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## **Learner Perceptions of Asynchronous Oral Computer-Mediated Communication Tasks Using Wimba Voice for Developing Their L2 Oral Proficiency**

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The present study, conducted at a large research university in the United States, addresses the perceptions of international teaching assistants (ITAs) regarding the role of asynchronous oral computer-mediated communication (CMC) tasks using Wimba Voice (WV), for developing their second language (L2) oral communication skills. With increased planning of oral production, access to instructor and peer feedback, and additional opportunities for self-reflection, asynchronous CMC technologies have been found to enable L2 learners to express their thoughts at their own pace and feel more relaxed and confident than in more threatening face-to-face situations (Sun, 2009). The findings of this study suggest that learners have a variety of opinions regarding the role of WV tasks in aiding them with their L2 speaking development, which may be a result of individual differences among them. Learners were also found to prefer the use of asynchronous WV-based tasks for interaction between peers rather than for their provision of opportunities to focus on form and meaning, which, paradoxically, was a large part of the methodological rationale for the inclusion of such activities in the course curriculum.

### **INTRODUCTION**

With the introduction of emerging technologies, SLA teachers and researchers are concerned with how to best implement new technology-based tasks into the L2 classroom so that they have the most positive impact on student language learning (Levy & Stockwell, 2006). Given the proliferation of CMC technologies that target L2 learners' speaking skills, there is a great potential for technology-based tasks to help learners develop their L2 oral performance (Zhao, 2003). Learner perceptions about how different technologies help to develop L2 skills is a topic worthy of exploration since students will undoubtedly have different reactions to such tasks.

This study examines the use of Wimba Voice (WV) in an English communication skills course for ITAs, specifically investigating students' perceptions about how asynchronous oral tasks created in WV helped or hindered the development of their oral communication skills. WV was incorporated as a methodological choice in the present study because unlike synchronous CMC tools (e.g., Adobe Connect and Skype), which provide opportunities for real-time interaction and negotiation of meaning (Lomicka, Lord, & Manzer, 2003), asynchronous CMC is less face-

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threatening, allows students to learn at their own pace, enables self-reflection, and affords additional feedback opportunities.

There have been few investigations examining the role of WV-based activities for developing learners' oral communication skills. The current study will aim to address this gap by inquiring about the effectiveness of asynchronous oral CMC tasks using WV for developing learners' L2 oral communication skills.

## **ASYNCHRONOUS CMC, WIMBA VOICE AND THE DEVELOPMENT OF L2 SPEAKING SKILLS**

CMC promises to enhance language learners' communicative language skills; video conferencing, voice blogs, and voice discussion boards have been found to offer a number of benefits for the development of L2 oral skills (Sun, 2009; Zhao, 2003). In particular, these technologies can encourage students' participation and foster extensive oral production in the target language (e.g., Beauvois, 1997; Rosen, 2009), enhance L2 motivation, collaboration, and learner autonomy (Sun, 2009), and lead to effective language learning (Beauvois, 1998).

Certain asynchronous CMC tools offer advantages for language learners, such as providing additional practice for students enrolled in large classes with limited in-class speaking opportunities. Since many traditional classrooms provide students limited feedback opportunities, asynchronous oral CMC can allow for additional instructor and peer review (Meskill & Anthony, 2005). Asynchronous oral CMC tools can also enable L2 learners to express their thoughts at their own pace and feel more confident than in face-to-face situations (Sun, 2009; Zhao, 2003).

One such asynchronous CMC platform is Wimba Voice (WV), a suite of online tools including Wimba Voice Board (WVB), Wimba Voice Presentation (WVP), Voice Authoring, Voice Email, and Voice Podcaster. Figures 1 and 2 show the interfaces of WVB and WVP respectively.

Both WVB and WVP involve different simultaneous tasks, such as listening and recording using an audio-recording feature, or watching a video and mirroring the speaker's intonation. Such asynchronous oral CMC tools allow students to pause, play, listen to, record, and re-record their speech, and have been found to offer a shift from teacher-centered to student-centered learning (Fotos & Browne, 2004). Without the pressure brought on by demands of the face-to-face setting, asynchronous CMC environments may also allow students to develop their metacognitive strategies, reflect on errors and brainstorm ways to improve speaking skills, perhaps leading to increased L2 motivation (Xie & Sharma, 2004). Some studies have even shown positive correlations between student motivation and the learning environment, suggesting that an effective environment for learning can inspire students to learn a target language (Chang & Shu, 2000).

The dearth of research on the role of WV-based tasks includes studies that focus primarily on student perceptions of WV technology for oral skill development (Kabata, Wiebe, & Chao, 2005;

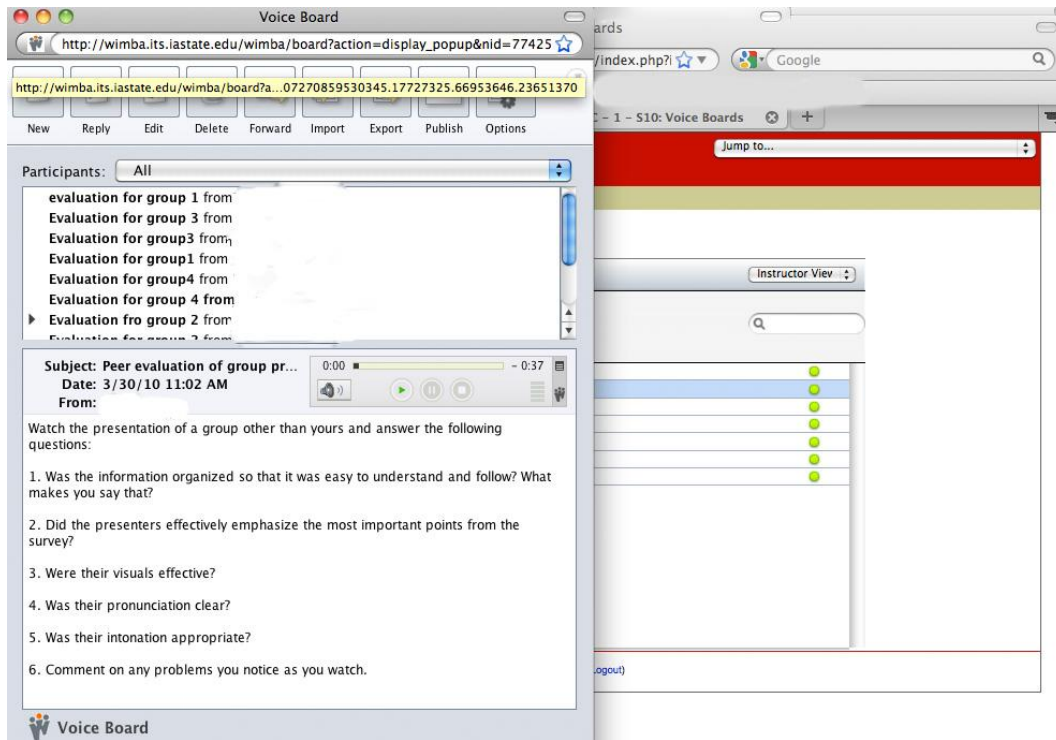


Figure 1. Screenshot of the Wimba Voice Board interface and sample assignment

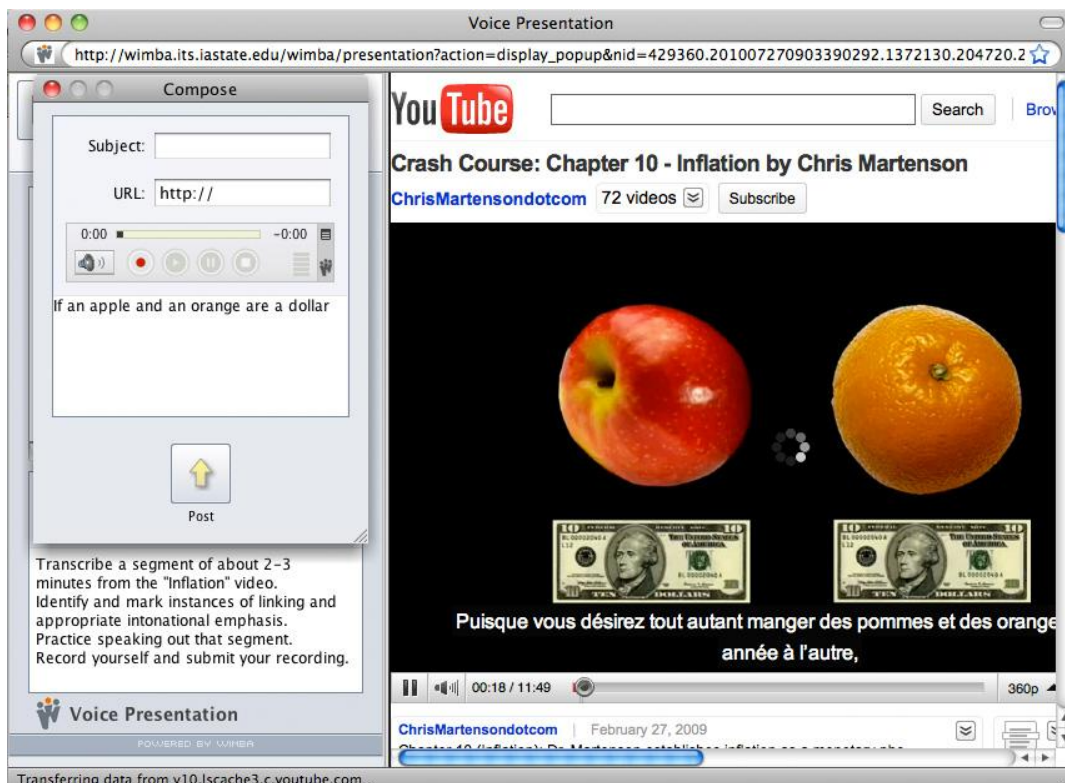


Figure 2. Screenshot of the Wimba Voice Presentation interface and sample assignment

McIntosh, Braul, & Chao, 2003; Rosen, 2009; Wang, 2006) and the role of WV in reducing language anxiety (Charle Poza, 2005; Cho & Carey, 2001). However, a survey of such research has revealed that many studies (e.g., Cho & Carey, 2001; Kabata et al., 2005) lacked clear methodological designs, making it difficult to draw definitive conclusions regarding the validity of their claims. While one's intuition may lead a person to the conclusion that WV tasks offer learners additional opportunities to improve their L2 oral performance and confidence by providing additional time for speech planning, self-reflection, and feedback; there is little empirical research on the role WV-based tasks in learners' perceptions of their oral performance. As such, the goal of the present study is to address this lacuna by answering the following research question: What are students' perceptions of WV's effectiveness as a tool for the development of their L2 oral proficiency?

## **METHODOLOGY**

The research question was addressed in a descriptive study, employing quantitative and qualitative data. It was conducted at a large public university in the USA and involved ITAs enrolled in a graduate-level English course designed to help improve their oral communication skills, specifically that of vocabulary, grammar, pronunciation, fluency, and listening.

### **Participants**

The participants included ten non-native speakers (NNSs) of English who had not achieved a Level 1 (fully certified level) on the SPEAK/TEACH test, a test that assesses the effectiveness of communicative spoken English in everyday university classroom situations (Iowa State University, 2010). All ten students were Asian, eight of them Chinese and two Korean, between the ages of 20 and 30, and had all studied English between four and 20 years.

### **Context**

The course met twice a week for 80 minutes over the period of a 17-week semester, in which students were required to give three live videotaped presentations, provide self- and peer evaluations of these presentations, and complete weekly homework activities. The first time such activities were integrated into this course began in Week 7, when WVB and WVP activities became part of the regular class schedule.

### **Materials**

#### ***WV-based tasks***

The two example WV-based tasks presented in the literature review (page 3) are examples of activities used throughout the semester to facilitate students' oral skills development. In the first activity, learners were prompted to watch their classmates' group presentations and orally respond to a sequence of questions provided by the instructor (see Figure 1). Six similar activities using WVB were implemented throughout the semester. In a second type of activity (see Figure 2), which was implemented twice throughout the semester using WVP, students had

to watch a video presentation on YouTube, paying close attention to the speaker's use of linking and intonational emphasis, transcribe a short segment of the video, and mirror the presenter's oral discourse.

### *Pre- and post-surveys*

The materials consisted of a pre- and post-survey partially adapted from a survey on technology use for language learning (Chapelle, 2008). Both contained four sections with items on a 5-point Likert scale (with 5 being "strongly agree", 4 - "agree," 3 - "neutral," 2 - "disagree," and 1 - "strongly disagree") and one section with open-ended items, inquiring into student perceptions of their use of technology for improving their L2 speaking skills. Additionally, the pre-survey contained questions about participants' backgrounds and the post-survey asked them to evaluate the usefulness of technology-based tasks using WV for improving their oral communication skills (see Appendices A and B). Both surveys were created and administered to the students in the Moodle course management system.

### *Semi-structured interviews*

At the end of the semester, semi-structured interviews were conducted with students to elaborate and clarify their responses to the surveys (Oxford, 1996). These five-to-ten-minute interviews asked students to focus on their most positive and negative experiences completing WV activities, their overall perceptions of the WV tasks, and whether or not they would recommend the use of WV to future courses.

### **Procedure**

After introducing the study to participants and obtaining their informed consent, the researchers administered the first survey during week 11 of the semester, shortly after WV was introduced to the students. The second survey and semi-structured interviews with students were completed four weeks later. Eight of the original ten participants completed both surveys and partook in an interview.

### **Analysis**

Since the small sample size did not warrant the use of inferential methods, the data obtained from participants' responses to the surveys were analyzed using descriptive statistics, which have routinely been reported in other CALL studies with small sample sizes investigating similar aspects (see, for example, Chang, 2007; Hegelheimer, 2006; Hincks & Edlund, 2009; Kissau, McCullough, & Pyke, 2010; Sydorenko, 2010). For responses to the Likert-type items, a five-point scale ranging from "strongly disagree" to "strongly agree" was used. Both positively and negatively phrased items were included in order to eliminate response bias (Dörnyei, 2010), but for data analysis, the point values of the negatively phrased items were inverted so that high values showed consistently positive attitudes and low values demonstrated the contrary. In addition to the use of descriptive statistics, students' discourse during semi-structured interviews was analyzed qualitatively. To answer the research question (What are students' perceptions regarding the effectiveness of WV as a tool for the development of their L2 oral proficiency?),

interview transcripts and survey responses about the effectiveness of WV-based tasks for developing their oral L2 skills were analyzed for recurrent themes.

## RESULTS AND DISCUSSION

### The Usefulness of WV-Based Tasks for Improving L2 Pronunciation

To answer the research question, descriptive statistics for students' responses to the 5-point Likert-scale items from one section of the pre- and post-surveys were calculated and analyzed. Statements 1 and 2, below, whose descriptive statistics are displayed in Table 1, elicited students' perceptions regarding technology's usefulness for improving their L2 pronunciation.

**Statement 1:** Recording my voice using Wimba has improved my pronunciation.

**Statement 2:** My pronunciation did NOT improve by using Wimba in this class.

The total mean for these two statements in the post-survey ( $M=3.83$ ,  $SD=0.95$ ) decreased compared to that of the pre-survey ( $M=4.33$ ,  $SD=0.78$ ), and this change was strong based upon the total large effect size ( $d=-0.60$ ). Six of the nine participants maintained their opinions of technology's usefulness for improving their L2 pronunciation skills after using WV, whereas the other three participants' opinions became less favorable.

Table 1. Descriptive statistics for technology's usefulness for improving L2 pronunciation

Statement	Pre $M$	Pre $SD$	Post $M$	Post $SD$	$M$ diff ( $x_1-x$ )	Cohen's $d$
1	4.44	0.73	3.89	0.93	-0.60	-0.80
2	4.22	0.83	3.78	0.97	-0.40	-0.50
Total $M$	4.33	0.78	3.83	0.95	-0.50	-0.60

The most noticeable decline came from participant 1, whose ratings of the usefulness of WV tasks for improving L2 pronunciation fell from 5("strongly agree") in the pre-survey to 2("disagree") in the post survey. Furthermore, participants 9 and 10 showed similar decreases from 5("strongly agree") to 4("agree") and 3 ("neutral"). However, the majority of students did not change their responses to the items in this section of the surveys.

### The Usefulness of WV for Receiving Instructor Feedback

The descriptive statistics for statement 3, below, are displayed in Table 2, providing information about students' perceptions regarding technology's usefulness for getting feedback from their instructor on their pronunciation.

**Statement 3:** Using Wimba in this class to get feedback from my instructor on my pronunciation was helpful.

The mean for this statement in the post-survey ( $M=4.44$ ,  $SD=1.01$ ) decreased compared to the mean for the pre-survey ( $M=4.22$ ,  $SD=0.67$ ), but this change was not significant ( $d=-0.20$ ). Table 2. Descriptive statistics for technology's usefulness for getting pronunciation feedback from instructor

Statement	Pre $M$	Pre $SD$	Post $M$	Post $SD$	$M$ diff ( $x_1-x$ )	Cohen's $d$
3	4.44	1.01	4.22	0.67	-0.20	-0.20

While five of the nine participants maintained their opinions of technology's usefulness for getting feedback from their instructor about their pronunciation skills, three of the others' opinions became less positive, going from 5 ("strongly agree") to 3 ("neutral") and one participant's opinions became more positive after using WV, changing from 2 ("disagree") to 4 ("agree").

### The Usefulness of WV for Improving L2 Speaking Skills

The descriptive statistics for statement 4, below, are displayed in Table 3, which provides information about students' perceptions of technology's usefulness for improving their L2 speaking skills in general.

**Statement 4:** Using Wimba was a more effective to improve my speaking skills in English than without Wimba.

The mean for this statement in the post-survey ( $M=3.67$ ,  $SD=1.12$ ) decreased compared to the mean for the pre-survey ( $M=4.22$ ,  $SD=0.67$ ), and this change was strong based upon the large effect size ( $d=-0.80$ ).

Table 3. Descriptive statistics for technology's usefulness for improving general L2 speaking skills

Statement	Pre $M$	Pre $SD$	Post $M$	Post $SD$	$M$ diff ( $x_1-x$ )	Cohen's $d$
4	4.22	0.67	3.67	1.12	-0.60	-0.80

While five of the nine participants once again maintained their opinions, four of the other participants' opinions became less positive, changing from 4 ("agree") to 2 ("disagree") after using WV.

### Attitude Toward WV-Based Tasks for Improving L2 Speaking Skills

The descriptive statistics for statement 5, below, are displayed in Table 4, offering evidence of students' attitudes toward Wimba for improving their general L2 speaking skills.

**Statement 5:** I want to continue to use Wimba to improve my speaking skills.

The mean for this statement in the post-survey ( $M=3.78$ ,  $SD=0.97$ ) increased as compared to that of the pre-survey ( $M=3.44$ ,  $SD=1.01$ ), but this change was not strong ( $d=0.33$ ).

Table 4. Descriptive statistics for attitude toward Wimba for improving L2 speaking

Statement	Pre $M$	Pre $SD$	Post $M$	Post $SD$	$M$ diff ( $x_1-x$ )	Cohen's $d$
5	3.78	0.97	3.44	1.01	0.33	0.33

While four participants maintained their attitudes of WV for improving their speaking skills, only one participant became less approving, changing his response from 3("neutral") to 2("disagree"). The four remaining participants' opinions all became more commendatory after using WV: two went from 2("disagree") to 3 ("neutral"), one from 3 ("neutral") to 4("agree"), and one from 4 ("agree") to 5("strongly agree").

### Effectiveness of WV-Based Tasks for Improving L2 Oral Proficiency

In addition to descriptive statistics from the pre- and post-surveys, students' discourse during semi-structured interviews and responses to open-ended questions in the post-survey were used to answer the research question. The analysis of interview transcripts and survey responses revealed that students had both positive and negative perceptions concerning the effectiveness of WV tasks for the development of their oral English skills. As noted by the majority of students, three main advantages of the class activities in which WV was used were its (a) convenience and user-friendliness, (b) facilitation of noticing and self-diagnosis of errors, and (c) interactivity that enabled an asynchronous exchange of ideas. For example, one participant enjoyed using WV for numerous activities because it was very easy to use and did not require computer installation. According to another participant, the technology-based activities incorporating WV gave him a chance to exchange ideas with his classmates and to receive feedback. Moreover, another participant found WV-tasks to be facilitative of error noticing, and by allowing him to listen to his recorded speech; he was able to realize his mispronunciation of certain words.

Concurrently, students also reported several shortcomings of technology-based tasks using WV, which were divided into three main categories: (a) technical problems with WV, (b) WV's similarity to other recording software, and (c) the absence of real-time interaction that could facilitate meaning/form negotiation. The main technical problems experienced by participants included the difficulty of saving recordings, the inability to edit recordings once they were posted, and the impossibility of accessing WV from outside Moodle. With regards to the third main limitation of WV tasks, namely the absence of real-time interaction that could facilitate



negotiation of meaning, one student opined that, for him, interacting with a native English speaker would have been much more useful to improve his L2 speaking skills than using WV.

The aforementioned results indicate that students have a wide range of perceptions about the utility of WV tasks for the development of their oral proficiency in English. On one hand, participants' perceptions of technology for helping them to improve their pronunciation, get feedback from their instructor, and improve their L2 skills in general overall declined after using WV-based tasks. On the other hand, participant attitudes toward technology, specifically the desire to continue to use WV-based tasks to improve their L2 skills, increased. Despite these changes, many individuals did not alter their perceptions of technology's usefulness for helping them to improve their L2 oral proficiency after using WV. These mixed results may suggest that individual student differences play a role in determining perceptions regarding the usefulness of WV for language learning.

Another interesting theme that emerged from participants' responses in the interviews was a desire or preference for synchronous communication with fellow classmates. Despite the fact that WV was chosen for use in this particular English communication-skills course in part due to its asynchronous CMC features, which allowed users to reflect upon the form and meaning of their utterances; many students reported interactively using WV to exchange messages and ideas with peers. As one student states, "it's very good for recording, for exchange of value or ideas... and the most important thing is it can give us a chance to exchange our ideas to know what my classmates think of my speaking." For this participant, the most attractive feature of WV lay not in its ability to allow him to reflect on his L2 performance, but rather in its facilitation of message transmission and interaction between friends. Indeed, when asked if he ever listened to his own speech, another participant claimed he did only when his instructor forced him to do so for homework. The fact that this student uses the term "forced" to describe his use of WV for reflecting on his speech indicates that he found this to be an unfavorable experience. On the other hand, he also reported enjoying the act of using WV to reply to other students' posts, which he found "fun" and "interesting." Special attention to the descriptive language that participants use to portray their experiences using WV can give teachers and researchers greater insight into how to best exploit language learning tasks in asynchronous CMC environments to facilitate students' L2 motivation and learning.

## CONCLUSION

Based on the results from the study, several conclusions can be drawn. First, participants appear to have an array of perceptions regarding the efficacy of WV tasks for the development of their L2 oral communication skills. Although students' overall perceptions of technology's usefulness for improving their L2 pronunciation and general L2 speaking skills, as well as for providing additional feedback opportunities, decreased after using WV-based tasks, their overall eagerness to continue using technology to develop their L2 speaking skills improved. Despite the possibility that these variations may be caused by multiple factors, it seems possible that one of the main reasons for the disparity in their perceptions could be the result of individual differences.

Also noteworthy were participants' reported preferences for using WV to facilitate communication with fellow classmates. Despite the fact that WV was used as a methodological choice for asynchronous oral CMC, many individuals reported that, for them, the strengths of WV lay in its ability to promote interaction among classmates. This preference, despite running counter to the rationale for including asynchronous activities that allow for self-reflection and error diagnosis, may offer teachers and researchers insight into how CMC tasks that focus on improving oral communication skills can be best exploited to be enjoyable for students and to motivate them to improve their L2 speaking ability.

As all classroom-based research involving semester-long intact classes, this study has certain limitations. The first pertains to the difference between learner perceptions of their L2 proficiency and their actual development in the L2. Because the study used only self-reported data, it was not possible to ascertain whether students' perceptions of their development correlated with their actual progress. Consequently, further research is necessary to examine whether the use of certain WV tasks in an L2 classroom improves language learners' actual oral performance and language proficiency. A second limitation pertained to the fact that, since WV was introduced to learners during week 7 of the semester, learners were given only moderate opportunities to interact with WV activities. As a result, students' reflections were perhaps less comprehensive than if they had been given more time to interact with this technology.

More extensive research can promote our understanding of the potential of activities created in WV for developing learners' L2 oral proficiency. The examination of this potential is not only applicable to face-to-face courses that focus on the development of L2 oral communication skills, but is also vital for online/hybrid and distance language courses, where participants do not meet face-to-face every day. Some existing research shows that learners enrolled in distance language courses have to overcome logistical issues that limit their interaction among learners and with the instructor, which precludes the formation of meaningful relationships (Lai, Zhao, & Li, 2008). In this case, the use of WV for language learning tasks in online/hybrid and distance language courses must be examined in greater detail to determine if and how this tool may provide increased opportunities for collaboration, feedback, and self-reflection; which can have a significant impact on the development of students' oral L2 proficiency and motivation.

## REFERENCES

- Beauvois, M. (1997). Computer-mediated communication (CMC): Technology for improving speaking and writing. In M. D. Bush, & R. M. Terry (Eds.), *Technology enhanced language learning* (pp. 165-184). Lincolnwood, IL: National Textbook Company.
- Beauvois, M. (1998). Conversations in slow motion: computer-mediated communication in the foreign language classroom. *The Canadian Modern Language Review*, 54(2), 198–217.
- Chang, C. P., & Shu, M. Z. (2000). *The experiment research for English teaching with small class of junior high school.* (The Ministry of Education, *The 2000 Academic Year Research Project of Taiwan High School Technician Conference*).
- Chang, L. L. (2007). The effects of using CALL on advanced Chinese foreign language learners. *CALICO Journal*, 24(2), 331-353.
- Chapelle, C. (2008). Survey on technology use for language learning [Survey]. Unpublished instrument, Department of English, Iowa State University, Ames, IA, USA.
- Charle Poza, M. I. (2005). *The effects of asynchronous computer voice conferencing on learners' anxiety when speaking a foreign language.* Unpublished doctoral dissertation, West Virginia University.
- Cho, S., & Carey, S. (2001). Increasing Korean oral fluency using an electronic bulletin board and Wimba-based voiced chat. *The Korean Language in America*, 6, 116-128.
- Dörnyei, Z. (2010). *Questionnaires in second language research: Construction, administration, and processing* (2nd ed.). New York: Routledge.
- Fotos, S., & Browne, C. (2004). *New perspectives on CALL for second language classrooms.* London; Lawrence Erlbaum Associates.
- Hegelheimer, V. (2006). Helping ESL writers through a multimodal, corpus-based, online grammar resource. *CALICO Journal*, 24(1), 5-32.
- Hincks, R., & Edlund, J. (2009). Promoting increased pitch variation in oral presentations with transient visual feedback. *Language Learning and Technology*, 13(3), 32-50.
- Iowa State University. (2010). *Overview of the SPEAK/TEACH test.* Retrieved May 1, 2010, from [http://www.grad-college.iastate.edu/speakteach/testing\\_information/overview.php](http://www.grad-college.iastate.edu/speakteach/testing_information/overview.php)
- Kabata, K., Wiebe, G., & Chao, T. (2005). Challenge of developing and implementing multimedia courseware for a Japanese language program. *CALICO Journal*, 22(2), 237-250.

- Kissau, S., McCullough, H., & Pyke, G. J. (2010). "Leveling the playing field." The effects of online second language instruction on student willingness to communicate in French. *CALICO Journal*, 27(2), 277-297.
- Lai, C., Zhao, Y., & Li, N. (2008). Designing a distance foreign language learning environment. In S. Goertler & P. Winke (Eds.), *Opening doors through distance language education: Principles, perspectives, and practices* (pp. 85-107). San Marcos, TX: Computer Assisted Language Instruction Consortium (CALICO).
- Levy, M., & Stockwell, G. (2006). *CALL Dimensions*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Lomicka, L., Lord, G., & Manzer, M. (2003). Merging foreign language theory and practice in designing technology-based tasks. In C. M. Cherry (Ed.), *Dimension* (pp. 37-52). Valdosta State University: SCOLT Publications.
- McIntosh, S., Braul, B., & Chao, T. (2003). A case study in asynchronous voice conferencing for language instruction. *Education Media International*, 40, 63-74.
- Meskill, C., & Anthony, N. (2005). Foreign language learning with CMC: forms of online instructional discourse in a hybrid Russian class. *System*, 33(1), 89-105.
- Oxford, R. L. (1996). *Language learning strategies around the world: Cross-cultural perspectives*, (Ed.). Honolulu, HI: University of Hawaii Press.
- Rosen, L. (2009). Reaching students: A hybrid approach to language learning. In R. Oxford & J. Oxford (Eds.), *Second language teaching and learning in the Net Generation* (pp. 64-84). Honolulu: University of Hawai'i, National Foreign Language Resource Center.
- Sun, Y.-C. (2009). Voice blog: An exploratory study of language learning. *Language Learning & Technology*, 13(2), 88-103.
- Sydorenko, T. (2010). Modality of input and vocabulary acquisition. *Language Learning and Technology*, 14(2), 50-73.
- Wang, T. (2006). *The effects of Wimba on learning: A students and faculty perspective*. Unpublished Master's thesis, The University of British Columbia.
- Xie, Y., & Sharma, P. (2004). *Students' lived experience of using weblogs in a class: An exploratory study*. Retrieved August 1, 2010, from <http://www.eric.ed.gov/ERICWebPortal/contentdelivery/servlet/ERICServlet?accno=ED485009>.
- Zhao, Y. (2003). Recent developments in technology and language learning: A literature review and meta-analysis. *CALICO Journal*, 21(1), 7-27.

## APPENDIX A

### Pre- Survey

#### Open-ended items

Your gender (please underline): male or female

How old are you?

What is/are your native language/s?

What country are you from?

What foreign languages are you learning besides English?

What do you study?

How old were you when you started learning English?

How do you use technology to improve your English skills?

What software/online applications are you currently using to improve your English?

#### Using technology for improving speaking skills in English

5= Strongly agree, 4= agree, 3=neutral, 2=disagree, 1= strongly disagree

**Statement 1** I believe that recording my voice using technology is a good way to improve my pronunciation.

**Statement 2** I do NOT think that my pronunciation will improve by using technology in this class.

**Statement 3** I think that using technology in this class to get feedback from my instructor on my pronunciation will be helpful.

**Statement 4** Using technology is going to be more effective to improve my speaking skills in English than without technology.

**Statement 5** I am eager to use technology to improve my speaking skills.  
I am NOT interested in recording myself using technology in this class.

## APPENDIX B

### Post- Survey

#### Open-ended items

How do you use technology to improve your English skills?

What software/online applications are you currently using to improve your English?

Would you recommend this class to other students who want to improve their speaking/pronunciation skills in English? Please elaborate.

Did the use of Wimba help you to improve your speaking/pronunciation skills in English? Please elaborate.

What did you like most about using Wimba in this class?

What did you NOT like about using Wimba in this class?

Additional comments/ideas/suggestions:

#### Using technology for improving speaking skills in English

5= Strongly agree, 4= agree, 3=neutral, 2=disagree, 1= strongly disagree

**Statement 1** Recording my voice using Wimba has improved my pronunciation.

**Statement 2** My pronunciation did NOT improve by using Wimba in this class.

**Statement 3** Using Wimba in this class to get feedback from my instructor on my pronunciation was helpful.

**Statement 4** Using Wimba was a more effective to improve my speaking skills in English than without Wimba.

**Statement 5** I want to continue to use Wimba to improve my speaking skills.

Recording myself using Wimba in this class did NOT help me to improve my speaking skills.