distance. As shown in the students' opinions above, what they found most helpful for their learning was instructor-learner interaction in the process of using language. Similar to FTF teaching, synchronous online class time allowed instructors to monitor students' performance and provide just-in-time clarification and feedback (Pan & Sullivan, 2005), greatly reducing transactional distance.

In comparison, learner-learner interaction was not perceived as effective as the other two types of interaction, which may be attributed to a lower level of teacher support during group work, as well as a weaker sense of connection among students. However, it did not mean that students did not like student interaction. In contrast, as commented by one student,

> One thing that has helped me learn in class is doing the breakout rooms. I feel like if I am confused about something, it is a good time to ask my classmates what they think and it also gives me a chance to test what I know

and make sure I am understanding everything. It also gave me a chance to
connect with my classmates when I otherwise would not be able to.

As pointed out by Moore (1993), it was the quality, rather than frequency of learner-learner interaction, that was critical to diminishing learner perception of transactional distance. Therefore, in future synchronous online courses, instructors will need to prioritize the establishment and promotion of quality interaction among students.

According to students' feedback about learner autonomy, language courses generally require a higher sense of independence than other subjects, and even more so in an online setting. Given the gap between the autonomy required by the course and students' actual personal autonomy, it is necessary to provide a high level of structure, as mentioned earlier. Since learner autonomy is not predetermined by the instructor, it is recommended that instructors design a questionnaire to learn about students' learning habits and level of self-directedness before the course starts.

As students gain more experience in language learning, they should be expected to have more ownership in their learning path. In other words, as students advance in their language learning, the course design may transit from +S, –A to –S, +A. As pointed out by Falloon (2011), instructors need to strike a balance between learner autonomy and course structure so that learners can "maintain a sense of empowerment and ownership of their learning" while "working within a structure that provides adequate direction and communicates clear standards and expectations of performance" (p. 206). Overall, promoting a sense of learner autonomy can contribute to learner-learner interaction in the long run. When students become more accountable for their learning, they tend to be more motivated to participate and more engaged in completing tasks and finding resolutions to learning problems.

6. Conclusion

Overall, TTD is a useful pedagogical framework for instructors to design and evaluate remote education practices. In fact, the three elements of structure (course design), dialogue (course implementation), and learner autonomy are crucial to any form of teaching. Our study suggested that our synchronous online learning environment had a relatively low transactional distance, which contributed to students' overall satisfaction with the course. Many of the teaching practices discussed above may have been or can be applied to an FTF class.

Moving forward, we need to take into consideration synchronous and asynchronous learning as a whole and consider what optimal course design might mean for different programs. Blended learning approaches that involve various combinations of online and face-to-face instruction have become a major trend in online learning (Means, Bakia, & Murphy, 2014). With flexibility through asynchronous learning and quality interaction through synchronous learning, blended learning might become the preferred mode even after the pandemic ends. As shown in our survey results, students recognize the value of asynchronous learning, and some also support replacing synchronous lectures with

asynchronous learning, especially during the initial stage of acquiring factual knowledge about language forms. In other words, learners can use the materials (e.g., textbook, slides, handouts, videos, etc.) prepared by the instructors to engage in the learner-content dialogue at their own pace in any place while engaging in additional interactions with instructors and peers in a face-to-face environment.

Furthermore, the technology used in online teaching seems to have a profound impact on students' learning experience. When Moore first proposed his theory, physical and temporal distance was rather prominent in correspondence education (teaching through audio/video recording and broadcast), contributing to a substantial psychological or communicative gap. However, as technology has advanced, it has become easier to achieve both synchronous and asynchronous learning. What instructors need to consider is the effectiveness and efficiency of technology. More specifically, effectiveness refers to whether a specific technological tool can help students to reach their learning goals. Efficiency refers to the time and energy needed in using the tool to achieve such goals. Our experiences have shown that tools as simple as annotation or in-discussion chat can enhance the quality of interaction during class. In essence, what matters most is not how many or how frequently we adopt new tools but rather how effectively and efficiently these tools can help us achieve better learning outcomes.

There is no doubt that the COVID-19 pandemic has majorly disrupted teaching across the world. Nonetheless, it has also provided an opportunity to explore other possibilities in course design. Equipped with online teaching experience, we now have a better understanding of factors that may affect teaching and learning not just in remote classes but also in brick-and-mortar classes. Many of the practices mentioned above can also be applied in FTF classes when the pandemic is over. There is no set formula for these elements in providing effective learning. As stated by Moore (1993), the extent of dialogue and the degree of structure varies from course to course. Technology itself is not the answer; a successful course design also depends on the teaching philosophy of the instructor, the capacity of the learners, and the nature of the subject. Future researchers, instructors, learners, and designers must have an open mind to new approaches and practices in order to optimize course designs for language learning.

References

Benson, R., & Samarawickrema, G. (2009). Addressing the context of e-learning: using transactional distance theory to inform design. *Distance Education, 30*(1), 5-21.

Bernard, R. M., Abrami, P. C., Borokhovski, E., Wade, A., Tamim, R., Surkes, M. A., & Bethal, E. C. (2009). A meta-analysis of three interaction treatments in distance education. *Review of Educational Research*, *79*(3), 1243–1289.

Choi, J., & Yi, Y. (2016). Teachers' integration of multimodality into classroom practices for English language learners. *TESOL Journal, 7*(2), 304-327.

Chou, C. C. (2002). A comparative content analysis of student interaction in synchronous and asynchronous learning networks. In *Proceedings of the 35th annual Hawaii international conference on system sciences* (pp. 1795-1803). IEEE.

Collis, B. (1996). *Tele-learning in a digital world: The future of distance learning.* Thompson Computer Press.

Dennen, V. P., Aubteen Darabi, A., & Smith, L. J. (2007). Instructor–learner interaction in online courses: The relative perceived importance of particular instructor actions on performance and satisfaction. *Distance education, 28*(1), 65-79.

Falloon, G. (2011). Making the connection: Moore's theory of transactional distance and its relevance to the use of a virtual classroom in postgraduate online teacher education. *Journal of Research on Technology in Education, 43*(3), 187-209.

Haythornthwaite, C. (2002). Building social networks via computer networks: Creating and sustaining distributed learning communities. In K. A. Renninger & W. Schumar (Eds.), *Building virtual communities: Learning and change in cyberspace* (pp. 159-190). Cambridge University Press.

Haythornthwaite, C., & Kazmer, M. M. (2002). Bringing the Internet home. *The Internet in everyday life*, 431.

Hodges, C., Moore, S., Lockee, B., Trust, T., & Bond, A. (2020). The difference between emergency remote teaching and online learning. *Educause Review, 27*, 1-12.

Huang, X., Chandra, A., DePaolo, C. A., & Simmons, L. L. (2016). Understanding transactional distance in web-based learning environments: An empirical study. *British Journal of Educational Technology, 47*(4), 734-747.

Jung, I. (2001). Building a theoretical framework of Web-based instruction in the context of distance education. *British Journal of Educational Technology, 32*(5), 525-534.

Kearsley, G. & Lynch, W. (1996). Structural issues in distance education. *Journal of Education for Business*, *71*(4), 191–195.

Krashen, S. D. (1981). *Second language acquisition and second language learning*. University of Southern California.

Lou, Y., Abrami, P. C., & d'Apollonia, S. (2001). Small group and individual learning with technology: A meta-analysis. *Review of Educational Research, 71*(3), 449-521.

Mayer, R. E. (2001). *Multimedia learning*. Cambridge University Press.

McBrien, J. L., Cheng, R., & Jones, P. (2009). Virtual spaces: Employing a synchronous online classroom to facilitate student engagement in online learning. *International Review of Research in Open and Distributed Learning, 10*(3). https://doi.org/10.19173/irrodl.v10i3.605

Means, B., Bakia, M., & Murphy, R. (2014). *Learning online: What research tells us about whether, when and how*. Routledge.

Moore, M.G. (1993). Theory of transactional distance. In D. Keegan (Ed.), *Theoretical principles of distance education* (pp. 22-38). Routledge

Moore, M. G. (2004). Editorial, Constructivists: Don't Blame the Tools!. *The American Journal of Distance Education, 18*(2), 67-72.

Pan, C. C., & Sullivan, M. (2005). Promoting synchronous interaction in an eLearning environment. *T.H.E. Journal*, *33*(2), 27-30.

Sandoe, C. (2005). *Measuring transactional distance of online courses: The structure component.* Unpublished doctoral dissertation. University of South Florida.

Saba, F. & Shearer, R. L. (1994). Verifying key theoretical concepts in a dynamic model of distance education. *The American Journal of Distance Education, 8*(1), 36–59.

Schullo, S., Hilbelink, A., Venable, M., & Barron, A. E. (2007). Selecting a virtual classroom system: Elluminate live vs. Macromedia breeze (adobe acrobat connect professional). *MERLOT Journal of Online Learning and Teaching, 3*(4), 331-345.

Stein, D. S., Wanstreet, C. E., Calvin, J., Overtoom, C., & Wheaton, J. E. (2005). Bridging the transactional distance gap in online learning environments. *The American Journal of Distance Education, 19*(2), 105-118.

Swain, M. (1985). Communicative competence: Some roles of comprehensible input and comprehensible output in its development. In S. M. Gass, & C. G. Madden (Eds.), *Input in second language acquisition* (pp. 235- 253). Newbury House

Wang, R. (2020). An analysis of online teaching models for Chinese language skill courses during a period of epidemic prevention and control. *Chinese Teaching in the World, 34*(3), 300-310. [王瑞烽 (2020). 疫情防控期间汉语技能课线上教学模式分析. *世界汉语教学, 34*(3), 300-310.]

Wikeley, F., & Muschamp, Y. (2004). Pedagogical implications of working with doctoral students at a distance. *Distance Education, 25*(1), 125-142.

Yang, Z., & Liu, Q. (2007). Research and development of web-based virtual online classroom. *Computers & education, 48*(2), 171-184.

Zhang, A. (2003). *Transactional distance in web-based college learning environments: Towards measurement and theory construction* [Unpublished doctoral dissertation]. Virginia Commonwealth University.

Appendix A

A Survey of student perception in synchronous online class

The purpose of the survey is to learn about your perceptions and experiences studying in a synchronous online class. Your responses will be anonymous and will not affect any grades in this course. Because no identifying data is requested, your answers cannot be traced back to you. This survey is conducted on a voluntary basis. If you agree to participate in this study, the only thing you need to do is to complete the survey and you can choose to quit anytime. Therefore, there is a minimal or no risk to you. If you have any questions or comments, please email the two researchers: Yingling Bao (yingbao@iu.edu) or Yea-Fen Chen (yeafen@indiana.edu).

Please read the following statements and rate your responses on a scale of 1-5.
1 means Strongly disagree; 2 Disagree; 3 Neutral; 4. Agree; 5. Strongly agree

Is this your first semester studying in an online course at college level?

Perceptions of the environment
It is difficult to pay attention to the instructor in an online class.
I have adequate access to the resources I need.
The fact that I am online does not inhibit my class participation.
An efficient system is provided for students and instructors to exchange materials.
I am comfortable using the computer.
It is easy for me to use the technology involved in this course.
The environment outside of class (e.g., home/dorm environment, health, finances, etc.) has been helpful with my learning.

Perceptions of the course structure
The course is organized in a clear manner.

The online course site is informative.
The online course site is easy to navigate.
Course objectives and outcomes are clearly stated.
Assignment requirements and schedules are clearly stated.
Grading policies are present.
The course contains flexible or adaptable learning pathways.

Perceptions of the course content
The content of the course is of great interest to me.
I know our learning objectives.
The course materials are at a level appropriate for me.
My coursework provides various types of language input to help us learn new language forms.
My coursework provides many opportunities for us to apply new language forms in various contexts.
My coursework emphasizes communicating in the target language instead of rote memorization.
The exams in this course have challenged me to do my best.

Perceptions of the instructors in this course
The instructor general answers the students' questions.
The instructor pays attention to students.
I receive prompt feedback from the instructor on my academic performance.
The instructor provides frequent feedback (formal and informal).
The instructor is helpful to me.
The instructor is available to answer my questions.
I can turn to the instructor when I need help in the course.
I pay attention to the interactions between instructor and other students.

Perceptions of other students in this course
I learned a lot from interacting with other students.
The students in this class challenge me to do my best work.
I get along very well with my classmates.
I feel respected by my classmates in this class.
I am good at working with other students in this class.
I feel a sense of kindred spirit with my fellow classmates.
I can turn to my classmates when I need help.
My classmates are supportive.

Learner autonomy
I am self-motivated to learn.
I am a self-disciplined person.
The course can accommodate my learning style.
The course can accommodate my learning goals.
The course can accommodate my learning path.
The course can evaluate various types of learning.
I hope to have more autonomy in identify my learning goals and objectives.
I hope to have more autonomy in determining the pace and sequence of learning.
I hope to have more autonomy in evaluating the usefulness and quality of learning.

Perceptions of the whole course
I am thoroughly engaged in learning in this class.
I enjoy learning in this class.
I often express myself in this class.
I am encouraged to express my opinions.
I feel part of a learning community in this class.
Overall interaction between the instructor and the whole class is high.
In general, students are motivated to interact in class.

I have learned a great deal in this course.
I have learned as much in the online class as in face-to-face class.
I have made great progress towards my goal in this course.
Overall, I am extremely satisfied with this course.

Suggestions and comments
Any thoughts and feedback are welcome and greatly appreciated!