EXPLORING ENGAGEMENT IN FOREIGN LANGUAGE

INSTRUCTIONAL DESIGN AND PRACTICE

By

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To my parents, for their unconditional love always and the encouragement that supports me all the way through this journey. To my dearest beloved, Bo, for his sincere love, care and interesting ideas which make me be proud of what I am doing and really enjoy the life we have. At last, to my son Nicolas Liu, he is the best present I have had ever, his birth brings me hope and joy, and lights the direction of my life, thank him for his sweet company in this process!
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Abstract

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August 2014

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This dissertation includes two studies to explore the application of task engagement principles in foreign language instructional design and practice. The first study explores how task engagement principles can be integrated into online foreign language instructional design. It employs a design-based research (DBR) approach to combining research and design in the development of Chinese as a foreign language (CFL) online learning tasks for American teacher education students. With the intent of solving practical problems in a real teaching context, five designers worked as a design team in this study to refine an online learning module. Through the design process, the team explored how task engagement principles could be integrated into an online CFL learning module and how collaboration and interaction among researchers and designers could support the implementation of the design. Finally, five engagement principles were identified as essential elements in designing engaging tasks and an onsite learning segment was suggested by students to offer more opportunities for instant feedback and practice.
The second study is designed as a follow-up study to examine whether the refined Chinese learning module is effective in engaging students in practice. This study employs the five engagement principles identified by the first study as the theoretical framework to explore whether and why students perceive engagement in a flipped learning environment in which they learned language content online and practiced onsite. In this flipped learning environment, the online learning segment consisted of the refined learning tasks reported in the first study, and the onsite segment was created according to students’ suggestions and feedback. Participants were 50 American undergraduate pre-service teachers who were enrolled in a flipped Chinese for Teachers module in Fall 2013. Surveys, follow-up interviews, focus groups and student documents explored how students perceive their engagement in the Chinese learning tasks and the reasons for their perceptions. Participants’ perceptions of five engagement principles are presented and the reasons for their perceptions are discussed under each engagement element. Finally, implications are generated for future instructional design and practice.
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Dedication

This dissertation is dedicated to my son Nicolas Liu
who was born with luck and love and has lighted the hope of my life
A DESIGN-BASED STUDY OF ENGAGEMENT IN AN ONLINE CHINESE AS FOREIGN LANGUAGE COURSE

Abstract
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This study explores how task engagement principles can be integrated into online foreign language instructional design. It employs a design-based research (DBR) approach to combining research and design in the development of Chinese as a foreign language (CFL) online learning tasks for American teacher education students. With the intent of solving practical problems in a real teaching context, five designers worked as a design team in this study to refine an online learning module. Through the design process, the team explored how task engagement principles could be integrated into an online CFL learning module and how collaboration and interaction among researchers and designers could support the implementation of the design. Finally, five engagement principles were identified as essential elements in designing engaging tasks and an onsite learning segment was suggested by students to offer more opportunities for instant feedback and practice.
Introduction

Many U.S. pre-service teachers have little knowledge concerning languages and cultures other than their own. Exposing teacher education students to other languages and cultures is necessary, because it can increase student achievement, and make connections between their teaching and ESL students’ lives etc. (Angelova, 2005; Fink, 2003). Especially languages and cultures that differ widely from English and US culture as Chinese does (DeFrancis, 1984).

Therefore, in order to help them attain a better understanding of their future ESL students, including those from China, teacher educators created and implemented a seven-week online Chinese as a foreign language (CFL) module for pre-service teachers. This course was reported by users to be interesting in concept but less than engaging in use. To address this problem, researchers and instructor created a design team to refine this online course, guided by task engagement principles from the literature. The study reported in this paper employs design based research (DBR) as an approach to combining research and design in the development of engaging CFL learning tasks. This paper first reviews the relevant literature, and then it outlines the methodology. Next it describes the refining and implementing process. Finally, design principles are generated at the end to offer reference for future CFL course design.

Literature Review

This literature review contains three parts: a brief introduction to challenges in CFL learning, task engagement, and studies in CFL task engagement. These three parts offer an
overall view of the challenges in creating CFL learning environments and the principles of task engagement. At last, it presents researches of applying task engagement principles in CFL teaching.

**Challenges in teaching and learning Chinese language and culture**

Mandarin Chinese is perceived by English Speaker as one of the most challenging languages to learn. In fact, data reported by the Defense Language Institute (DLI) and the Foreign Service Institute (FSI) show that the time L1 English speakers spend on Chinese learning is at least three times more than the time they spend on learning other languages like French and Spanish (Ye, 2011). This extra time requirement appears to be due to the nature of Chinese, which arises in general from its written orthography, pronunciation system, and grammar system.

Edverson (1988) commented that for American Chinese learners, the dissimilarities of Chinese and English suggest potential problems in both CFL teaching and learning. DeFrancis (1984) agreed that Chinese learners usually have great difficulties in remembering Chinese characters and in matching the pronunciations with the written forms of the Chinese words. In addition, Cai and Liu’s (2011) research found that the negative transfer caused by the sharp differences between the Chinese language and students’ native languages usually made Chinese learning confusing when students are at their beginning level of learning.

Because of these traits, it might be difficult to engage US pre-service teachers in the
experience of learning Chinese.

Wen (1997) agreed, claiming that American students’ motivation in Chinese learning may be decreased by the high difficulty level of learning tasks at the beginning level. Further, Tian’s (2009) finding supported Wen’s (1997) claim by noting that 45% of CFL learners gave up their Chinese learning due to difficulties in Chinese learning tasks. Ye (2011) also claimed that it is usually hard for English-speaking learners to engage in the Chinese learning process if they are not given appropriate learning materials and instruction.

Chen et al. (2013) believes that the major reason for less engaging Chinese teaching is that the instructors neither address learners’ characteristics in their teaching nor give effective guidance and assistance when students are facing challenges; Chinese teaching is often mechanical and disregards students’ learning needs and their leaning difficulties. According to Egbert (2010), without the understanding of students’ needs, interests, and backgrounds, teachers will not be able to develop appropriate teaching materials for students; in other words, they will have no basis upon which to engage students.

To sum up, Chinese is often perceived as hard to learn by L1 English speakers, and the dissimilarities between Chinese and English may require teachers to spend more effort on understanding the characteristics of Chinese and on understanding CFL learners’ learning process with the purpose of offering appropriate and effective instruction. Therefore, it is necessary to find out how to make Chinese learning interesting and how to offer students an
enjoyable CFL learning environment. There is no systematic CFL research addressing the issues mentioned above; to address these problems, the concept of task engagement can be explored in CFL teaching and learning.

Task Engagement

Task engagement is an educational concept that works to explain how and why students learn. A growing body of research shows that task engagement is one component that can positively influence an individual’s learning; this is because highly engaged learners show higher achievement than less engaged learners (Guthrie & Wigfield, 2000; Lin, 2011; Newmann, 1992; Shernoff et al., 2003). According to researchers, task engagement is primarily defined as “involvement” during learners’ learning process (Csikszentmihalyi, 1990; Dörnyei & Ushida, 2011; Meltzer & Hamann, 2004). Involvement has many elements. For example, Csikszentmihalyi’s (1990) studies of Flow Theory show that when students are in “flow” (deeply engaged) during learning, they will: concentrate on what they are doing; not worry about failures; have self-consciousness evaporate; and experience a distorted sense of time. Dörnyei (2003) offered a socio-dynamic approach to investigate task engagement, by which the complex interaction among cognition, affect and motivation in students’ learning process was explored. His research shows that to understand students’ complex language learning process, researchers should consider a variety of components and factors (e.g., emotion, motivation etc.) Lutz et al. (2006) defined task engagement as a construct having multiple dimensions that includes four
levels (affective, behavioral, cognitive, and social). When students are involved in a learning task at the affective level, they feel happy and joyful to learn; at the behavioral level, students show active participation in the learning task; at the cognitive level, students use more learning strategies in their learning; at the social level, students can share their learning outcomes through social interaction. In addition, Lin (2012) offered a model of a dynamic engagement system showing three dimensions of task engagement, which she termed behavioral, cognitive and emotional. According to Lin (2012), these three dimensions are related to each other; the cognitive dimension refers to an individual’s psychological construction of emotional and behavioral involvement in a learning task to different degrees; the behavioral dimension is students' performance when they are involved in a learning task; the emotional dimension refers to students’ attitudes and values toward the task.

Based on this research, important elements of the conditions and criteria for engaging tasks include: immediate feedback in students’ learning process (Csikszentmihalyi, 1999); interest, challenge and skills balance, undivided attention, choice, and control (Csikszentmihalyi, 1999; Egbert, 2003; Shernoff et al., 2003); collaborative work (Shernoff et al., 2003); and opportunities to set clear goals and connections to students' prior knowledge and life experiences (Lee, 2007). Besides the aforementioned studies, other researchers have emphasized developing students’ depth of cognitive processing; they claim that when students participate in higher order thinking (e.g., critical thinking, evaluating, and problem solving) they will be involved in tasks to a deeper
The research on task engagement has implications for instructional design in creating an engaging learning environment. Therefore, instructors and instructional designers should pay attention to how tasks, for example, offer students stimuli authentic and multidisciplinary tasks, connections to their lives, opportunities to collaborate and interact with peers, and so on (Dörnyei, 2003; Dörnyei & Ushida, 2011; Meltzer & Hamman, 2004). By designing and using pedagogy built on engagement principles, educators can build effective learning tasks to foster learners’ active participation, which in turn can lead to higher achievement.

**Studies in CFL Task Engagement**

Overall there is very little research that specifically addresses CFL task engagement; however, parts of many studies explore how CFL teachers/researchers engage CFL learners. For example, Tsung and Shum (2008) conducted research on how to engage South Asian (SA) students in learning Chinese. Their research comprised a questionnaire for 387 SA students in a Hong Kong secondary school and some in-depth interviews with two principals, eight teachers and a few students. They found the main reasons for SA students’ low achievement in learning Chinese are: lack of motivation for learning Chinese; absence of achievement targets (goals) such as public examinations; lack of appropriate teaching resources and well-trained CSL teachers; lack of effective support from the government. To solve these problems they created a framework of study in which a systematic series of theme-based learning units were offered. In
keeping with the literature, they explained that the learning materials for students should aim to
develop their Chinese language proficiency according to their actual needs and hence be able to
engage learners in an active role in using and learning the language. Even though the participants
in this study were SA students who may have different characteristics from American
students—which may limit its generalizability in the American context--this study figured out
some problems in Chinese teaching and suggested promoting students’ active role as a solution.
The suggestion to relate language teaching to students’ daily lives and their actual learning needs,
well-supported in the engagement literature, could offer guidance for CFL course design.

In addition, the study by Cai and Liu (2011) worked out a prototype for designing
engaging CFL teaching materials. They edited *The Textbook for Interesting Chinese Pinyin* based
on the idea that Chinese teaching should take into account foreign students’ characteristics,
identities, needs and native language features. They recommend that in order to make Chinese
learning interesting for foreign students, the teachers should make the instruction simple and
clear and make the teaching content concrete and vivid. Corresponding to Tsung and Shum’s
(2008) research described above, this study also emphasized the importance of paying attention
to students’ learning needs and their characteristics. Besides, the designers offered some
examples for how to make the teaching content concrete and interesting (e.g., using vivid
pictures, giving simple and clear instructions), and ideas how to help students make connections
between their prior knowledge to the knowledge they are going to learn (e.g., teaching some
common words from daily life).

Additional studies use real world communication situations to design CFL learning contexts. For example, Ren and Wainwright (2007) created a life-like setting for Chinese learners by using a teaching technique involving a special classroom drama competition which is taught by teachers and played by students. This classroom drama helped their students become involved in Chinese learning by offering them life-related scenarios and real world communicative situations in which students could learn practical language and culture that they can use in communicating with Chinese natives. This teaching technique was reported to be welcomed by students and proved to be very successful in offering students an interesting learning environment. Further, Zhang et al. (2011) in their study, first introduced the Environment, Motivation and Flow (EMF) model, a user-centered game design model, and then they designed an educational game for teaching CFL. They claimed that in order to create an effective Chinese learning environment, the learning tasks should start from concrete experience then move to abstract experience; they included vivid scenes to help players construct knowledge. In this study, the authors did not report any results concerning the effectiveness of their designs. However, their study reflected the idea that language teaching should be integrated with real word communication and offer opportunities for students to practice what they have learned.

**Research Questions**

The studies reviewed in this section offer examples of the application of task engagement
principles that emphasize meeting students’ learning needs, matching the challenges with students’ abilities and skills, setting up clear learning goals and offering clear instructions and directions in developing engaging CFL learning tasks. These examples contribute to our growing understanding of CFL task engagement. However, these studies did not generate theoretical guidance to solve problems in CFL teaching or show systematic application of task engagement principles. To address these gaps in the literature, an instructional design team introduced task engagement principles to CFL teaching. The team designed a CFL course based on task engagement principles to generate theoretical guidance for future Chinese teaching. The design process aimed at answering the following questions:

(a) How can task engagement principles be integrated into an online CFL course for American students?

(b) How can collaboration and interaction with researchers and practitioners support the implementation of the design?

Methodology

Research Method

This study employed design based research (DBR) as an approach to combining research and design in the creation of an engaging CFL learning environment for American teacher education students. Different from conventional predictive research methods which arise from hypotheses based upon observations and/or existing theories, design-based research is more
narrative-based, focusing on the analysis of practical problems by researchers and practitioners in collaboration (Herrington, Mckenny, Oliver, & Reeves, 2007). As Barab and Squire (2004) claimed, design based research moves beyond observing interactions but also creates interactions. In this design process, the course designers had the joint roles of both designers and researchers, and they developed the teaching materials and instruction by negotiating the contents and contexts together.

This CFL course was designed to embody task engagement principles that emphasize meeting students’ learning needs, matching the challenges with students’ abilities and skills, setting up clear learning goals and offering clear instructions and directions. Its design process started from the iteration stage, refining an earlier version of the online Chinese course with the purpose of finding out the problems and offering solutions. Reeves (2000) considered design based research to be an iterative process which could be divided into four steps, which are: (a) identifying and determining the significance of practical problems in the real world; (b) developing solutions by generating a design; (c) evaluating the design; (d) making reflections on research and design principles. This study followed this four-step framework in the process of designing, implementing and describing this CFL course.

**Design Context**

According to Ma et al. (2009), design based research evolves from researchers’ and practitioners’ enthusiasm and intent of solving practical problems in the real world. The design of
an engaging CFL course started with the intent of finding problems, solving previously noted problems, and refining an online Chinese language and culture module. This module was part of an onsite ESL methods class for pre-service teachers at a rural university in northwest U.S. The original purpose of this online language and culture module was to help pre-service teachers gain intensive experience in language and culture learning that mimics what some ESL students go through, while also improving their understandings of the needs and challenges of their future ESL students in general. Chinese was chosen as the target language based on the understandings that students in this course would have very limited knowledge about Chinese language and culture, it would be perceived as difficult by the course participants, and the course designers have expertise in teaching Chinese language and culture.

The original version of the online course used an open source platform called Moodle that emphasizes creating collaborative and student-centered learning environments. This course served as an introduction to Chinese culture and language and was designed to contain nine modules and eleven tasks addressing different Chinese culture and language topics, in addition to having the teacher education students reflect on and apply their experiences to their future classrooms. The first module was the general course introduction and the rest of the modules were each made up of three sections: culture, language and assignments. In the culture section, students read brief articles and then discussed culture issues. In the language section, they learned Chinese phrases and completed speaking and writing tasks. While using this course
management system, students completed language and culture tasks and then joined the online discussion.

The researchers and instructors in the design team for the revised course agreed that this online course was a useful prototype which exemplified online CFL. Much of the content of this course (e.g., the introduction of Chinese tones and the differences between Chinese and American education) was seen as meaningful for students’ future teaching careers. Also, it was overall well organized into 9 units, and thus it could help students have a clear general view in mind of the content and focus on their weekly tasks. However, after using this online Chinese course for 1 year (2 iterations), students’ evaluations and anecdotal data showed that the original course design had some problems concerning its contents and instructions that might prevent this course from achieving its original goals effectively and might make the learning context less engaging for students. For example, a review by instructors and researchers showed that it lacked connections among topics and some of the task topics did not address teacher education students' learning needs closely; also, course evaluations and comments within the course indicated that the content of the language tasks was so difficult that it might give students an unnecessary cognitive burden. In addition, some of the instructions in these sections were not clear enough for students to follow. In order to solve these problems and to offer students more engaging learning tasks, the research team set about to redesign the course.
Participants

Five designers participated in this study. Two of them were from the U.S.; one was a professor, and the other was a Ph.D. student who can speak an intermediate level of Chinese. Both of them had the experience of traveling and teaching in mainland China and Taiwan, which could be helpful to understand and interpret Chinese culture and language from an objective and reasonable perspective. The other three course designers were from mainland China, Taiwan and South Korea respectively; the course designer who came from mainland China was a doctoral student and had two years of Chinese teaching experience in China, while the Taiwanese course designer, also a PhD student, had five years of English teaching experience in Taiwan and the U.S. The final course designer was a post-doc from South Korea with expertise in task engagement in ESL reading and technology in education. All of course designers had the experience of learning at least one foreign language (e.g., English, Spanish, Russian, and Chinese) and had designed and/or taken online courses before.

The roles of the designers varied in the redesign of the Chinese course. Although any designer could suggest changes or participate in any part of the project, general roles were negotiated. For example, the Korean post-doc took charge of the technical problems. In the process of course development, the professor negotiated the general design requirements and course outlines with the Chinese course designer and the Taiwanese designer (who took charge of the construction of this online course). Then all the course designers had weekly meetings to
negotiate the topics and the components of each unit; at times the professor was not present.

Based on the discussed ideas, the course designers generated course materials and uploaded them on the Moodle site and then the professor made additional comments and changes. This design team valued different perspectives during the design process. For example, when the course designer from mainland China and the course designer from Taiwan had different ideas concerning culture topics and character use (simplified or traditional), in order to solve the potential conflict, all the members discussed the best solution to make sure the topics and the examples were not only from mainland China but also included ones from Taiwan. These were clearly delineated in the course.

Fifty-one undergraduate teacher education students, all seniors in their final semester of coursework, also participated in this study by completing the course and offering their feedback in the discussion. Student documents, as noted below, were collected to refine and edit the course.

**Data Collection**

In this study, there were three major sources for data collection, which were: course documents, design notes and conversation notes. The data sources are explained in more detail below.

**Course documents.** Documents from the previously used Moodle online course were the original source for designers to figure out the problems and solutions when compared to the task
engagement literature. The documents included: students’ feedback and instructors’ comments within the course, course tasks and assessments in each section, and teaching materials (including video and audio files). The students’ feedback and instructors’ comments served as evaluation criteria of the course for this analysis. Based on the analysis of the course tasks, assessments and teaching materials, the researchers figured out the needed modifications for the refinement.

**Design notes.** The design notes were composed of two parts: the first part was the general course outline, course contents and resources developed by the Chinese course designer and the professor; the second part was the revised course outlines and course contents lists which were created by all the course designers by negotiating the problems and solutions together.

**Conversation notes.** Conversation notes were the records of the collaboration and interaction among all the designers. It contained the online cooperation notes which were created and implemented on GoogleDocs (an online document management system) and the meeting notes which were taken in the weekly meetings of the course designers.

**Data Analysis**

Data analysis was carried out on the data set of course documents, design notes and conversation notes. The data from course documents were analyzed by qualitative procedures of inductive coding to identify the major problems of the original version of this online course. Based on the analysis of the course tasks, assessments and teaching materials, the designers used
a theoretical framework of engagement elements to look for linkages among the data pieces to
categorize the problems and needed modifications. Interpretive coding was used to analyze the
design notes and conversation notes to describe the implementation process. Again, the literature
on task engagement provided a theoretical framework for interpreting the solutions and design
ideas. As mentioned earlier, the researcher in this study had a joint role of both researcher and
designer. This means that the researcher participated in the data analysis process as a course
designer and applied theory to implement a design that generated data, and as a researcher
analyzed the implemented design to reflect on theory. This process is documented in the design
narrative in the next section.

Limitations

Replicability. Context plays an important role in the process of conducting design based
research. However, because the researchers’ interventions are usually culturally embodied, the
research context might not always be described appropriately by the researchers (Hoadley et al.,
2000). Therefore, it may cause inaccuracy for others to repeat the same study in a different
cultural context. In this study, the context of this course task design may differ from typical
foreign language courses at the college level that lack a specific educational purpose. However,
the general design principles and reflections generated in this study can still offer guidance for
designing engaging learning tasks for CFL learning.

Time. Reeves (2000) claims that design based research focuses on the designing process in
which problems, solutions, and methods are refined over time; good design is iterative, which means that the process of creating something that addresses a goal should be repeated many times to test and refine the designed artifact or process (Hoadley, 2002). In this design process, the design of the initial course served as the first iteration. To overcome this limitation, student documents such as their online discussions and their in-class feedback were used to find out how users perceived the task engagement of the redesigned course.

**Design Narrative**

The design narrative is where a series of related events in the design process are relayed (Hoadley, 2002). In this study, the design narrative presents an implementation of the CFL course and depicts the design process. Reeves’s (2000) four steps of conducting design based research, noted previously, served as high-level guidance to describe the detailed procedure of the refinement. This narrative thus identifies 4 main problems based on participants' experiences and observations, feedback from instructors and students, and the literature on engagement. Under each problem the solutions and the refining process are described, and reflection is made on engagement principles.

**Addressing student needs**

According to the data, in the culture sections of the module, the topics did not address students’ learning needs and the reading articles had a lack of authentic examples from the real world. According to Lin (2012), students’ feedback in this same online module showed that
reading brief articles and having culture discussions were the most engaging parts for them, because these tasks were linked to their life experience and could meet their learning goals. But her research did not show exactly which cultural topics were engaging for students among the eight topics (Chinese language, demographic diversity, the educational system, manners, food and cuisine, culture borrowing, lunar calendar, and festivals). Based on observations and instructors’ feedback, the design team determined that some of the culture topics did not meet students’ learning needs and goals as future ESL teachers. For instance, some of the sub-topics, such as those under Chinese cuisine and food (regarding Chinese food, night markets and chopsticks) and culture borrowing (regarding fortune cookies) did not address Chinese educational issues closely nor show enough connections to students’ future teaching contexts. Even though these topics could be used as resources by pre-service teachers to understand and to talk with their future Chinese students, putting the topics about food and culture borrowing among the topics about the Chinese school system and classroom manners tended to make the overall topic design lack inner connections and appeared to prevent students from getting a systematic understanding. In addition, most of the reading articles were obtained and used directly from the Internet, without real-world examples and enough modifications to make the content clear and interesting (or engaging) enough.

In redesign, discussion with two instructors who had taught this teacher education course for several years allowed analysis of the general characteristics of the teacher education students
and their learning needs. The team designed 6 culture topics (i.e., introduction to Chinese culture and language, relationships, the education system, classroom behaviors and characteristics of Chinese students, Chinese or Not Chinese, and social customs) to help students obtain a more systematic understanding of the characteristics of Chinese students and their education. There was inner connection relating to education among these 6 topics: the first two topics were designed to help pre-service teachers gain a sense of Chinese students’ classroom-related behaviors. The following two topics addressed Chinese educational issues with concrete examples. The last two topics were designed to help the pre-service teachers become aware of stereotypes of Chinese people and culture that their ELLs might experience, then further helped them gain a view of cultural aspects they may come in contact with. For each topic, team members edited two articles with diverse culture perspectives and included clear instructions for culture-based tasks.

This section was designed based on the engagement principle that knowledge of learners’ characteristics and their learning needs (necessities, wants and abilities) is essential in developing an engaging course. This online module was part of the onsite class for ESL pre-service teachers, and the majority of students took this course not for the purpose of learning Chinese language and/or culture but for the purpose of understanding their future ESL students better. Therefore, to attract their interest, students had opportunities to connect the culture content with previous learning and their future teaching. The design team designed the topics to
address educational issues and used authentic teaching materials to help students attain a clear sense of their applications. In addition, this course was designed to engage students by promoting their depth of cognitive processing. For example, learners had opportunities to bring different perspectives and knowledge to each theme through discussion, thus promoting meaning negotiation and critical thinking.

**Challenge/ability match**

The challenges of the language tasks in the original module did not match the abilities and skills of the teacher education students. In the language section, course evaluations and comments within the course indicated that the students perceived the content was too hard for students to understand. For example, in the Chinese phrase-learning section, students were actually taught pronunciation, writing and grammar information in a single step by following instructions in which the characters, Pinyin, and grammar were displayed in a single chart. This task gave students too much information to remember and therefore frustrated them. Also, students and the design team perceived that the introduction of Chinese pronunciation and the writing system was not explicit enough to offer effective support.

To solve these problems, the design team divided the Chinese phrase-learning section into four stages, putting characters and Pinyin learning into several discrete steps. The stages were supported by videos of a mouth making each sound, vivid pictures, and simple explanations, as shown in Figure 1. In addition, in order to assess student outcomes, in the third stage they were
required to record their own pronunciation for the words they learned.

![Image](image_url)

**Figure 1.** Example of one part of the language learning task in the redesign

In the second and third stages of each language task, students learned how to write the Chinese words they had learned in the first stage. In this learning stage, students were first offered a review chart in which the characters were presented with both Pinyin and English translations. This chart was designed to help students connect the Pinyin they had learned with the characters they were going to learn. Then, students were shown how to write Chinese characters in a stroke by stroke sequence.

In the fourth stage, students had the opportunity to get extra help in the formation of Chinese characters by observing orthographic features. During the process, students were first provided with some background of each Chinese character's formation (the structure, semantic and phonetic elements of Chinese characters). Then, they were given concrete explanations and interesting anecdotes of the words they learned. See Figure 2 for an example of the formation of a Chinese character.
Figure 2. Example of using orthographic features in teaching a Chinese character

In the original module, students’ feedback showed that it was hard for them to write the exact strokes of the characters by following the instructions in static Chinese calligraphy models. Therefore, in the redesign, instead of presenting the characters in the form of calligraphy, the characters were presented in hand-writing. See Figure 3 for an example of the handwriting model for students.

Figure 3. Example of a handwriting model

Overall, making this course (particularly the content and the presentation of lessons) as engaging (in this case, helping students meet the challenges) as possible was the primary consideration in our design. To achieve this goal, the team separated student learning tasks intro
several steps to provide the right amount of work and scaffolding. In each stage students had a simple learning task to focus on, without unnecessary cognitive burden. Further, according to engagement principles, the introduction of new information should be based on students’ prior knowledge and involve a gradual process of scaffolding. Therefore, in the writing instruction page, before giving students the writing instruction, a summary chart helped them make connections between what they had learned and what they were going to learn. In addition, in order to foster students’ active participation in character learning, the team scaffold the instruction by using authentic teaching materials (e.g., using hand-writing to teach students to write characters) and by creating concrete explanations and interesting anecdotes for the characters.

**Setting up clear learning goals**

Assessments in the original module were not specific enough for students to monitor their learning outcomes. According to the designers’ observations, the assessments in this online course might not be enough to help students to set up clear personal learning goals. For example, although it had an overall assessment section (pre- and post-course assessments) and reflection section (discussion questions for each unit), according to engagement principles, these assessments appeared to be unable to offer enough opportunities for students to monitor their learning outcomes and to maintain and refine their personal learning goals. Multiple forms of assessment were needed in both the culture section and language section to help students
evaluate their learning performance at each stage of their whole learning process.

To address this problem, a preview and review assessment were added in each culture section. The preview took the form of a non-graded warm-up quiz that worked to test students’ prior knowledge concerning the weekly culture topic; the review was developed to check understanding of the readings in each unit on the topic. These assessments were in multiple forms, including multiple choice, true and false, filling out a form, answering open ended questions, or real world communication scenarios that were created to help students make sense of the culture contexts before their reading tasks. For example, in the section on Chinese social customs, the design team developed a scenario in which students had been invited to dine at the home of one of their Chinese students’ families, and they were asked to write a paragraph about how they prepared to behave in this situation. The previews included vivid pictures to trigger student interest in reading the culture content and to offer them visual aids.

The review tasks, in addition to testing students’ knowledge of the concrete culture points, included open-ended questions to help students make critical reflections on their understandings. For instance, in the section on relationships, students compared the philosophies of American and Chinese people based on the knowledge they were taught in that unit; as another example, in the final culture task, students were required to fill out the TLW form (Thought, Learned, and Would like to know) concerning Chinese education, Chinese social and cultural norms, and philosophies.
To support goal formation for the redesigned language sections, the voice recording assignment from the previous course iteration was updated, and, in order to assess student learning outcomes in a timely fashion, one of the Chinese team members went to the physical classroom to collect student handwriting assignments and to give them feedback by the end of that class session. Therefore students could assess their outcomes quickly.

Last, the discussion section from the original module was retained, but the discussion topics were modified to help students reflect directly on their learning experiences and to generate implications for their future teaching. For example, in the section on Chinese education, students were required to discuss with peers about their Chinese learning process and how they would utilize this experience in their future teaching for students from other linguistic groups.

The design of the assessments was based on the idea that engaging tasks should offer students opportunities to set clear learning goals. In this course redesign, multiple forms of assessment tasks (previews, reviews, handwriting tasks, voice recording, and discussion) offered students explicit principles and guidelines which could help them keep their behaviors on track throughout the learning process. According to engagement principles, engaging tasks should help students develop deep cognitive processing and promote active self-regulated collaborative inquiry. The assessment and discussion tasks in each unit were designed to allowed students to create and modify learning goals, voice opinions, and make contributions to their learning environment. The discussion questions were designed to help students reflect on their learning
experiences and to rethink and reset their goals as future teachers.

**Clear instructions and directions**

The data showed that the overall instructional design of the original module was not clear enough for students to get information effectively. Based on designers’ observations and student comments indicated that, the overall instruction and navigation in the previous iteration of the online course module could be better designed to offer students a clearer guide. The navigation did not offer students a clear overview; for instance, it did not include enough descriptions under each title and subtitle on the main page, which might cost students extra time in figuring out what was going on and where to go and in setting up their learning goals. Also, some of the pages were not well organized; the instruction pages of Chinese Pinyin and Chinese tones were confusing, since the web pages had several misleading hyperlinks that made it difficult for learners to obtain effective information. See Figures 4 and 5 for examples of the unclear instruction and navigation in the original course.

![Figure 4. Example of the titles and subtitles without descriptions](image)
In order to solve these problems for the redesign, on the main page a clear “Table of Contents” was created and descriptions added under each title and subtitle explaining what could be found at each link. See Figure 6 for an example of the redesigned Table of Contents.

In each instruction page for the culture and language sections, the team created simple and clear instructions to give students guidance before their learning tasks. Figure 7 provides an example of guidance for doing the language recording task. In addition, after students’
tasks, they were offered instructions and a link to the next learning task, as shown in Figure 8.

![Instructions](image)

**Figure 7.** An example of guidance for doing the language recording task

![Image](image)

**Figure 8.** Example of instructions and a link for the next learning task

As for the instruction pages which were not well organized in the original module, to make the content easy to understand, team members deleted confusing links and abstracted the most useful information from the original sources. For example, in the instruction pages for Chinese Pinyin and Chinese tones, students were first offered an overall introduction to Chinese Pinyin and tones and then given concrete examples and pictures to explain the introduction.

The design idea of this section is that clear instructions are essential in engaging students in their learning tasks because clear instructions offer students explicit guidelines and explanations to help them focus and concentrate on what they need to do. The Table of Contents and the descriptions of the learning tasks offered students a clear view of the general structure of the course and then helped them set up their learning tasks effectively. Also, engaging tasks
should be student-centered, which means students have some autonomy in deciding what, how
and when to study in their learning process. The redesigned learning module allowed students to
plan their learning tasks in any order to make their own learning schedule.

**Implications for Design Principles**

This study contributes to our understanding of designing an engaging CFL course. During
the design process, the team generated the following design principles:

First, collaboration among designers who come from diverse backgrounds (American,
Chinese, Taiwanese, and South Korean) can enrich design outcomes. The conversations among
designers of different cultures promoted the diversity of this course and made the course helpful
for students. In the design process, when designers had controversies on issues, they negotiated
to find the most appropriate ways to express the contents and contexts; the weekly discussions
among designers helped avoid cultural stereotypes and supported the use of a variety of teaching
materials during the course construction process. In this design, each designer had his/her
strengths and limitations; the collaborative division of work reaches the design goals by
maximizing each person’s capability.

Second, course design should be implemented step-by-step with reflections on each step.
In this course design, the team broke the design process down into several sub-steps. The first
step was to create a conceptual model which was summarized in a design outline; prototypes of
contents, features, format, and resources were designed and then implemented and refined in the
design prototype. Since the team had different focuses in each stage and the designers’ roles shifted as the design focus changed, to achieve the design goals, it was crucial to identify the purpose of each individual step and to monitor the accomplishment of each stage.

Overall, it was very important that our curriculum design made connections between the practice of design and the theories of language learning and task engagement. This means that in the design process, designers follow the relevant learning theories and at the same time generated implications for language teaching and learning. In this design process, the team implemented the design of an engaging CFL course using task engagement principles; meanwhile, by implementing this design, the team reflected on these principles as related to CFL task engagement.

To sum up, through this design based study, the team obtained insight into CFL teaching and learning in a real world context. In the implementation process, the research questions noted above were addressed, and design principles to offer guidance for CFL online course design were generated. However, in the next iteration, more choices and opportunities in tasks must be developed, for example, more opportunities for practice and instant feedback should be created, based on students’ feedback in their online discussion. In addition, more guidance in finishing some learning tasks is still necessary. For example, in the voice recording part, some students had problems in recording and hearing their voices, and they felt worried while they were trying to finish the tasks. To solve these problems, a flipped class was suggested by members of the
design team to offer language learners more opportunities to practice what they had learned and to obtain immediate feedback and guidance.
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EXPLORING PRE-SERVICE TEACHERS’ ENGAGEMENT
IN FLIPPED CFL INSTRUCTION

Abstract
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Chair: Joy L. Egbert

This study is designed as a follow-up study to examine whether the refined Chinese learning module is effective in engaging students in practice. This study employs the five engagement principles identified by the first study as the theoretical framework to explore whether and why students perceive engagement in a flipped learning environment in which they learned language content online and practiced onsite. In this flipped learning environment, the online learning segment consisted of the refined learning tasks reported in the first study, and the onsite segment was created according to students’ suggestions and feedback. Participants were 50 American undergraduate pre-service teachers who were enrolled in a flipped Chinese for Teachers module in Fall 2013. Surveys, follow-up interviews, focus groups and student documents explored how students perceive their engagement in the Chinese learning tasks and the reasons for their perceptions. Participants’ perceptions of five engagement principles are presented and the reasons for their perceptions are discussed under each engagement element. Finally, implications are generated for future instructional design and practice.
Introduction

Research studies suggest that giving pre-service ESL teachers an intensive experience of language learning that is similar to what some ESL students go through could facilitate their understanding of their future ESL students’ foreign language learning processes (Angelova, 2005; Fink, 2003). Therefore, in order to improve American pre-service teachers’ understandings of their future ESL students in general, an online language and culture learning module was created as part of an onsite ESL methods class in 2010. In this learning module, Chinese was chosen as the target language based on the understanding that students in this course would have very limited knowledge about Chinese language and culture; therefore, Chinese would be perceived as difficult by the course participants. Also, the course designers had expertise in teaching Chinese language and culture. This learning module was reported by users to be interesting in concept but less than engaging in use. In order to engage students more, a design team refined this learning module in 2013, based on engagement principles (reported in Wang, 2013). In spite of the changes, student feedback in Wang’s (2013) study still suggested that they wanted more opportunities for practice and instant feedback and more guidance in finishing some learning tasks.

To solve the problems mentioned above, an in-class segment for the Chinese learning module was created, aligned with the online portion. In the process of designing and preparing the in-class segment, instructors employed a flipped instructional strategy. In flipped instruction,
lecture or other direct instructional material is delivered outside of class, often using technology, and students participate in guided hands-on activities (e.g., small group collaboration, jigsaw) in class (Hamdan et al., 2013). Flipped instruction has been defined as a student-centered teaching approach that has its foundation in student engagement (Sams & Bergmann, 2012); however, simply having students study online and practice in class does not necessarily lead to student engagement, which is one of the goals of language teaching (Gubillos, 2013). In order to offer educators support for flipped instructional design in foreign language learning, features of engaging tasks must be outlined and research on how students perceive their engagement during flipped tasks should be conducted.

Therefore, the purpose of this study is to explore whether students perceive themselves to be engaged in this flipped Chinese module and to identify the reasons for their perceptions. To do so, this paper first reviews the relevant research literature and describes a theoretical framework composed of the five engagement elements identified by Wang’s (2013) study. Next the paper describes the study and discusses implications to offer guidance for foreign language instructional design.

**Literature review**

In order to establish the theoretical framework for this study, this literature review first outlines five engagement elements to explain how flipped learning could support student engagement. It then describes the practice of using flipped instruction in learning contexts to
increase student task engagement. At last, research questions are generated to explore engagement in Chinese as a foreign language flipped instruction.

**Flipped learning and task engagement**

A theoretical framework for student task engagement can offer criteria for evaluation of flipped learning and help explain how flipped learning might support task engagement.

Wang (2013) applied task engagement principles in creating an online Chinese language learning environment. Her study identified five engagement principles as the most important elements in developing engaging tasks. These elements are: 1) meeting students’ needs; 2) matching the challenges of tasks with students’ abilities and skills; 3) offering opportunities for students to set up learning goals; 4) providing clear instructions and directions for students to finish their learning tasks and 5) providing students with opportunities to practice and to receive instant feedback. These five principles are supported by other research studies that found that, in an engaging learning environment, students have choice in what, how, and when to study, and the key decisions about learning are made by students through negotiation with the teacher (Csikszentmihalyi, 1990; Dörnyei, 2003; Egbert, 2003; Lee, 2007; Meltzer & Hamann, 2004; O’Neill & Mcmahon, 2005; Schweinle, Turner, & Meyer, 2008). To achieve the goal of establishing an engaging learning environment, researchers suggest that educators should first develop a good understanding of students learning needs. As Egbert (2010) claimed, without understanding students’ needs, interests, and backgrounds, teachers would not be able to develop
engaging teaching materials to guide students in their learning. Likewise, Meltzer and Hamann’s (2004) research showed that providing a multiplicity of tasks allows teachers to meet students’ multiple needs and can thus lead to student engagement. Other researchers, who emphasize providing the right amount of work and scaffolding to students, noted that to create a safe learning environment, the challenge of the learning tasks has to meet with students’ skills and abilities (Csikszentmihalyi, 1990; Egbert, 2003; Lee, 2007). In addition, the importance of offering students opportunities to set clear goals in their learning tasks is affirmed by researchers who emphasize students’ active role in their learning process (Csikszentmihalyi, 1990; Dörnyei, 2003; Egbert, 2003). For instance, Csikszentmihalyi (1990) claimed that individuals who are experiencing flow (i.e., they are deeply engaged) usually have clear goals in mind. His study also indicated that offering students instant feedback and clear instructions are essential in helping them focus and concentrate on what they need to do and involving them in the task to a deeper degree. The research studies discussed above support the idea that, to establish an engaging learning environment, the instructional design should consider students’ needs, match the challenges of tasks with students’ abilities and skills, offer opportunities for students to set up clear learning goals, provide students with opportunities to practice and to receive instant feedback, and provide clear directions for students to finish their learning tasks.

Some researchers have indicated that flipped instruction has the potential to incorporate these five engagement principles in engaging students in their learning (Berett, 2012), since it is
considered a student-centered instructional model that uses student learning needs as the driving factor of instruction (Sams & Bergmann, 2012). Based on the literature, flipped learning has the possibility of supporting the five engagement elements in the following ways: First, delivering content outside of class can meet students’ diverse learning needs (Hamdan et al., 2013), match the challenges with students’ abilities and skills (Musallam, 2011), and help students set clear learning goals (Ayers, 2006; Mayer, 2009). For example, students can pace their own learning by reviewing the content outside of class as many times as they want, and struggling learners have more opportunities to understand and review, further gaining confidence in applying the knowledge. Also, by being better prepared before class, students can set effective personal learning goals and be equipped with some background knowledge and skills to practice with new material. This further enables teachers to help students explore topics in greater depth in class, where they are challenged but not demoralized (Vygotsky, 1978). Second, the maximized interaction during face-to-face class time enables teachers to have more time to evaluate students’ understandings and offer them instant feedback (Gojak, 2012); Bloom (1984) claimed that the continuous feedback and correction students receive during one-on-one interactions significantly maximizes student engagement and achievement. Further, during class teachers can adopt various techniques (e.g., peer instruction, problem-based learning) to support interaction with and among students and continually evaluate their learning outcomes and provide them with feedback relevant in the moment. In addition, hands-on in-class activities can involve students in
active learning in which students are engaged in reflecting upon ideas and their application (Michael, 2006). Berrett (2012) noted that in the traditional classroom learners put most of their energy into understanding and remembering, while in the flipped classroom they can engage in applying, analyzing, and creating. Thus, they have more opportunities to integrate and apply their knowledge, which can maximize the opportunities for students to practice what they have learned, an important principle for engaged learning.

In sum, flipped learning is proposed to maximize students’ learning opportunities by actively involving students in applications of their knowledge in class and giving autonomy to students in their content learning outside of class (Bates & Galloway, 2012; Hamdan et al., 2013); therefore, this strategy has the potential of supporting task engagement as discussed above. However, whether and how the application of this learning strategy can engage students effectively in their learning in educational practice is still uncertain.

**Flipped learning in practice**

Many educators have implemented flipped learning in an attempt to maximize student engagement (e.g., Papadopoulos & Roman, 2010; Sams & Bergmann, 2012). From their reports, flipped instruction worked effectively in making the challenge of learning tasks match student’s abilities and in offering more opportunities for students to apply the acquired knowledge in interaction and collaboration with peers. For example, in 2009, Byron High School’s math teachers adopted flipped learning to improve students’ performance. After flipping their
classrooms, they found that students gained more confidence in their learning, which made them perceive that the learning tasks were challenging but doable (Fulton, 2012). Sams and Bergmann (2012) also flipped their classrooms in an effort to make sure that students who were missing classes had access to in-class lectures. They recorded the lectures into video files that could be easily distributed online. According to their report, the students who were behind at first began to gain the individual attention they needed to catch up with their peers and, at the same time, advanced students were continually being challenged.

Besides being used to help to match the tasks’ challenges with students’ abilities and skills, flipped instruction has also been used to increase collaboration and interaction to maximize the opportunities for students to practice what they have learned and to obtain instant feedback. For example, Warter-Perez and Dong (2013) reported that in order to increase opportunities for collaborative project-based learning, California State University flipped their engineering course for freshmen. The purpose of this shift was to increase the interaction between students and the instructor to help students obtain just-in-time guidance and instant feedback. In their qualitative study based on a satisfaction survey and focus groups, they found that 70% of the students felt that the class learning environment was more interactive than before, and all the students strongly agreed that the new learning environment enabled them to obtain hands-on skills and learn content better. Another example of using flipped is Papadopoulos and Roman (2010), who found that after flipping an electrical engineering class, students could understand topics in
greater depth because they had time to digest the learning content and utilize the knowledge they learned in collaboration with instructors and peers in class.

Aside from implementing flipped instruction for content learning, some language educators have also applied this teaching strategy in foreign language teaching to increase students’ active participation in their language practice. For instance, Hamdan et al. (2013) reported that Cubillos flipped a Spanish class in the University of Delaware in 2013 so that students received content online in preparation for interactive activities in class. After a single semester evaluation, Cubillos found that, although there was neither significant improvement nor setback in students’ Spanish proficiency, the participants perceived higher confidence levels during oral assessments, which helps make students more willing to practice what they have learned online.

**Challenges with flipped instruction**

Even though the cases above show that flipped learning could increase student engagement, there are also those who show that flipping does not always work as efficiently as expected. For instance, Strayer (2012) noted that in a flipped college introductory statistics course, students reported less satisfaction with the way they were taught in the flipped class, because they were not used to the new way of learning. In addition, some researchers found that there were no significant differences in students’ knowledge, anxiety levels and test scores between flipped and traditional instruction (Frederickson, Reed, & Clifford, 2005; Johnson & Renner, 2012).
Researchers also noted that students may have different satisfaction levels concerning the web-based portion and the in-class portion. For example, students may be less satisfied with the web-based instruction since there is less opportunity for instant feedback and more engagement in in-class collaboration and interaction by which they could have more opportunities to practice what they have learned. (Fredrickson, Reed, & Clifford, 2005; Crouch & Mazur, 2001)

That some flipped instruction is more effective than other indicates that simply requiring students to learn content online and practice in class does not necessarily lead to engagement or better learning. Based on the studies presented above and more general literature on learning, it can be concluded that every flipped class is not the same, and educators cannot use a single model to fit all students. In fact, Ash (2012) claimed that there were multiple ways to flip a classroom; in order to facilitate student learning, teachers should provide students with a variety of resources and allow them to choose what they want to utilize to learn the required information. In addition, to meet students’ multiple learning needs across disciplines and topics, teachers should reflect carefully on which content learning can be effective outside the classroom. As Zhang et al. (2011) reported, sometimes some students are able to learn independently and sometimes teachers need to explain something to everyone in class. In addition, Strayer (2012) claimed that more effort should be made by teachers to develop students' deep interest in the content rather than just giving students videos to watch, and he also suggested defining the tasks clearly enough to avoid frustrating students. For example, in Sams’s (2012) “mastery based
flipped classroom,” students were not required to watch videos at home on a specific day; instead, they were offered an outline for each unit which included all the resources (e.g., videos, worksheets, textbooks, experts, etc.) they may need for each task. Further, teachers need to figure out how to use the class time wisely (Zhang et al., 2011). This means that teachers should offer clear structure in the in-class practice although there is no lecture. All in all, engagement is one of the final goals of flipped instruction (Hamdan et al., 2013), and all teachers should ask themselves the question, “Am I engaging my students?” when they employ a certain teaching approach.

**Research questions**

Based on the literature reviewed in this section, it seems that even though there are a lot of cases in which flipped learning can integrate the principles of student task engagement, to date there is no specific research showing how students perceive their task engagement in a flipped foreign language class. More specifically, there is no research that shows student engagement in the different learning environments (in and out of class) of a flipped class. Therefore, this study presents the five engagement elements mentioned previously as the evaluation criteria for measuring students’ engagement in order to reflect on these principles and their relationship to flipped instruction. In doing so, this study explored whether and why a flipped Chinese module could engage students in their Chinese learning. The research questions are:
1. How do pre-service teachers perceive their level of overall engagement in online and onsite segments of a flipped Chinese module?

2. How engaged do students perceive themselves in each engagement element in each learning segment?

3. What reasons do they give for their perceptions?

**Methodology**

This study employs a qualitative research methodology as an approach to exploring students’ engagement perceptions in a flipped Chinese learning module. Rather than generate numbers to answer the research questions about “how many” or “how much”; qualitative research methodology generally aims to understand the experiences and the attitudes of participants to answer the research questions about the “what”, “how” or “why” of a phenomenon by generating patterns (Bricki & Green, 2007). The purpose of this study is to find out “how” and “why” students perceived the presence of five engagement elements identified by Wang’s (2013) study. Therefore, a qualitative research methodology is appropriate for this study to obtain insight of students’ attitudes towards their engagement experiences in this Chinese flipped learning module and the reasons for their perceptions.

**Participants**

Fifty American teacher education students who were enrolled in a flipped Chinese for
Teachers module (part of a three credit flipped *Introduction to ESL for K-8 Teachers* course) in Fall 2013 served as the participants in this study.

All the participants were undergraduate pre-service teachers in their final semester of coursework. These students were from twenty to twenty-four years old, with 46 females and 4 males. At the beginning of this course, the participants in general had very limited knowledge about Chinese language and culture; none of the fifty students reported previous learning experience with Chinese and only three of them had traveled to China. However, forty of them reported that they had previously studied at least one foreign language (e.g., Spanish, German, or Japanese, etc.), and two of them considered themselves fluent speakers of Japanese and German because of their heritage. It is important to note that all the participants were required to take this Chinese module, and their grades in this flipped Chinese module were part of their final grades for the course.

**Module Description**

The Chinese module lasted for seven weeks. There were two sections for this course with twenty-six students in the first section and twenty-four students in the other. According to Wang’s (2013) study, the purpose of this language module, aside from providing opportunities to learn about Chinese language and culture, was to help pre-service teachers gain an intensive experience of language learning (e.g., Chinese learning) that is similar to what some ESL students go through, while also improving the pre-service teachers’ understandings of their future
ESL students in general.

This module had two parts: 1) an online learning segment and 2) a brief face-to-face classroom practice segment. The online segment contained eight units. The first unit was a general introduction, which worked as an overview of the whole module. The middle six units were learning units made up of three sections: culture, language and discussion. In the culture section, students did a preview task, read brief articles, watched a video and did a review task; while in the language section, they learned Chinese phrases and completed speaking and writing tasks. Each unit ended with a required online discussion of topics relevant to language and teaching. The final unit worked as a review and final assessment of the whole module.

A brief, weekly, face-to-face segment was added to the module in 2013 with the purpose of offering students the opportunity to practice what they had learned in the six online learning units. In this setting, students had from 15- 25 minutes per week to practice with a Chinese instructor, two language helpers, and their peers. There were five weekly sessions of in-class practice, with one week a holiday. Each face to face session contained three parts: 1) whole class review in which the Chinese instructor helped students review the content by doing pronunciation, interactive listening, and speaking drills (e.g., the instructor described a communicative context in English and the students responded by using Chinese phrases); 2) students worked on remembering Chinese characters by collaborating with their peers (e.g., matching the Chinese characters with their corresponding Pinyin); 3) students applied the phrases they learned in order
to communicate with their language partners (e.g., creating and practicing their own dialogues using phrases from a list of words they learned online.) While students were practicing with peers, the instructor and the language helpers walked around to assess students’ performance and offer relevant feedback. The learning tasks in the onsite segment were designed based on some of the engagement elements identified by Wang’s (2013) study. The whole class review aimed at offering students opportunities to set up learning goals and making the learning tasks matching students abilities by reinforcing their memory of online learning content; the character matching activity and dialogue practice activity were designed to offer students communicative context to practice what they have learned and to get instant feedback from language helpers, peers and the instructor.

**Data Collection**

Glesne (2011) and others claim that using multiple data sources could help researchers make the research trustworthy and credible. To achieve this goal, this study employed three data sources. An engagement perception survey was employed to evaluate participants’ perceptions of engagement. Follow-up interviews and participants’ online discussions were also used as data to explore the reasons for students’ perceptions, as noted below.

**Engagement perception survey.** The purpose of this twice-weekly survey, presented in Appendix A, was to help the researcher understand students’ perceptions of engagement in learning tasks in both the online and physical settings. In addition, the results of the surveys
helped the researcher design and modify the follow-up interview questions. Before implementing the survey, an introduction was given to make sure participants understood the aims of the survey and to reduce their confusion. Participants were informed that their survey participation was on a voluntary basis and the responses would not influence their course grades. Each participant completed an online version of the engagement survey after the week's online tasks and a paper-based version of the same survey after the weekly in-class learning tasks. In the engagement perception survey, participants were provided with questions that addressed the five engagement elements identified by Wang’s (2013) study as the criteria for their evaluation. Students chose either “yes,” “no,” or “somewhat” to present their perceptions of the presence of each engaging element, and they also had the opportunity to include open-ended comments. Participants were encouraged to finish the surveys individually and had no access to others’ responses.

Overall, 179 surveys from 46 participants were collected in the online segment, while 249 surveys from 50 participants were collected in the onsite segment. It is important to note that not all fifty participants took all six surveys in the online segment. Four students who did not take any online survey noted that they thought the survey was voluntary; therefore, they did not want to waste their time on it. Other students who did not take all six surveys commented that they thought all the surveys were the same, so they just wanted to take the first one or some of them. Further, only five weeks’ surveys in onsite segment were collected since there was no onsite...
practice in the third week due to a holiday and only one student did not answer the second week’s survey due to her absence in class.

**Interviews.** Steinar (1996) explained that an interview is a specific form of personal communication which helps knowledge evolve through dialogue. In this study, two types of interviews (i.e., individual interviews and focus group interviews) were conducted to get a deeper understanding of reasons why students were engaged or not in their learning tasks in both onsite and online environments. The individual interviews were conducted each week as a follow-up to the engagement perceptions survey. Based on the findings of the engagement perceptions survey, the researcher chose the most and least representative opinions from students’ answers and then interviewed these students individually to obtain a further understanding of their opinions by asking open-ended questions (e.g., “In your survey you commented that… what do you mean?” “Could you give a specific example for your comments that…?”). Twenty five individual interviews were conducted during the six weeks of learning units, and the researcher took notes of each interviewee’s comments for data analysis.

Focus group interviews were conducted at the end of the course to gather students’ opinions concerning their general engagement in this module. The fifty students were divided heterogeneously based on their answers to the engagement perception survey. This means that students who responded with “yes” were together with students who responded with “somewhat” and “no.” In each course section, there were two focus groups and each focus group contained
around thirteen students. Focus group participants were asked to discuss general open-ended questions.

**Students’ discussion documents.** Students were required to take part in an online discussion concerning one topic every week as part of the Chinese module. For example, in the final unit students were asked to give their comments for the question: “Sum up your experience in this Chinese language course. How do you feel about what you did and learned? What changes would you like to see made? What are you taking away from this course that you will remember/use in the future?” Sixty-five students’ responses in their discussions were coded to integrate with the surveys and interviews to help answer the questions.

**Data Analysis**

The findings from the engagement perception surveys were organized first. Students’ comments were coded inductively to identify the major patterns of their perceptions, and then the categorized data was used to develop interview questions. Wang’s (2013) five elements of engaging tasks worked as the evaluation criteria for analysis. This meant that students’ weekly responses were sorted to form patterns under each of the five engagement elements to present how they perceived each element and the reasons for that. To find out how students perceived their overall engagement, the researcher counted the answers from the student engagement surveys to see how many students perceived all the five engagement elements positively (equivalent to giving a positive response [“yes”] to all of the five engagement elements) in the
online and onsite learning segments respectively.

The data from the interview questions and student documents were coded in the same way as the responses to the surveys. This data functioned as support for the interpretations from the perception survey data. This means that the data attained from interviews and student discussions were used to explain and offer examples for their responses in the engagement surveys. In addition, new patterns found in the interview questions and student documents were also used as data.

In the data analysis process, it is important to note that the online tasks were different each week, and the onsite tasks were designed for students to review the online content. The differences in the learning tasks may influence student engagement perceptions in different learning segments. For example, students may perceive that the online tasks were more challenging than those in the onsite segment, since the online content was new to them each week. In addition, the different survey implementations (i.e., online and onsite) may influence students’ responses in the two segments. For example, students may give more positive and detailed responses in the onsite segment, since they were given time to answer the survey questions and they had physical contact with the researcher in class. Therefore, to make ensure fairness, this study does not compare which segment was more engaging but describes students’ different engagement perceptions in different segments.
Limitations

In this study, as a foreign researcher who is not very familiar with K-12 education in the U.S., the researcher may have a barrier to understand some issues concerning elementary pre-service teachers. In addition, the researcher may miss some important points during the data collection process because of the lack of background knowledge and her previous living experience. To address this limitation, the researcher posited herself as an international teacher, a researcher and a student who was open-minded in teaching and researching and willing to learn. Also, in order to maximize the credibility of this study, the researcher conducted member checks with participants (e.g., asking participants checking questions to make sure of respondent validity). Additionally, the researcher undertook a triple role of researcher, instructor and course designer; this may bias how she analyzed the data. Therefore, the data were triangulated by using multiple sources (survey, interview and student documents) to ensure that the researcher’s position did not interfere with the results.

Results and Discussion

Participants’ responses to the engagement perception surveys, follow-up interviews, focus groups and their online discussions were compiled and analyzed according to the research questions. The results are organized below in order of the research questions for ease of presentation.
Question 1. How do pre-service teachers perceive their level of overall engagement in the online and onsite segments of a flipped Chinese module?

Table 1 shows the percentage of students who perceived all the five engagement elements positively (answering “yes” to all five elements) in each segment during each week.

Table 1

<table>
<thead>
<tr>
<th>Section</th>
<th>Week 1</th>
<th>Week 2</th>
<th>Week 3</th>
<th>Week 4</th>
<th>Week 5</th>
<th>Week 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Onsite</td>
<td>40/50</td>
<td>43/49</td>
<td>no onsite practice</td>
<td>38/50</td>
<td>46/50</td>
<td>47/50</td>
</tr>
<tr>
<td>Online</td>
<td>32/46</td>
<td>27/35</td>
<td>24/30</td>
<td>14/21</td>
<td>14/22</td>
<td>21/25</td>
</tr>
</tbody>
</table>

The data presented in Table 1 illustrates that over 60% of the participants who took the online and onsite surveys perceived the five engagement elements positively. And only half of the participants answered the online surveys in the online segment during the six weeks. In order to further understand how students perceive their overall engagement in the different learning environments (onsite and online), data obtained from students’ focus groups were used to attain a deeper insight into students’ perceptions of the onsite and online learning segments respectively. Students’ comments in the surveys and online discussions also helped to explain their perceptions.

**Onsite Segment.** Fifty students in four focus groups commented that the activities in the onsite learning segment were great fun and their learning needs were met by practicing in a variety of ways. They claimed that the face-to-face practice could offer opportunities of getting
instant feedback and could help them practice and retain the language they learned online; therefore, it was engaging to them. Additionally, they indicated that the instructor’s energy and enthusiasm were essential elements to facilitate their perceptions of the five engagement elements. Aligned with their comments in the focus groups, in engagement perception surveys, thirty-two of these forty students expressed their perceptions of overall engagement again by using the words such as “I was 100 percent engaged and was tested on speaking, listening and identifying written Chinese!”, “I practiced my words and had fun! However, ten students who didn’t report their overall engagement in focus groups indicated in their surveys and discussions that the lack of in-class time would make them feel the learning tasks were too quick and brief to digest. At the same time, they claimed that the onsite practice would be more engaging if they had more in-class practice time.

**Online Segment.** Twenty-six students in two focus groups expressed that the online learning tasks could engage them, yet not deeply enough. They indicated that sometimes earning grades was their major driving factor to finish the online tasks; therefore, they “just tend to answer the questions.” Twenty-four students in the other two focus groups corresponded to these perceptions by saying that “we just did the activities for a grade.” However, at the same time, these twenty-four students reported that while doing the online tasks (e.g., voice recording), they had a clear goal, which was performing better and better; therefore, “Once [I] started the tasks they were very fun to learn!” It might be inferred from their comments that the learning tasks
could engage students in setting up clear learning goals (e.g., getting A grades). In addition, twenty-five students in their online discussions claimed that learning Chinese culture online could meet their learning needs of acquiring better understanding of their future ESL students; therefore, it was engaging. However, other students noted that learning a language online without instant feedback and guidance from instructor was too hard for them; therefore, it was less engaging.

In conclusion, according to the data, most of the participants who gave their comments perceived their overall engagement positively in both the onsite and online segments. Based on the students’ comments, it seems that the online segment engaged students by meeting their learning needs and having them establish clear learning goals; the onsite segment seemingly engaged students by offering instant feedback and the opportunity to practice in a real communicative context. Also, the instructor’s energy and enthusiasm seemed to be an essential element to facilitate students’ perceptions of overall engagement in the onsite segment. However, to get detailed reasons for the students’ perceptions, an exploration of how the students perceived each engagement element in the different segments was still needed.

**Question 2. How do students perceive each engagement element in different learning segments and the reasons for their perceptions?**

The data were summarized to present how students perceive each engagement element and to uncover patterns to explain the reasons for students’ perception of their engagement. These
patterns are presented under each of the five engagement elements in this section.

**Meeting students’ learning needs**

Table 2 presents the survey outcomes for the learning needs element.

Table 2

*The number of students’ responses to the element of meeting their learning needs*

<table>
<thead>
<tr>
<th>Element of Engaging task</th>
<th>Segments</th>
<th>Week 1</th>
<th>Week 2</th>
<th>Week 3</th>
<th>Week 4</th>
<th>Week 5</th>
<th>Week 6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>yes</td>
<td>no</td>
<td>Some</td>
<td>yes</td>
<td>no</td>
<td>Some</td>
</tr>
<tr>
<td>Meeting students’ learning needs</td>
<td>online</td>
<td>n=46</td>
<td>n=35</td>
<td>n=30</td>
<td>n=21</td>
<td>n=22</td>
<td>n=25</td>
</tr>
<tr>
<td></td>
<td>onsite</td>
<td>n=50</td>
<td>n=49</td>
<td>no onsite segment</td>
<td>n=50</td>
<td>n=50</td>
<td></td>
</tr>
</tbody>
</table>

n=participants who answered engagement survey

This table shows that most of the students who answered the surveys perceived the learning needs element as “yes” in both online and onsite segments with the number of students saying “no” in both online and onsite segments very low. However, in the online segment, during six weeks, six students perceived this engagement element as “no” with one student who marked “no” in both week one and week six, and twelve students perceived this engagement element as “somewhat.” In the onsite segment, among the fifty participants who answered their surveys, four of them perceived this engagement element as “no” and eight of them perceived this element as “somewhat.”
The participants’ comments were used to attain a further understanding of how they perceived this engagement element in the different learning segments and the reasons for their perceptions.

**Online Segment.** In the online segment, thirty-nine of the forty-six students who provided comments indicated that whether the learning content was relevant to their future teaching was the most influential factor to meet their learning needs. However, they held different opinions regarding whether the learning content could benefit their future teaching or not. Six students who perceived this element as “no,” questioned the meaning of learning Chinese culture and/or language (e.g., “I did not see any point in learning Chinese or Chinese culture, because I did not see its connection to teaching English language learners” and “Learning the culture was good, yet why bother learn[ing] the language?”). Twenty-three students who perceived this element as “yes” provided specific comments to confirm that learning Chinese was useful to their future teaching (e.g., “The Chinese learning experience made me think about how I could accommodate the needs of students even more and take into account their culture beliefs in my feature teaching.”) However, it is important to note that ten students who perceived this engagement element as “somewhat” commented that learning Chinese language and culture was beneficial yet they would like to see more choices to have other languages to learn. For example, one student mentioned that “I like that we were learning about the Chinese culture and language but at same time some key phrases in another language would be more helpful.”
Besides the relevance to students’ future teaching, seventeen other students who perceived this element as “yes” considered the variety of learning methods offered in this module (e.g., reading, speaking and writing) as another factor that helped to meet their learning needs. (e.g., “All the learning tasks [in the online learning segment] allowed me to express my learning in different ways, requiring different types of thinking for different questions…they applied to meet all of my learning styles.”). However, the ten students who perceived this element as “somewhat” still expressed that to better meet their learning needs, the course designer should develop more kinds of videos to teach pronunciation (e.g., to have American speakers to make both slow and fast videos) and have learning materials that go to greater depth. For example, one student noted that “the culture content was a good brief overview, but it did not go too much in-depth like I would have liked. I think it could be more to my learning if there was deeper information, which means things could be provided in a more detailed way.”

**Onsite Segment.** In contrast to students’ comments about the online element, the data obtained from the in-class segment indicated that getting instant feedback and interacting in an authentic communicative context were influential factors that facilitated students’ perceptions of meeting their learning needs. For example, twenty-one of thirty-eight students who perceived this engagement element positively reported that the instant feedback they got from in-class interaction could deepen their understanding of the online content and further build their confidence in using the target language by receiving instructors’ confirmation (e.g., “I learned
really well being able to talk with native Chinese speakers in class, since I knew if I am pronouncing in the right way by hearing their feedback.” and “After I got the feedback, I knew I pronounced the words correctly and I feel more comfortable pronouncing the words now.”) In addition, sixteen students remarked that the in-class activities (e.g., creating their own dialogues with the phrases they had learned and working with peers) could provide opportunities to manipulate the words they knew and further boost their interest in online language learning because these tasks offered chances for interaction in real life situations (e.g., “I really liked the in-class conversation because it was in a real life situation rather than just recording the words online, this made me think my online learning is meaningful.”). One student in the online survey supported this statement by saying that ‘I can’t wait [for] class time to practice the phrases [learned online]!’ However, eight students who perceived this engagement element as “somewhat” indicated that the in-class time was not enough for them to practice what they had learned. Additionally, four students who perceived this element as “no” just commented that they believed the time they used on Chinese learning was meaningless.

In sum, to meet students’ learning needs, participants felt that it was essential to make the learning content relevant to their future application and to have a multiplicity of choices in learning. Their responses also showed that physical practice with instant feedback and real life communicative context played an important role in meeting their foreign language learning needs, since it could not only provide opportunities for the application of what they have learned.
but also help them build confidence in using the target language. It is also important to note that their responses revealed that the physical practice could make online learning more engaging. In addition, differentiated instruction (e.g., audio, video) and multiple modes of learning (e.g., quiz, reading, handwriting etc.) were also presented to influence how students perceive in this engagement element in both the online and onsite segments.

Students’ comments reinforce the need for offering them guidance on how to transfer what they have learned for future application. To help students see the relevance to their future application, instructors and course designers could not only design activities (e.g., discussions) to help students reflect on their learning process but also participate in the discussions to guide students on how to use the knowledge they have learned with concrete examples. Furthermore, in order to develop students’ deep interest in content learning and to better meet their learning needs, the course designers and instructors could provide students with a variety of resources and allow them to choose what they want to utilize to learn the required information; this is supported by Ash (2012).

Matching students’ abilities and skills.

Table 3 presents the survey results for the matching students’ abilities and skills element.
Table 3
The number of students’ responses to the element of matching their abilities and skills

<table>
<thead>
<tr>
<th>Element of Engaging Task</th>
<th>Segments</th>
<th>Week 1</th>
<th>Week 2</th>
<th>Week 3</th>
<th>Week 4</th>
<th>Week 5</th>
<th>Week 6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>online</td>
<td>43</td>
<td>1</td>
<td>2</td>
<td>33</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>n=46</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>onsite</td>
<td>47</td>
<td>1</td>
<td>2</td>
<td>40</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>n=50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

n=participants who answered engagement survey

Table 3 illustrates that most students who answered the surveys perceived this engagement element as “yes” in the two learning segments. Comparatively, the table illustrates that the number of students who perceived this engagement element as “no” in both online and onsite segments is low. In the online segment, during six weeks, four students perceived this engagement element as “no” and twelve students perceived it as “somewhat”. In the onsite segment, ten of the fifty participants who answered surveys during the five weeks perceived this engagement element as “no” with two students marking “no” twice. In addition, in the onsite segment, two participants perceived this element as “somewhat.” It is important to note that more students marked “no” in the fourth week compared to other weeks in both the online and onsite segments. To obtain a further understanding of how students perceived this engagement element in the different learning segments and the reasons for their perceptions, a detailed description of
student comments is discussed below.

**Online Segment.** Twenty of the forty-six students who gave comments for this engagement element during six weeks claimed that learning content online could give them enough time to digest the knowledge by allowing them to review the content (e.g., videos, culture readings) as many times as they wanted (e.g., “I could play the videos and return to all the pages whenever I needed. This gave me more time to understand and review.”) In addition, sixteen students commented that the learning content that was divided into several steps allowed each task to contain the right amount of information, which made it easier for them to follow and to retain the knowledge (e.g., “a lot of different tasks [online] they were all mini tasks and easy to get done in a timely manner”; “I liked [that] it took things step-by-step, which made the learning tasks easy to follow [for us] since we have no background in Chinese.”). Additionally, eighteen students indicated that the fixed course format could reduce the information load and further help them focus well on their learning tasks (e.g., “It is easy for me to complete each week’s assignments because I now know the basic layout and can focus on learning new content.”) However, four students who perceived this engagement element as “no” and twelve students who perceived this element as “somewhat” mentioned that the way of submitting word recordings made them feel stressed, and then they perceived that the task was hard. They noted that it was very difficult to listen to four or five words at one time and then try to remember each word for recording. For example, one student commented that “many times, I would get a bit
worried about remembering how to say four or five words instead of actually just being able to focus on one word and its pronunciation at a time. I felt it would have been much more beneficial to be able to record one word at a time.”

**Onsite Segment.** Twenty of the fifty students who commented on this engagement element pointed out that the fixed teaching format (introduction, modeling, and then practice) helped them concentrate on practicing new materials. Additionally, twelve students commented that each practice was moving at a really good pace, in which the amount of words was just appropriate and the process was simple (e.g., “The information given was not overwhelming in the amount and was straight to the point.”). This is possibly due to the students being at the beginning level of learning Chinese. Further, sixteen students mentioned that the language assistance (e.g., a language support chart, or a list of language phrases with pronunciations and meanings that students learned online) and visual aid (e.g., real objects, pictures, and taking notes on the board) could offer them effective assistance when they were having difficulties. For instance, one student commented that “the language support chart was a great tool! It really helped me review and remember our new words, since it is so in-hand that I can check it when I forget something.” In addition, twenty-two students noted that allowing them to learn the content online before face-to-face practice and giving whole class review before individual practice could help build new knowledge on their language skills and previously learned knowledge (e.g., “I felt prepared for in-class practice because of the online practice”; “Review before individual
practice helped me perform well in practice, because it can solidify the words I learned online”).

Seven students who perceived this element as “no” in the fourth week mentioned that since there was no in-class activity in the third week, they had to practice the phrases they learned in the third week in the fourth week’s practice; this made them feel the practice in the fourth week was really hard (e.g., “As we practiced Chinese we had learned last week not the new language from this week, I felt that I forgot many of the words”).

Students’ comments for this engagement element are in correspondence to the design ideas that reported in Wang’s (2013) study, which advocates making the learning task simple and not giving students too much to remember at one time. Also, their comments suggest that in both online and onsite segments, a fixed course format (e.g., same course/teaching structure in each learning unit) and explicit instructions could help students avoid the feeling of being overwhelmed by their learning tasks. This finding reflects the idea that “if students know what to expect, they can focus more of their energy on the instruction and less on what they will be expected to do next” (Herrell & Jodan, 2008). In addition, their emphasis on the importance of being prepared before face-to-face practice and having review before individual activities reflects the idea that practice which builds on previously learned skills and knowledge leads to a more positive attitude and greater implementation of this activity in the classroom (Egbert et al., 2002).

The results suggest that while developing learning materials, course designers and
instructors should take students’ characteristics (e.g., learning levels) and the difficulties they may encounter into account to offer students appropriate learning tasks. For instance, in this learning module, with the understanding that students were at their beginning level and had little background knowledge, the online word recording task could be made less stressful by allowing students to make single submission instead of remembering the pronunciations of four to five words one time to record. Additionally, it suggests that to better match the challenges with students’ abilities and skills, instructors could offer students various kinds of instant support (e.g., language support chart, notes on the board) while they face difficulties, which could allow for every student having access to participate in the learning activities.

**Setting up clear learning goal**

Table 4 presents the results for the engagement element of setting up clear learning goal.

Table 4

<table>
<thead>
<tr>
<th>Element of Engaging task</th>
<th>Segments</th>
<th>Week 1</th>
<th>Week 2</th>
<th>Week 3</th>
<th>Week 4</th>
<th>Week 5</th>
<th>Week 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Setting up clear learning goal online</td>
<td>n=46</td>
<td>n=35</td>
<td>n=30</td>
<td>n=21</td>
<td>n=22</td>
<td>n=25</td>
<td></td>
</tr>
<tr>
<td></td>
<td>31</td>
<td>5</td>
<td>10</td>
<td>30</td>
<td>3</td>
<td>2</td>
<td>27</td>
</tr>
<tr>
<td>Setting up clear learning goal onsite</td>
<td>n=50</td>
<td>n=49</td>
<td>no onsite segment</td>
<td>n=50</td>
<td>n=50</td>
<td>n=50</td>
<td></td>
</tr>
<tr>
<td></td>
<td>45</td>
<td>4</td>
<td>1</td>
<td>45</td>
<td>0</td>
<td>4</td>
<td>44</td>
</tr>
</tbody>
</table>

n=participants who answered engagement survey

Table 4 illustrates that most students who answered the surveys responded “yes” to
indicate that the learning tasks in this flipped Chinese module offered them opportunities to set up clear learning goals. It also can be seen that in the online segment, during six weeks, thirteen students responded “no” to this engagement element and fifteen students perceived this element as “somewhat” (seven among them marked “somewhat” in more than one week). In the onsite segment, during five weeks, nine students perceived this engagement element as “no,” while seven participants perceived this element as “somewhat” (five of them marked “somewhat” in more than one week).

In addition, Table 4 shows that the number of students’ responses is even in the two segments. To further understand how the students perceived this engagement element in different learning segments, a detailed description of their comments is discussed below.

**Online Segment.** Fourteen students reported that the instant assessments (i.e., pre-test and post-test in each learning unit) offered opportunities to assess their learning outcomes and further assisted them in establishing their learning goals. One student noted that “the pre-test made me really think before I performed the work, and I believe the post-test is also useful to correct my misunderstanding.” Additionally, eighteen students noted that in the online learning tasks (i.e., pre-test, post-test, voice recording and hand writing), they had time to practice and to refine their skills before doing their final draft, which helped them set up personal learning goals at each stage. (e.g., “I can make as many mistakes as I want and I was allowed to fix it until I feel I got it right. This helped solidify the correct answer in my brain because I had a chance to see where I
messed up and try again. It challenged me to perform well and practice over and over.”) Seven of thirteen students who perceived this element as “no” commented that learning Chinese is meaningless; therefore, they had no learning goal. Six other students claimed that they had no idea about what the learning goals were, but they just tended to finish all the tasks.

Onsite Segment. During five weeks, thirty students perceived that “the instructions and practice were well-paced and clear, therefore, allowing them to set up clear learning goals.” Additionally, nineteen students noted that the whole class review offered opportunities to reflect on their online learning outcomes and to see the areas of improvement. In addition, twenty students indicated that listing course agenda and expectations before activities could help them set up and continue to develop learning goals through their whole learning process. For example, one of them commented that “the listed activities gave me a clear plan, and then I can figure out my goal in each step.”) It was also interesting to find out that five students remarked on the importance of giving them time to react when the instructor asked questions. They said that giving them reaction time could help them bear in mind how they wanted to learn (e.g., “[The reaction time] was the time to let me set up the learning goals when it got me thinking without telling me the answer right away”). Corresponding to participants’ comments in the online segment, students who did not perceive this element positively (marked as “no” or “somewhat”) also noted that they had no idea of what their learning goals were.

Participants’ responses indicate that assessing their learning outcomes in a timely manner
and offering them enough time to refine their work before final submission could help them set up clear learning goals and push them to practice over and over to improve performance.

Csikzentmihalyi’s (1990) flow theory explains this finding by claiming that when students have clear learning goals, they push themselves to higher level of performance that encourage them to perform an activity repeatedly. In addition, according to students’ comments, listing the agenda can offer students a clear plan in their mind and further help them to check their learning goals at each step. The necessity for clear initial expectations makes sense because students often need explicit guidelines to keep their behavior on track (Lin, 2012). It suggests that course designers and instructors could help students set up clear learning goals by offering students enough time to pace their own study. At the same time, besides offering clear directions and instructions, instructors and course designers should offer students in-time assessments to assist students to monitor their learning outcomes at each stage. Students’ responses also reinforce the need of offering guidance to help them know what their learning goals are and how they could set up learning goals effectively.

**Offering opportunities for practice and instant feedback.**

Table 5 presents the results for the engagement element of offering opportunities to practice what students have learned and to obtain instant feedback.
Table 5

The number of students’ responses to the element of offering opportunities for practice and instant feedback

<table>
<thead>
<tr>
<th>Element of Engaging task</th>
<th>Segments</th>
<th>Week1</th>
<th>Week2</th>
<th>Week3</th>
<th>Week4</th>
<th>Week5</th>
<th>Week6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offering opportunities</td>
<td>online</td>
<td>n=46</td>
<td>n=35</td>
<td>n=30</td>
<td>n=21</td>
<td>n=22</td>
<td>n=25</td>
</tr>
<tr>
<td></td>
<td></td>
<td>41</td>
<td>2</td>
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</table>

n=participants who answered engagement survey in two learning sections;

Table 5 illustrates that most students who answered the surveys perceived that the learning tasks in this flipped Chinese module offered them opportunities to practice what they had learned. It also shows that there were fewer students who perceived this engagement element as “yes” in the fourth week and fifth week in the online segment and in the fourth week in the onsite segment. In the online segment, thirteen students perceived this element as “no” and eight students perceived this element as “somewhat” with eight students marking “somewhat” for two weeks and four students marking “somewhat” for three weeks. In the onsite segment, ten students perceived this element as “no” with two of them marking “no” for two weeks, and nine students perceived this element as “somewhat.”

In Table 5, it seems that the number of the students saying “no” is very low in both online and onsite segments. Also, according to the table, there seems to be no difference in the students’
perceptions of the two segments. Therefore, the students’ comments were analyzed to gain a further understanding of how they perceived this engagement element in different learning segments and the specific reasons for their perceptions.

**Online Segment.** Twelve of the thirty students who gave comments for this engagement element in the online survey mentioned that practicing in multiple ways (e.g., reading, writing, speaking and online discussion etc.) and both inside and outside of the classroom maximized the opportunity of applying the Chinese language and culture knowledge they had learned. In addition, ten students noted that giving them enough time to practice online and providing them with videos which can be played over and over again can help them practice well for the recording tasks. Additionally, two students mentioned that the way of learning language online can help them have a good understanding of Chinese and will help them in using and practicing the language (e.g., “For me, it seems to make me want to continue using the new language I have learned outside of these activities. The reason for this is that I have a strong understanding of these words by learning them online”). However, fifteen students who perceived this element as “no” or “somewhat” still indicated that merely doing online activities could not fully meet their needs for practicing the Chinese language. They claimed that the in-class activity was an essential step to make their Chinese well practiced. For instance, one of them commented that “I think I need additional practice (I like in-class practice!) to interact with people to feel totally comfortable with the pronunciations and remembering the words”.

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**Onsite Segment.** In the onsite module, forty of the fifty students who gave their comments for this engagement element commented that various ways of learning (e.g., whole group, with language partners, individual activities) and hands-on activities (e.g., creating their own dialogues) maximized the opportunities for them to apply the language knowledge they learned online. In addition, eleven students indicated that the worksheet with hints and notes allowed them to do follow-up practice at home. However, ten students indicated that they need more time to practice individually with the instructor.

In conclusion, students’ comments seem to indicate that having them practice in multiple ways and in both outside and inside contexts could maximize the opportunities to practice what they have learned. Additionally, having enough time in onsite practice is an essential factor that influenced students’ perceptions of this engagement element. However, it is important to note that the online learning content should be practiced in a timely manner to make sure students can remember what they have learned online while practicing in class. Furthermore, it shows that face-to-face interaction with peers and instructors is an essential part of engaging students in practicing what they have learned and obtaining instant feedback.

**Offering clear instructions and directions.**

Table 6 presents the results for the engagement element of offering clear instructions and directions.
Table 6
The number of students’ responses to the element of offering clear instructions and directions

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<th>Segments</th>
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</table>

n=participants who answered engagement survey

Table 6 illustrates that most students who answered the surveys perceived that this flipped Chinese module could offer them clear instructions and directions in both the online and onsite segments. However, in the online segment, two students perceived this element as “no” and seven students perceived this element as “somewhat”; in the onsite segment, two students perceived this element as “no” and one student perceived this element as “somewhat.” In Table 6 we see that the number of the students who perceived this element as “no” is very low in both segments. The details and the reasons for their perceptions in the online and onsite segments are discussed respectively below.

**Online segment.** In the online part, forty students gave their comments for this engagement element; among them, twelve students provided comments that seem to confirm that the online tasks offered them clear instruction and direction (e.g., “As always, the directions are clear and understandable”). In addition, twenty-four students indicated that the step-by-step
instructions were straightforward and easy to follow, and helped them concentrate on their learning tasks well (e.g., “[I] practiced in a variety of ways and all the tasks walked through steps.”). At the same time, it is important to note that two students indicated that “even though the reading was concise, we still were not sure how to answer some quiz questions.” Also, two students pointed out that the instructions for voice recording were not clear. For example, one student commented that “I was still confused about what we [were] actually supposed to record …. One page said record the first five numbers, but another page said record the phrases you just learned. I don’t know if that meant 12 numbers or the classroom directions.”

**Onsite segment.** Thirty-eight of fifty students who gave their comments for this engagement element in the onsite segment commented that the listing of learning activities on the board and modeling and taking notes on the board while doing practice helped to provide clear instructions and to guide their learning (e.g., “Outlined learning tasks and expectations, modeling can give good clarification, demonstration and clear direction.” “I enjoyed that they are on the board, it was nice to follow”). In addition, five students indicated that the instructor allowed question asking and checked their understanding, which helped their understanding of the content. Ten students also noted that the instructor and language helpers “walking around and helping was great.” However, one student reported that they were confused while doing the whole class review in the fourth week’s practice. She mentioned that “When practicing the new
words, we weren’t sure if we were supposed to speak the words or their meaning. We did both just in case.”

Students’ responses indicate that giving them step-by-step instructions is essential in offering clear instructions and directions in both the online and onsite segments. In the online segment, students’ comments on the instructions for the voice recording task reflects the idea that, to avoid confusion and frustration, course designers and instructors should define each learning task clearly enough (Strayer, 2012). In the onsite segment, students’ comments show that modeling, checking students’ understanding during the tasks and walking around to offer assistance and feedback are essential in offering students clear instructions and directions.

In addition, it can be seen from the results that clear directions and instructions are essential in offering students opportunities for setting up learning goals and in making the challenge of the tasks match with their skills and abilities. This finding reinforces the need of defining the course tasks clearly to avoid confusion and to help students concentrate well.

**Conclusion**

In this study, students’ comments show that the students have different engagement perceptions in different learning segments. In the online segment, learning tasks were different each week, and the students needed to learn the required information without direct guidance and instant feedback from the instructor; therefore, the students perceived that a fixed course format, clearly defined learning tasks, step by step instructions, and effective assessments were essential
in engaging them in learning. In the onsite segment, students’ primary learning need was to practice what they have learned online and to obtain instant feedback; therefore, the various kinds of interactive activities with instructor, peers and language helpers may have impacted the students’ engagement perceptions. Furthermore, it is important to note that while doing activities in class, students perceived that having a listed agenda and modeling were also important influential factors to their engagement perceptions.

Although the students had different engagement perceptions in different learning segments, the comments seem to indicate dynamic interactions between the students’ engagement perceptions in the two segments. This means that the students’ engagement perceptions in one learning segment might influence those in the other. According to the students’ responses discussed in the previous sections, it seems that when used together, the online and onsite learning segments of this flipped Chinese module could support students’ positive perceptions of the engagement elements reported in Wang’s (2013) study. This means that in this learning model, students perceived that they were well prepared for language learning before their onsite practice. In other words, they gained adequate information during the online segment and were more confident during onsite practice. Additionally, the students’ perceptions seem to show that providing opportunities for self-paced study outside of class could help them set up learning goals and have more time to practice. A stronger sense of autonomy may result in them pushing themselves to perform better and better to reach their learning goals. This finding supports
previous research which claimed that flipped instruction could maximize student engagement by enabling students to pace their own study outside of class and have more opportunities in applying the knowledge (Fulton, 2012; Papapoulos & Roman, 2010; Sams & Bergmann, 2012).

However, aligned with other research studies which found that flipped instruction does not always work efficiently in engaging all the students (Frederickson et al., 2005; Johnson & Renner, 2012; Strayer, 2012), the results of this study show that, simply having students study online and practice in class is far from enough. Further, this study’s results seem to correspond to Sams’s (2012) “mastery based flipped classroom” in which students were provided with multiple resources and choices while learning the required materials. More specifically, this study finds that to better meet students’ diverse learning needs, differentiated learning materials (e.g., videos, worksheets, pictures and real objects) and multiple learning modes (e.g., reading, writing, practicing in a whole group, with language partners, and individually) could be employed in both the onsite and online parts to offer students enough opportunities to practice what they have learned. Furthermore, this study reveals that face-to-face interaction with peers and instructors and instant feedback are essential factors that help facilitate students’ perceptions of the engagement elements. This finding supports the claim that when students receive continuous feedback and correction during interactions their engagement and achievement are maximized (Bloom, 1984).
Implications

This study contributes to our growing understanding of how flipped foreign language instruction could be better designed based on engagement principles.

Based on the findings, to better incorporate the five engagement elements in foreign language flipped instructional design, when develop learning materials, course designers and instructors should have a full consideration of its relevance to students’ future application and to make sure students have reasons to learn from the tasks (Egbert, 2010). Meanwhile, course designers and instructors need to be cautious of the distinct characteristics of different learning environments and take advantage of each learning segment to offer students as many choices and opportunities for meaningful tasks as possible. Additionally, instructors need to be aware of the difficulties students may encounter at each step, in order to offer students effective assistance and instant feedback.

Furthermore, this study emphasizes the importance of using both face to face practice and online learning in engaging students in foreign language learning. Based on the findings, it seems that the flipped instructional strategy could offer students more opportunities for applying the target language compared to using only an onsite or an onsite element. However, it also shows that the in-class time is limited sometimes to have students fully practiced what they have learned. Therefore, the findings of this study suggest that future studies work to uncover the patterns of how course designers and instructors could maximize the opportunities for physical
practice, for example, by structuring their in-class practice differently or developing follow up activities and materials which allow students to practice outside of class. This study also suggest more research is needed on how to involve students who have different learning styles in online language learning to have them well prepared before in-class practice.

Finally, it is clear that flipped instruction is not a universal approach that could solve every problem, and not every flipped strategy is the same. To better engage students in foreign language learning, course designers and instructors should not be constrained to only one type of instructional strategy, but they should seek to use as many types of instructional strategies and resources as possible to allow every student to be involved in their foreign language learning.
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APPENDIX

Student engagement perception survey

Name__________Section_________

Task________________

Instruction: Please mark the one answer for each statement that most closely corresponds to your opinion and complete the related open-ended question that follows if appropriate.

1. Does the content of this task meet your learning needs?
   □If yes, how does it do so?
   □If no, why doesn’t it? How could it do so?
   □If somewhat, please explain:

2. Is the challenge of the task appropriate for your abilities and skills? In other words, is it too hard or too easy for you?
   □If appropriate, what made it a good match for your abilities and skills?
   □If too easy, how could it better match your abilities and skills?
   □If it is too hard, what makes it hard to you?

3. Does the task offer you enough opportunities to set up learning goals for yourself?
   □If yes, how does it do so?
   □If no, how might it do so?
   □If somewhat, please explain:

4. Does the task provide enough opportunity for you to practice the skills or ideas presented and to obtain instant feedback?
   □If yes, in what ways?
   □If no, how could it do so?
   □If somewhat, please explain:
5. Does the task have clear enough instructions and directions for you to meet its goal?
   □ If yes, how does it do so?
   □ If no, how could it do so?
   □ If somewhat, please explain:

6. Other comments about this task:

   ____________________________