

Pre-Service Teachers' Task Engagement in Flipped Chinese Language and Culture Learning

Tingting Wang, Auburn University, USA*

 <https://orcid.org/0000-0002-5716-081X>

Haixia He, Ningxia University, China & Washington State University, USA

 <https://orcid.org/0000-0001-6136-691X>

ABSTRACT

The flipped classroom approach is becoming increasingly popular in higher education as a substitute for more conventional teaching methods. This study examines pre-service teachers' task engagement in flipped Chinese language and culture learning by employing three engagement facilitators as a theoretical framework. In this study, 50 American undergraduate pre-service teachers who were enrolled in an ESL methods course learned Chinese language and culture online outside of class and then engaged in practice and collaborative learning under the guidance of an instructor. Surveys, follow-up interviews, focus groups, and student documents were analyzed to explore how pre-service teachers perceived their task engagement in their learning tasks and the reasons for their perceptions. The main findings reveal that students are positively engaged in flipped learning when tasks match their abilities, offer opportunities to set their learning goals, provide instant feedback, and have clear learning goals, instructions, and directions. The results also indicate that a fixed course format, clearly defined learning tasks with step-by-step instructions, and effective assessment were essential in engaging students in learning. Conclusion and implications are generated for flipped instructional design and practice for foreign languages. Finally, limitations and future studies are discussed.

KEYWORDS

Chinese as a Foreign Language, Flipped Learning, Language and Culture Pedagogy, Pre-Service Teachers, Task Engagement

INTRODUCTION

Flipped learning is identified as an instructional strategy in which lectures or other direct instructional materials are delivered outside of class, typically using technology, and students participate in guided hands-on activities (e.g., small-group collaboration, jigsaw) face-to-face in class (Hamdan et al., 2013). This strategy changes the way students learn from the traditional in-class lecture and allows students to learn materials before class and apply the content of the learning materials during class

DOI: 10.4018/IJCALLT.323649

*Corresponding Author

This article published as an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>) which permits unrestricted use, distribution, and production in any medium, provided the author of the original work and original publication source are properly credited.

(van Alten et al., 2020). Flipped instructional strategies have been widely implemented in lectures and other direct instructional materials delivered outside of class by using technology, and in class where students participate in guided hands-on activities (e.g., small-group collaboration, jigsaw) (Hamdan et al., 2013; Zou et al., 2020). Over the past several decades, flipped learning has emerged as a popular alternative to teacher-centered instruction in the education realm (van Alten et al., 2019), particularly in the foreign language field (Mehring & Leis, 2018). However, simply having students study online and practice in class does not necessarily lead to student task engagement, which is one of the goals of language teaching (Egbert et al., 2021). Furthermore, students may not be engaged in flipped language and culture tasks because language learning involves more cognitive loads of memory, which may result in low interest, decreased academic performance, and negative school experiences, and thus leads to disengagement. Therefore, it is important to explore students' perceived engagement in flipped language learning to understand their actual classroom experience and explore ways to enhance their engagement.

To address these issues, the purpose of this study is to explore how pre-service teachers perceived themselves to be engaged in flipped Chinese learning tasks and what facilitated them to engage in such tasks.

LITERATURE REVIEW

The research literature defines flipped instruction as a student-centered teaching approach that has its foundation in student task engagement (Bergmann & Sams, 2012). Task engagement is a strong predictor of student academic achievement (Egbert et al., 2021; Hiver et al., 2021; Jang et al., 2012). It is closely related to students' learning persistence, interest, and successful learning (Appleton et al., 2008; Chapman et al., 2011; Egbert et al., 2021; Rumberger & Rotermund, 2012; Wang & Degol, 2014). Teachers can enhance student engagement by designing class activities based on task engagement facilitators. This section explores engagement facilitators from theoretical perspectives.

Definition of Task Engagement

All learning is based on tasks; a task designed for language learning should provide learners with the opportunity to acquire and utilize language knowledge and skills to achieve specific learning objectives related to effective communication (Egbert, 2004; Wang et al., 2022). The construct of language task engagement, deeply rooted in the concept of engagement, has recently gained considerable research interest. Literature has defined student task engagement in various ways. Generally, it is defined as students' involvement with their tasks (Meltzer & Hamann, 2005; Lutz et al., 2006). For example, Reeve (2012) explained that task engagement is "the extent of student's active involvement in a learning activity" (p. 150). In line with Reeve, Oga-Baldwin (2019) claimed that task engagement is "visible and invisible actions that learners take toward learning" (p. 9). In a language learning setting, task engagement happens when language learners are involved in completing a language activity even though they are challenged by the class activities (Mohamadi, 2017). This study defines task engagement as the deep involvement that face-to-face or online activities can generate during students doing their tasks.

Task Engagement Facilitators

Task engagement facilitators are the factors that can impact student engagement in tasks and that should be considered in the instructional design (Lam et al., 2012). They are essential in understanding how tasks can engage students in learning (Egbert et al., 2021). Several studies investigate task engagement facilitators in language learning. Wang (2015) proposed five principles to engage students by integrating them into the design of online foreign language and culture curriculum development for teacher education. The five engagement principles are: 1) meeting students' needs; 2) offering opportunities for students to set learning goals; 3) matching the challenges of tasks with students'

abilities and skills; 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. In a recent study, Egbert et al. (2021) explained six facilitators contributing to student task engagement in their Language Task Engagement Model (LTEM): authenticity, social interaction, learning support, interest, autonomy, and challenge. In other words, Wang's (2015) four engagement principles correspond with three of Egbert et al.'s (2021) LTEM facilitators, which are shown in Table 1.

Based on the overlap of Wang's (2015) four principles with Egbert et al.'s (2021) three LTEM facilitators, this study will examine authenticity, challenge, and learning support. These three facilitators of task engagement form the theoretical framework of this study.

Authenticity

Authenticity is defined as "learners' perceptions that the task is meaningful, valuable, and/or enjoyable" (Egbert, 2020). In the context of language learning, tasks designed with authenticity can be related to students' personal experiences (Davis & McPartland, 2012) or setting learning goals that are meaningful and relevant to students' interests and values. McTighe et al. (2020) also confirm that a task with authenticity should be relevant to its practical purpose and learning outcomes. To establish an engaging learning task, researchers further suggest that educators should first develop a good understanding of students' learning needs in real-life and design authentic learning experiences to meet a variety of students' needs, such as their cognitive, emotional, and social needs (Wang, 2015; Wang & Li, 2022).

Challenge

Researchers noted that challenge could be an engagement facilitator when it matches students' language learning abilities. (Crick, 2012; Czimmermann & Piniel, 2016). To match challenges with students' abilities, researchers suggest that language tasks should challenge learners at an optimal level to push them to put effort into accomplishing the task instead of being frustrated or disengaged (Aubrey et al., 2022). To create such tasks, instructors should create a safe and engaging learning environment (Csikszentmihalyi, 1990; Egbert, 2004), and the challenge of the learning tasks should be just above students' current skills and abilities (Lee, 2007).

Learning Support

Learning support from instructors can help learners engage in learning activities by building positive teacher-student relationships, providing structure to learning, and supporting students' individual needs (Shernoff et al., 2017). Teacher learning support, such as clear instructions and directions, rewards, visual material, and rubrics, is effective in supporting language learning engagingly (Curry & Lillis, 2004; Wang & Li, 2022). Kim (2018) explained that after students acquired knowledge and comprehension of content with clear instructions prior to face-to-face class, they became more engaged in applying what they had learned during in-class sessions. The importance of offering clear

Table 1. Overlap of principles of student engagement and facilitators of LTEM

Principles of Student Engagement (Wang, 2015)	Facilitators of LTEM (Egbert et al., 2021)
Offering opportunities for students to set learning goals	Authenticity
Matching students' abilities	Challenge
Providing clear instructions and directions for students to finish their learning tasks	Learning support
Providing students with opportunities to practice and to receive instant feedback	Learning support

instructions and directions is also emphasized by El Miedany and El Miedany (2019), who noted that teachers' clear instruction can help students have "better communication and efficiency in group activities" (p. 297). Further, feedback is an important aspect of learning support. Student engagement could be sustainable if teachers could give them pertinent, beneficial, approachable, substantial, and well-timed feedback (CAST, 2018; Meyer et al., 2014). When students are offered opportunities to practice the knowledge they have learned, instructors' timely feedback can evoke students' feelings of competence because it directly communicates their mastery of learning, leading to engagement (Fredricks et al., 2004; Niemiec & Ryan, 2009; Sailer et al., 2017).

Overall, the three primary facilitators discussed above can enhance task engagement when teachers integrate them into task components and are perceived by learners. One way to examine the task engagement facilitators is to explore how students perceive their level of engagement facilitated in a flipped learning environment.

Flipped Learning and Task Engagement

Flipped learning supports task engagement because it allows for active and interactive learning inside of the classroom and self-regulated learning outside of the classroom (Turan & Akdag-Cimen, 2020). It provides affordances that can be considered as facilitators to engage students. Specifically, in a flipped learning class, delivering content outside the classroom can meet students' diverse learning needs (Hamdan et al., 2013), and activities can be personalized to students' experiences and culturally and socially relevant to their lives (CAST, 2018). Further, flipped instruction offers learning content from both outside and inside classes that may better match the challenges with students' abilities and skills (Musallam, 2010) and help students set clear learning goals (Mayer, 2002; Zou et al., 2020). In addition, since flipped instruction has pre-class preparations, in-class activities, and after-class assignments, teachers can provide clear instructions in multiple platforms (e.g., video, learning management system) for students to finish their learning tasks step by step. The maximized interaction during face-to-face classes gives teachers more time to evaluate students' understandings and offer them instant feedback (Zou et al., 2020).

A good amount of research was conducted to investigate student engagement in the flipped learning environment. Based on the core dimensions of affect, cognition, and behavior of student engagement, Steen-Utheim & Foldnes (2018) explored student's perceptions of their learning experience in a flipped classroom and a lecture-based classroom during two-semester mathematics course by interviewing 12 first-year undergraduate students in a Norwegian business school. Their findings show that students perceived higher engagement in the flipped classroom and seven categories contributed to their engagement, including the commitment to peers, being recognized, feeling safe, instructor relationship, physical learning environment, learning with peers, and using videos to learn new content. Similarly, Lo and Hew (2021) conducted a study to develop a set of theoretical and empirical-based design principles to support student engagement in flipped mathematics learning by employing the three-dimensional framework of student engagement. Their study explored methods to support student engagement in flipped learning. Some research in the language domain also investigates the effect of flipped learning on student engagement. For example, Lian and Jia (2021) explored the effect of flipped language classrooms on student engagement from four dimensions (behavioral, cognitive, emotional, and social) by adopting a quasi-experimental design with mixed methods in a Chinese university. Their findings indicated student engagement could be enhanced by the quality of out-of-class learning materials and the integration of pre-class and in-class learning tasks. However, these studies did not provide information on what facilitates students' engagement in a flipped learning environment nor did they explore students' perceptions of their level of engagement in flipped learning tasks.

Based on the literature reviewed on flipped learning and task engagement, it seems that the flipped learning affordances such as authenticity, challenge and learning support would allow for task engagement. However, to the researchers' best knowledge, little research has been conducted on

how these facilitators could engage students in flipped learning classes designed and implemented under the guidance of task engagement facilitators in a language context. Even though there are many cases in which flipped learning can promote student engagement, to date, few specific researches have provided evidence on how students perceive their task engagement during flipped foreign language and culture learning, especially for pre-service teachers. To fill these gaps, this study aims to explore how pre-service teachers perceive themselves to be engaged and what facilitates them to engage in flipped Chinese learning. It also seeks to understand students' perceptions of flipped learning and outlines the features of engaging flipped language learning tasks to offer teacher educators support for flipped instructional design in the foreign language and culture teaching and learning.

RESEARCH QUESTIONS

Based on the literature discussed, this study addressed the following research questions based on the three task engagement facilitators:

1. How do pre-service teachers perceive their level of overall task engagement in online and face-to-face flipped tasks?
2. How engaged do pre-service teachers perceive themselves by each engagement facilitator in each set of tasks?
3. What facilitates pre-service teachers to engage in a flipped task?

METHODOLOGY

This study employs a case study based on an in-depth investigation of pre-service teachers' task engagement. As Saldaña and Omasta (2016) claim, "a case study focuses on a single unit—one person, one group, one organization, one event, and so on" (p. 148). By focusing on the group of pre-service teachers, this study explores their task engagement during a flipped Chinese learning module to offer implications for future engaging teacher education flipped task design.

Participants

Fifty American pre-service teachers (undergraduate students) enrolled in a flipped Chinese for teachers' learning module (part of a three-credit *Introduction to ESL for K-8 Teacher's* course) served as the participants in this study. The course was required for the teacher education degree in a large public university in the US Pacific Northwest. Participants were chosen purposefully because the first author of this study was the instructor of the Chinese module. Participants needed to finish the course for credits.

All the participants were undergraduate pre-service teachers in their final semester of coursework. These students were from 20 to 24 years old, with 46 females and four males. At the beginning of this course, the participants generally had limited knowledge of the Chinese language and culture; none of the 50 students reported previous learning experiences with Chinese, and only three of them had traveled to China.

The study passed all relevant ethical review processes and was conducted in accordance with the code of ethics. All participants were informed of the purpose and content of the study; consent was obtained from the participants, and the study was conducted voluntarily.

Module Description

The Chinese module lasted for six weeks, 45 minutes to one hour of the overall three hours that the ESL class met per week. This module had two parts: 1) an online self-learning session and 2) a face-to-face classroom practice session.

The online material was divided into six units and was delivered using an online learning platform (i.e., Canvas). The first unit was a general introduction, which was an overview of the whole module. The middle four units comprised three sections: 1) culture, 2) language, and 3) discussion. Figure 1 shows the main structure of the learning unit. In the culture section, students did a preview task, read brief articles, watched a video, and did a review task. They learned Chinese phrases in the language section and completed speaking and writing tasks.

To meet pre-service teachers' learning needs, in collaboration with the course instructor, the module designers designed six cultural 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 pre-service teachers obtain a more systematic understanding of the characteristics of Chinese culture. Figure 2 provides an example of the reading materials for Chinese students' classroom-related behaviors.

Figure 1. The structure of the learning unit

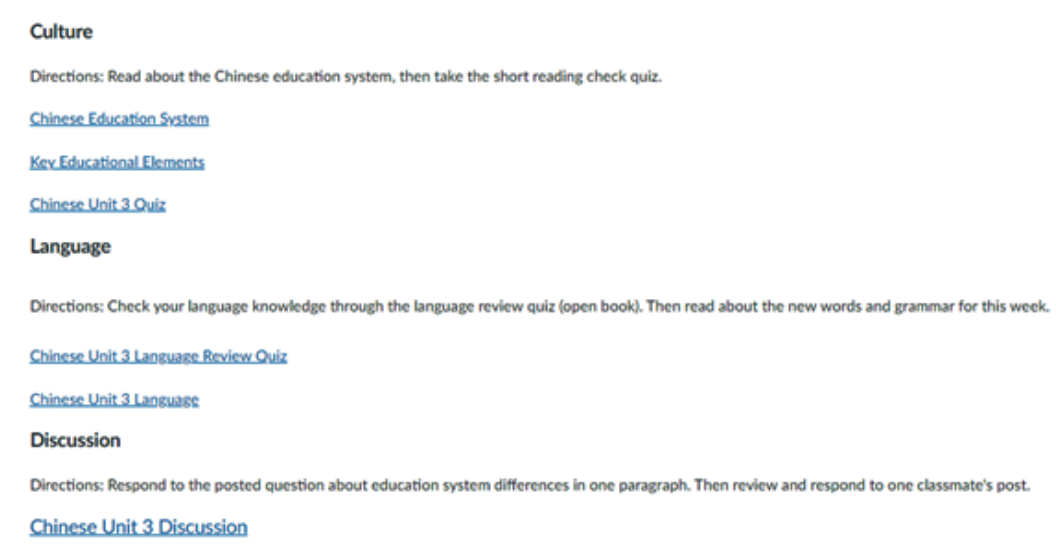


Figure 2. An example of the reading materials

Classroom Behavior

Though all teachers and students are different, the following descriptions introduce classroom behaviors that can often be found in more traditional Chinese classrooms.

Quiet

Most of the learning done in the Chinese classroom is done passively. Chinese students are taught to sit quietly and listen to their teacher rather than being encouraged to actively join the conversation. An emphasis on perfection also deters some students from speaking up, for fear of getting an answer wrong. Quiet students are also a byproduct of large class sizes. In language classes, choral repetition is often used.

Indirect

Chinese people often prefer indirect forms of communication. This style is used both to pay respect to the intelligence of the listener and to soften the blows of confrontation. It can, however, lead to confusion and frustration when communicating between cultures.

Structured

Chinese instruction is often lecture-based and meticulously organized. The direction of the lecture will always be clear and obvious with particular emphasis on relevance to the text.

Visual

Important information will always be written down for particular emphasis. This will easily allow students to take notes and know what aspects to focus on for review.

To match the task challenges with student abilities, the module designers divided the language materials into four stages in each unit, separating character and Pinyin learning into several discrete steps. The stages were supported by videos of a mouth making each sound, vivid pictures, and straightforward explanations to facilitate understanding. Figure 3 shows Chinese character learning; students were shown how to write Chinese characters in a stroke-by-stroke sequence. Students had the opportunity to obtain extra help in forming the characters by observing orthographic features with concrete explanations and interesting anecdotes of the words they learned.

The face-to-face sessions were created to offer students ample opportunities to practice what they had learned in the online learning units. Students had 50 minutes three times per week to practice with a Chinese instructor, and two language helpers. 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 practice, interactive listening, and speaking drills (e.g., the instructor asked questions in Chinese, and the students were required to answer the questions in Chinese to practice the grammar and vocabulary they learned online); 2) students worked on remembering Chinese characters by collaborating with their peers (e.g., grouping vocabulary that shared the same Chinese characters and reading a short passage), and; 3) students were paired to apply the phrases they learned to communicate with their language partners (e.g., creating and practicing the dialogues using phrases from a list of words they learned) or finish the language tasks. There was no face-to-face meeting for week three due to a holiday.

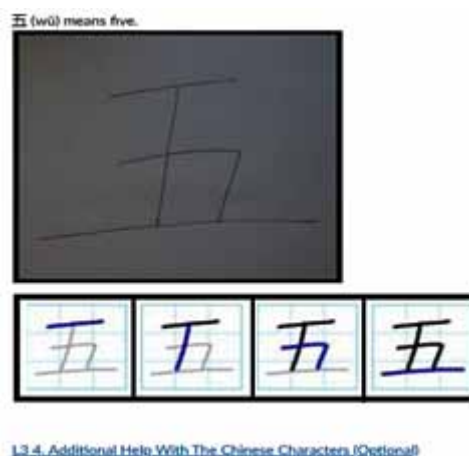
Data Collection

This study used three data sources. An engagement perception survey was employed to evaluate participants' perceptions of engagement. Follow-up individual interviews were used to explore the reasons for students' perceptions in the task engagement perception survey, while a focus group explored students' general engagement perceptions of the module in an open discussion in which students were provided opportunities to think about their comments critically and review their opinions from different perspectives.

Engagement Perception Survey

Each participant completed a survey after each week's online tasks and after the weekly in-class learning. This twice-weekly survey, presented in Appendix A, was to help the researcher understand students' perceptions of engagement facilitators in learning tasks in both online and physical settings.

Figure 3. Chinese character learning in a stroke-by-stroke order



In addition, the results of the surveys helped the researcher to design and modify the follow-up interview questions. The survey was composed of six questions; participants were required to mark one answer (i.e., “Yes” or “No” or “Somewhat”) for each statement that most closely corresponded to their opinion of each task engagement facilitator and complete the relevant open-ended question that followed. The survey was voluntary and students finished anonymously to ensure that the students were reassured that their comments would not influence their grades.

Interviews

In this study, two types of interviews (i.e., individual interviews and focus group interviews) were conducted to obtain a deeper understanding of the reasons for students’ task engagement perceptions. The individual interviews were conducted each week as a follow-up to the perceptions survey. Based on the findings of the engagement perceptions survey, the researcher chose the students with the most and least representative opinions from students’ answers, and then interviewed 25 volunteer students individually to obtain a further understanding of their opinions by asking open-ended questions (e.g., “Could you give a specific example for ...?”). Twenty-five individual interviews were conducted during the six weeks of the module.

Four focus group interviews were conducted at the end of the course to gather students’ opinions concerning their general engagement in this module, and participants were asked to discuss general open-ended questions. The 48 students were divided heterogeneously based on their answers to the engagement perception survey to allow students to think about their comments critically and review their opinions from different perspectives. There were four groups of focus group interviews; each group had 12 students. The focus group interviews lasted 20 minutes, and students were asked the following questions:

- Do you find the flipped Chinese language and culture module engaging? Why or why not?
- Were there any influential factors for your engagement perceptions in the online section?
- Were there any influential factors for your engagement perceptions in the face-to-face section?
- Do you prefer a flipped Chinese class or a traditional Chinese class?

A member-checking technique was employed upon transcribing the interviews to ascertain the results’ credibility.

Student Discussion Documents

Students were required to participate in an online written discussion concerning one topic every week as part of the online Chinese module. For example, in the final unit, students were asked to comment on the questions:

- 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?”

The course discussion documents were integrated with surveys and interviews to understand student engagement in the learning tasks.

DATA ANALYSIS

The findings from the engagement perception surveys were organized first. The numeric data was used to display the numbers of the students who perceived or had not perceived task engagement in

the course; students' comments were coded inductively to identify the significant patterns of their perceptions, then the categorized data were used to develop interview questions. The transcribed individual interviews were coded to identify themes indicating reasons for student engagement perceptions; the transcribed focus group interviews, performed by two researchers, were coded to identify themes indicating student general engagement perceptions toward the course. Students' responses in the discussions were coded to integrate with the surveys and interviews to help answer the questions.

Finally, themes with similar content were grouped together and received a label covering the shared content. To ensure the reliability of the data analysis, during the entire coding process, two experienced researchers examined the data, completed the coding independently, and then collaborated and built a consensus on the coding. The inter-coder reliability was 80%, and then the raters discussed and reconciled to reach a 100% consensus.

RESULTS AND DISCUSSION

Question 1: How do pre-service teachers perceive their level of overall task engagement in online and face-to-face flipped tasks?

Table 2 shows the percentage of students who perceived all three engagement facilitators positively (answering "yes" to all three facilitators) in each session each week.

The data presented in Table 2 illustrate that over 60% of the participants who took the online and face-to-face surveys perceived the three engagement facilitators positively.

Online Sessions

Twenty-six students in the focus groups expressed that the online learning tasks could engage them to some extent, yet they were not fully engaged. They indicated that earning grades could be their major driving factor to finish the online tasks; therefore, they "just tend to answer the questions." Although another 24 students corresponded to these perceptions by saying that "we just did the activities for a grade," they 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 enjoyable to learn!" It can be inferred from their comments that the learning tasks engage many students in setting clear learning goals (e.g., getting A grades).

Face-to-Face Sessions

Forty students across the four focus groups commented that overall, the activities in the face-to-face learning sessions were great fun, and their learning needs were met by practicing in various ways. They claimed that the face-to-face practice offered opportunities for instant feedback and helped 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 to facilitate their perceptions of the three engagement facilitators. Aligned with these comments, in engagement perception surveys,

Table 2. The number of students answering "yes" to all facilitators

Sessions	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Face-to-Face	40/50 80%	43/49 87%	no onsite practice	38/50 76%	46/50 92%	47/50 94%
Online	32/46 69%	27/35 77%	24/30 80%	14/21 67%	14/22 64%	21/25 84%

32 participants expressed their perceptions again by using 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, 10 students who did not report their overall engagement in the focus groups indicated in their surveys and discussions that the lack of in-class time would make them feel that the learning tasks were too quick and brief to digest.

In conclusion, according to the data, most participants who gave their comments perceived their overall engagement positively in both the online and face-to-face sessions. Based on the students’ comments, it seems that the online sessions engaged some students by meeting their learning needs and having them establish clear learning goals; the face-to-face sessions seemingly engaged students by offering instant feedback and the opportunity to practice in a real communicative context. In addition, in the face-to-face sessions, the instructor’s energy and enthusiasm seemed to be essential in facilitating students’ perceptions of their overall engagement.

Question 2: How engaged do pre-service teachers perceive themselves in each engagement facilitator by each set of tasks?

Questions 3: What facilitates pre-service teachers to engage in a flipped task?

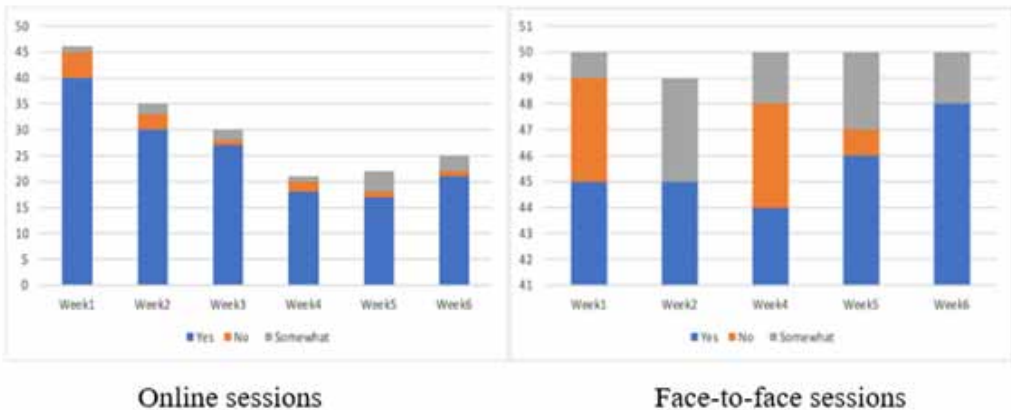
Authenticity: Setting Up Clear Learning Goals

Figure 4 presents the results of setting up clear learning goals for both online and face-to-face sessions.

According to student comments in the online learning sessions, the instant assessments provided a valuable opportunity for them to evaluate their learning outcomes and set learning goals in each unit. One student observed that the pre-test helped them focus, and the post-test allowed them to correct misunderstandings. In addition, 18 students found that the online learning tasks, including pre-tests, post-tests, voice recording, and handwriting exercises, provided them ample time to practice and refine their skills. By making mistakes and correcting them, they were able to solidify the correct answers in their minds and challenge themselves to perform well. Seven out of 13 students who perceived the Chinese language learning facilitator as “no” found the subject meaningless and had no learning goals. Six other students claimed they needed to learn about their learning goals, but completed all tasks.

In the face-to-face sessions, 19 students acknowledged that the whole class review offered an opportunity to reflect on their online learning outcomes and identify areas for improvement. Additionally, 20 students found it helpful when course expectations and agendas were listed before each face-to-face session. One student noted, “The listed activities gave me a clear plan, and then

Figure 4. Students’ responses to setting up clear learning goals



I could figure out my goal in each step.” By having a clear plan, they could set and develop their learning goals throughout the learning process.

Student feedback highlights the importance of prompt assessment and adequate time to refine their work before submitting their final drafts. This approach enables students to set clear learning goals and motivates them to practice and improve their performance. Listing the agenda also gives students a clear plan, allowing them to check their learning goals at each step. This is particularly important since students often require explicit guidelines to keep them on track (Lin, 2012). Additionally, the comments from students emphasize the need for guidance to help them understand their learning goals and how to set them effectively. These findings align with previous research by Egbert et al. (2021), Benson & Voller (2014), and Mercer (2019), which also highlight the importance of students setting up their learning goals.

Challenge: Matching Students’ Abilities and Skills

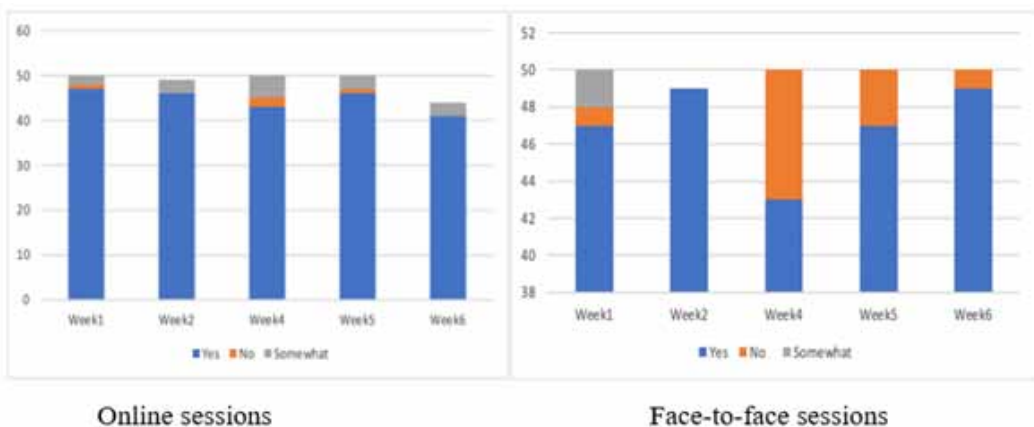
Figure 5 presents the results of matching students’ abilities and skills for both online and face-to-face sessions.

During the six-week online sessions, 20 out of 46 students who participated in a survey reported that online learning content provided them with ample time to digest knowledge by allowing them to review the content as many times as they wanted. This helped them to understand better and retain the information. Similarly, 16 students found that the learning content divided into several steps enabled them to follow better and maintain their knowledge. However, four students perceived submitting word recordings as a difficult task and felt stressed.

In the face-to-face sessions, 20 out of 50 students found that the fixed teaching format helped them concentrate on practicing new materials, while 12 students felt that each practice was moving appropriately. Furthermore, 16 students appreciated the language assistance and visual aids, which helped them when they were having difficulties. Twenty-two students found that learning the content online before face-to-face practice and having whole-class reviews before individual practice helped them build new knowledge of their language skills. However, seven students felt that practicing phrases learned in the third week during the fourth week’s course was challenging.

Students’ comments suggest that making the learning task simple and not giving them too much to remember at one time can help meet their abilities and challenges, which is in line with the design ideas suggested by Czimmermann and Piniel (2016) and Crick (2012) that challenge can facilitate student engagement if the level of task is appropriate.

Figure 5. Number of students’ responses to matching their abilities and skills



Learning Support: Offering Clear Instructions and Directions

Figure 6 presents the results of offering clear instructions and directions for both online and face-to-face sessions.

In the online part, 40 students provided feedback on the engagement facilitator. Of those, 24 found the step-by-step instructions easy to follow and helpful for concentrating on their learning tasks. However, two students needed help answering quiz questions, while two others found the instructions for voice recording unclear. In addition, students reported that feedback on the voice recording task highlighted the need for precise instructions.

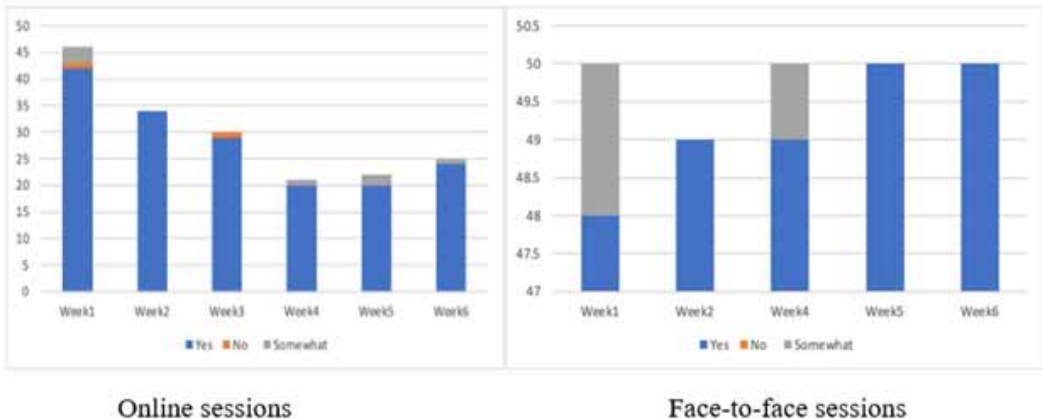
In the face-to-face sessions, 38 out of 50 students commented on the usefulness of learning activities listed on the board, modeling, and note-taking. Five students appreciated the opportunity to ask questions; 10 found the instructor and language helpers' support helpful. However, one student reported confusion during a class review. Students' comments reinforce the importance of timely feedback, walking around to offer assistance, and checking students' understanding.

These findings emphasize the importance of defining course tasks clearly to avoid confusion and enhance engagement. Students' feedback indicates that providing step-by-step instructions is essential in both online and face-to-face sessions. This aligns with Clark's (2015) research on flipped instruction, which emphasizes clear objectives and discussion content to promote engagement. Furthermore, students' feedback in class enhanced their attention and deepened their understanding of the online content. Instant feedback can promote perseverance, self-efficacy, and improvement, according to CAST (2018), while timely feedback can evoke feelings of competence and engagement, as per Sailer et al. (2017).

CONCLUSION AND IMPLICATIONS

This study provides evidence that pre-service teachers perceive that flipped learning tasks can engage them. Although students perceived the three task engagement facilitators in both online and face-to-face learning tasks, their self-reported comments indicate that the students' engagement perceptions in the two learning sessions are different. The finding indicates that the relevance of learning content to students' future application and a variety of learning resources are influential factors to engage students in the online sessions, while instant feedback and interaction are important engaging factors in the face-to-face sessions. In the online sessions, learning tasks were different each week and the students needed to learn the required information without direct guidance and instant feedback from

Figure 6. Number of students' responses to offering clear instructions and directions



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 face-to-face sessions, students' primary learning need was to practice what they had learned and, at the same time, obtain instant feedback; therefore, the various interactive activities with the instructor, peers, and language helpers may have impacted their engagement perceptions. This indicates that task engagement facilitators may look and be perceived differently in different tasks and contexts and that course designers and instructors must be cautious of the distinct characteristics of different learning environments and take advantage of each learning session to offer pre-service teachers as many choices and opportunities for meaningful tasks as possible.

This study provides information about both task engagement and flipped learning, which could provide more effective instruction for both face-to-face and online learning and provide significant practical implications for teaching practices. The positive results emanating from this study may encourage other educators and their institutions to adopt flipped learning tasks to enhance students' engagement levels and increase the quality of student learning and their university experience. Moreover, the findings based on the three facilitators addressed in the study add new insights into the literature on task engagement. Furthermore, this study can help teachers, instructional designers, and researchers better understand students' perceptions of task engagement facilitators in a flipped learning class and offer teacher educators support for flipped instructional design in the foreign language and culture teaching and learning. In addition, these findings and insights can also provide instructors with sound strategies to improve students' engagement in flipped learning.

LIMITATIONS AND FUTURE STUDIES

Several limitations should be acknowledged with some recommendations for future research. First, this research was conducted at only one university, so it may not be feasible to form generalizations resulting from the findings. It is suggested that future research test the use of flipped learning in different contexts, such as secondary schools. Second, the perceptions of the engagement facilitators in this study may be specific to language learning. In future studies, researchers can adopt these research findings as a basis to formulate questions about the influence of context and discipline on task engagement studies. Third, the researchers did not focus on engagement indicators showing signs of student engagement. It is suggested that future research explore student task engagement with both facilitators and indicators. Fourth, this study did not explain how the three facilitators interrelated with each other and what indicates students' engagement. It is suggested that future study explore the interrelation with each facilitator and examine the signs indicating students' task engagement (engagement indicators). Finally, the data collection of this study was mainly based on students' self-reporting, which may produce biased and subjective findings. However, by triangulating the data sources, the researchers uncovered patterns that supported one another. The researchers suggest that future studies investigate engagement facilitators in flipped learning by utilizing quantitative measures to obtain statistical results.

AUTHOR NOTE

The authors declare there are no potential conflicts with respect to research, authorship, and/or publication of this article.

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

The authors express their heartfelt thanks to Professor Joy Egbert, whose insightful advice and constructive feedback greatly helped to improve the manuscript.

Correspondence concerning this article should be addressed to Dr. Tingting Wang, Dept. of World Languages, Literatures, and Cultures, Auburn University, Auburn, AL, 36830, United States. Email: tzw0054@auburn.edu.

REFERENCES

- Appleton, J. J., Christenson, S. L., & Furlong, M. J. (2008). Student engagement with school: Critical conceptual and methodological issues of the construct. *Psychology in the Schools, 45*(5), 369–386. doi:10.1002/pits.20303
- Aubrey, S., King, J., & Almukhailed, H. (2022). Language learner engagement during speaking tasks: A longitudinal study. *RELC Journal, 53*(3), 519–533. doi:10.1177/0033688220945418
- Benson, P., & Voller, P. (2014). *Autonomy and independence in language learning*. Routledge. doi:10.4324/9781315842172
- Bergmann, J., & Sams, A. (2012). *Flip your classroom: reach every student in every class every day*. International Society for Technology in Education.
- CAST. (2018). *Universal Design for Learning (ULD) guidelines version 2.2* [graphic organizer]. Wakefield, MA: CAST. <http://udlguidelines.cast.org>10.1080/09588221.2015.1111910
- Chapman, C., Laird, J., Ifill, N., & KewalRamani, A. (2011). *Trends in high school dropout and completion rates in the United States: 1972–2009*. Compendium Report. NCES 2012–006. National Center for Education Statistics. <https://files.eric.ed.gov/fulltext/ED524955.pdf>
- Clark. (2015). The effects of the flipped model of instruction on student engagement and performance in the secondary mathematics classroom. *The Journal of Educators Online, 12*(1), 91–115. <https://files.eric.ed.gov/fulltext/EJ1051042.pdf>
- Crick, R. D. (2012). Deep engagement as a complex system: Identity, learning power and authentic enquiry. *Handbook of Research on Student Engagement*, 675–694.
- Csikszentmihalyi, M. (1990). *Flow: The Psychology of Optimal Experience*. HarperPerennial.
- Curry, M. J., & Lillis, T. (2004). Multilingual scholars and the imperative to publish in English: Negotiating interests, demands, and rewards. *TESOL Quarterly, 38*(4), 663–688. doi:10.2307/3588284
- Czimmermann, É., & Piniel, K. (2016). Advanced language learners’ experiences of flow in the Hungarian EFL classroom. In *Positive Psychology in SLA* (pp. 193–214). Multilingual Matters. doi:10.21832/9781783095360-009
- Davis, M. H., & McPartland, J. M. (2012). High school reform and student engagement. In S. L. Christenson, A. L. Reschly, & C. Wylie (Eds.), *Handbook of Research on Student Engagement* (pp. 515–562). doi:10.1007/978-1-4614-2018-7_25
- Egbert, J. (2004). A study of flow theory in the foreign language classroom. *Canadian Modern Language Review, 60*(5), 5549–5586. doi:10.3138/cmlr.60.5.549
- Egbert, J. (2020). The new normal? A pandemic of task engagement in language learning. *Foreign Language Annals, 53*(2), 314–319. doi:10.1111/flan.12452 PMID:32836324
- Egbert, J. L., Shahrokni, S. A., Zhang, X., Abobaker, R., Bantawtook, P., He, H., Bekar, M., Roe, M., & Huh, K. (2021). Language Task Engagement: An Evidence-Based Model. *TESL-EJ, 24*(4). <http://tesl-ej.org/wordpress/issues/volume24/ej96/ej96a3/>
- El Miedany, Y., & El Miedany, Y. (2019). Flipped learning. In *Rheumatology Teaching* (pp. 285–303). The Art and Science of Medical Education. doi:10.1007/978-3-319-98213-7_15
- Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research, 74*(1), 59–109. doi:10.3102/00346543074001059
- Hamdan, N., McKnight, P., McKnight, K., & Arfstrom, K. M. (2013). A white paper based on the literature review titled a review of flipped learning. *Flipped Learning Network*, 1–5. https://flippedlearning.org/wp-content/uploads/2016/07/WhitePaper_FlippedLearning.pdf
- Hiver, P., Al-Hoorie, A., & Mercer, S. (2021). *Student Engagement in the Language Classroom*. Multilingual Matters. doi:10.21832/9781788923613

- Jang, H., Kim, E. J., & Reeve, J. (2012). Longitudinal test of self-determination theory's motivation mediation model in a naturally occurring classroom context. *Journal of Educational Psychology*, 104(4), 1175–1188. doi:10.1037/a0028089
- Kim, J. Y. (2018). A study of students' perspectives on a flipped learning model and associations among personality, learning styles and satisfaction. *Innovations in Education and Teaching International*, 55(3), 314–324. doi:10.1080/14703297.2017.1286998
- Lam, S., Wong, B. P. H., Yang, H., & Liu, Y. (2012). Understanding student engagement with a contextual model. *Handbook of Research on Student Engagement*, 403–419. <https://www.ejmste.com/download/tell-us-esp-in-a-flipped-classroom-4922.pdf>
- Lee, C. D. (2007). *Culture, literacy, and learning*. Teachers College Press.
- Lianab, J., & Jiab, J. A. (2021). A Quasi-Experimental Study of Chinese University English Learners' Engagement in a Flipped Classroom. *29th International Conference on Computers in Education (ICCE 2021)*, 1, 493–502.
- Lo, C. K., & Hew, K. F. (2021). Developing a flipped learning approach to support student engagement: A design-based research of secondary school mathematics teaching. *Journal of Computer Assisted Learning*, 37(1), 142–157. doi:10.1111/jcal.12474
- Lutz, S. L., Guthrie, J. T., & Davis, M. H. (2006). Scaffolding for engagement in elementary school reading instruction. *The Journal of Educational Research*, 100(1), 3–20. doi:10.3200/JOER.100.1.3-20
- Mayer, R. E. (2002). *Learning and Instruction*. Pearson/Merrill/Prentice Hall.
- McTighe, J., Doubet, K. J., & Carbaugh, E. M. (2020). *Designing authentic performance tasks and projects: Tools for meaningful learning and assessment*. ASCD.
- Mehring, J., & Leis, A. (2018). *Innovations in flipping the language classroom: Theories and practices*. Springer. doi:10.1007/978-981-10-6968-0
- Meltzer, J., & Hamann, E. T. (2005). Meeting the literacy development needs of adolescent English language learners through content-area learning. Part Two: Focus on Classroom Teaching and Learning Strategies. *Education Alliance at Brown University*, 1–100. <http://search.proquest.com/docview/62070104/>
- Mercer, S. (2019). Language learner engagement: Setting the scene. *Second Handbook of English Language Teaching*, 643–660.
- Mohamadi, Z. (2017). Task engagement: A potential criterion for quality assessment of language learning tasks. *Asian-Pacific Journal of Second and Foreign Language Education*, 2(1), 1–25. doi:10.1186/s40862-017-0025-z
- Musallam, R. (2010). *The effects of screencasting as a multimedia pre-training tool to manage the intrinsic load of chemical equilibrium instruction for advanced high school chemistry students* [Doctoral dissertation]. University of San Francisco. <http://search.proquest.com/docview/742560032>
- Niemiec, C. P., & Ryan, R. M. (2009). Autonomy, competence, and relatedness in the classroom: Applying self-determination theory to education practice. *Theory and Research in Education*, 7(2), 133–144. doi:10.1177/1477878509104318
- Oga-Baldwin, W. Q. (2019). Acting, thinking, feeling making, collaborating: The engagement process in foreign language learning. *System*, 86, 102128. doi:10.1016/j.system.2019.102128
- Reeve, J. (2012). A self-determination theory perspective on student engagement. In *Handbook of Research on Student Engagement* (pp. 149–172). Springer US. doi:10.1007/978-1-4614-2018-7_7
- Rumberger, R. W., & Rotermund, S. (2012). The relationship between engagement and high school dropout. In *Handbook of Research on Student Engagement*, 491–513. doi:10.1007/978-1-4614-2018-7_24
- Sailer, M., Hense, J. U., Mayr, S. K., & Mandl, H. (2017). How gamification motivates: An experimental study of the effects of specific game design elements on psychological need satisfaction. *Computers in Human Behavior*, 69, 371–380. <https://doi.org/10.1016/j.chb.2016.12.033>
- Saldaña, J., & Omasta, M. (2016). *Qualitative research: Analyzing life*. Sage Publications.

Shernoff, D. J., Sinha, S., Bressler, D. M., & Ginsburg, L. (2017). Assessing teacher education and professional development needs for the implementation of integrated approaches to STEM education. *International Journal of STEM Education*, 4(1), 1–16. doi:10.1186/s40594-017-0068-1 PMID:30631669

Steen-Utheim, A. T., & Foldnes, N. (2018). A qualitative investigation of student engagement in a flipped classroom. *Teaching in Higher Education*, 23(3), 307–324. doi:10.1080/13562517.2017.1379481

Talan, T., & Gulsecen, S. (2019). The effect of a flipped classroom on students' achievement, academic engagement and satisfaction levels. *Turkish Online Journal of Distance Education*, 20(4), 31–60. doi:10.17718/tojde.640503

Turan, Z., & Akdag-Cimen, B. (2020). Flipped classroom in English language teaching: A systematic review. *Computer Assisted Language Learning*, 33(5-6), 590–606. doi:10.1080/09588221.2019.1584117

van Alten, D. C., Phielix, C., Janssen, J., & Kester, L. (2020). Self-regulated learning support in flipped learning videos enhances learning outcomes. *Computers & Education*, 158, 104000. doi:10.1016/j.compedu.2020.104000

van Alten, D. C. D., Phielix, C., Janssen, J., & Kester, L. (2019). Effects of flipping the classroom on learning outcomes and satisfaction: A meta-analysis. *Educational Research Review*, 28, 100281. doi:10.1016/j.edurev.2019.05.003

Wang, D., & Li, D. (2022). Exploring multiliteracies and multimodal pedagogies in Chinese language teaching: A teacher's one-year action learning circle. *International Journal of Computer-Assisted Language Learning and Teaching*, 12(1), 1–19. doi:10.4018/IJCALLT.298704

Wang, M. T., & Degol, J. (2014). Staying engaged: Knowledge and research needs in student engagement. *Child Development Perspectives*, 8(3), 137–143. doi:10.1111/cdep.12073 PMID:27087833

Wang, T. (2015). Engagement and teamwork in Chinese as a foreign language and culture curriculum development for teacher education. *International Journal of Computer-Assisted Language Learning and Teaching*, 5(2), 22–39. doi:10.4018/IJCALLT.2015040102

Wang, T., Zhang, X., & Wang-Bramlett, D. (2022). Engage students in Chinese language learning: Insights from teacher and student perspectives in a Chinese language study abroad program. *International Journal of Chinese Education*, 11(2). <https://doi.org/10.1177/2212585X221117579>

Zou, D., Xie, H., Wang, F. L., & Kwan, R. (2020). Flipped learning with Wikipedia in higher education. *Studies in Higher Education*, 45(5), 1026–1045. doi:10.1080/03075079.2020.1750195

APPENDIX

Student Engagement Perception Survey

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, it is 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:

Tingting Wang has training in student task engagement in language learning, language teacher education, computer-assisted language learning, and cross-culture communication. She participated in research and teaching projects, including the K-8 ESL teacher preparation program, the Online Chinese Language and Culture Course Design Project, and the Afghan e-Learning English Support Project (government-funded). She was funded by Auburn University in 2020 and by Princeton University in 2017 for the instructional design of Chinese online language courses and the research on Language learning in Extended Reality Environments and Chinese as a Heritage language learning.