

THE EFFECTS OF WIMBA ON LEARNING:  
A STUDENTS AND FACULTY PERSPECTIVE

by

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## ABSTRACT

One of the ultimate goals of language education is to enhance students' communicative competence (Ommagio Hadley, 2001). Recent research indicates that Wimba, as an online voice tool, is beneficial to develop students' conversational skills (Cho & Carey, 2001; Kabata, Wiebe & Chao, 2004; McIntosh, Brault, & Chao, 2003; Poza, 2005). Those studies focused mainly on the advantage of Wimba for developing learner's conversational skills but did not explore how to use the software most effectively for teaching and learning.

Therefore, this current study aims to investigate: 1) what was students and instructor's perspective on Wimba as a learning tool and what was the reason behind that; 2) how did the Wimba-based activities designed by the instructor meet the objectives of the course; 3) whether there is a certain type of learning that can be facilitated most by Wimba; 4) what are the in-depth pedagogical suggestions for improving intelligent Wimba usage for future students and instructors.

A class of Cantonese speakers learning Mandarin as a second dialect and its instructor were chosen for this study. Both quantitative and qualitative data were collected through questionnaires and interviews. Findings indicate that both students and instructor evaluated their experience with Wimba positively. However, the effectiveness of the implementation of this software did not meet its full potential in this case because the designed activities were limited by the instructor's time limitations. Students and instructor felt that Wimba was most effective for practice

listening and speaking for novice and intermediate learners.

Future application of the software should focus on providing students opportunities to be involved in tasks that require various language skills to maximize diversity of registers of use. At the same time, technology-related workshops for the instructors should not only focus on the simple “how-to” of the software. Instead, they should provide instructors detailed information and recommendation on how to use the technology most creatively and effectively for teaching and learning.

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## **Chapter 1: Introduction**

### *1.1 Background*

One of the ultimate goals in second language (L2) education is to enhance students' communicative competence. Expressing oneself effectively and appropriately during oral conversation with native or near-native speakers is considered one of the highest achievements for L2 learners.

Since the 1970s, many linguists and researchers became interested in the term "communicative competence". As defined by Savignon (1972), "communicative competence" is "the ability to function in a truly communicative setting – that is, in a dynamic exchange in which linguistic competence must adapt itself to the total informational input, both linguistic and paralinguistic, of one or more interlocutors" (p.8). The development of communicative competence should serve as the primary goal of language teaching according to Omaggio Hadley (2001). Therefore, it is essential that the language educators should engage learners in meaningful and authentic communicational activities to promote their proficiency in the target language (Canale & Swain, 1980).

However, language educators must keep in mind that communicative output is a complex combination of many sub-components. Canale and Swain (1980) proposed a theoretical framework for communicative competence and categorized it into three aspects: grammatical competence, sociolinguistic competence and strategic

competence. *Grammatical Competence* includes “knowledge of lexical items and of rules of morphology, syntax, sentence-grammar semantics, and phonology” (p. 31) and determines the accuracy of learners’ language output. Compared to native speakers, L2 learners tend to have better understanding of grammar in the target language because they are made to study it constantly in class.

*Sociolinguistic Competence*, on the other hand, addresses the appropriateness in using the language in various situations for specific communicative purposes. Speakers should be able to convey the appropriate register and attitude in different social context.

*Strategic Competence*, the last component of Canale and Swain framework, involves the use of verbal and non-verbal communicational strategies to compensate for the breakdowns in communication. The breakdowns might be caused either by speakers’ lack of grammatical competence or inappropriate sociolinguistic strategies.

Influenced by Canale and Swain, Bachman (1990) proposed a theoretical framework of “Communicative Language Ability” which contained some similar components but arranged them in a different way. His framework divided the communicative competence into three components: 1) language competence; 2) strategic competence, and 3) psychophysiological mechanisms. Language competence refers to “a set of specific knowledge components that are utilized in communication via language” (p. 84). On the other hand, strategic competence and psychophysiological mechanisms include the mental capacities and physical

mechanisms that help to implement knowledge in communicative language use. The components of the “language competence” are depicted in Figure 1.

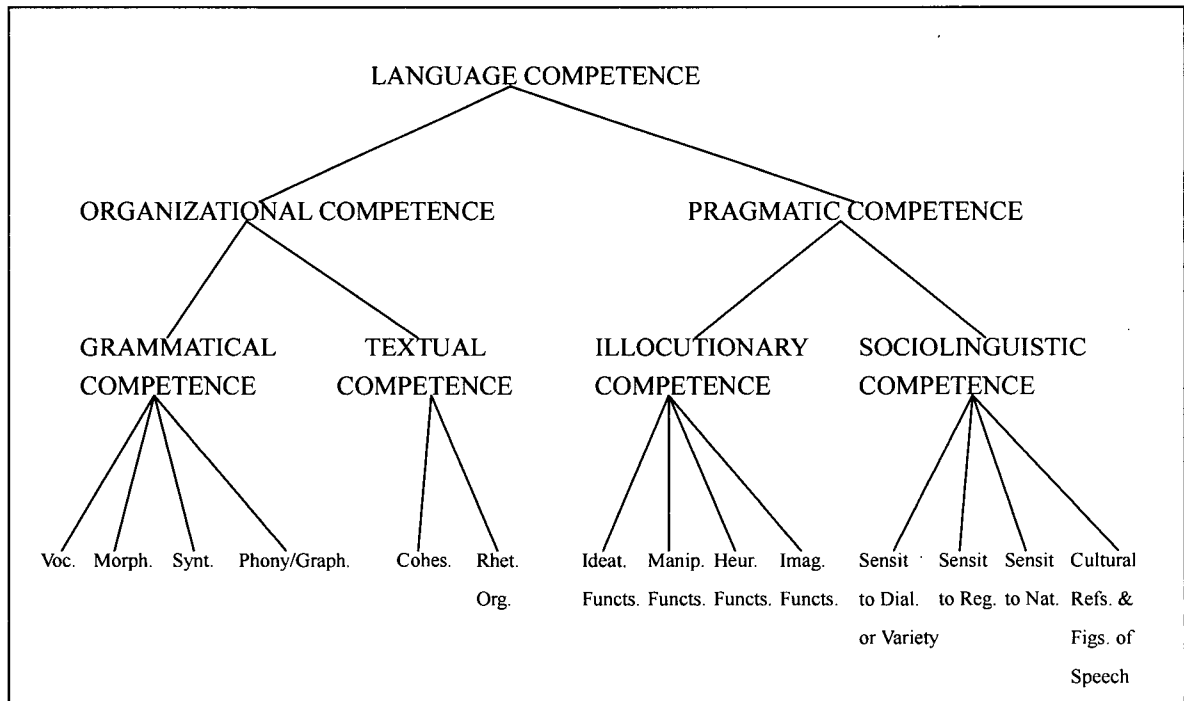


Figure 1: Components of Language Competence (Bachman, 1990, p.87)

In Bachman’s framework, language competence includes organizational ability and pragmatic ability. The former one includes the ability involved in language usage (grammatical competence) and the ability to join utterances together to form a text (textual competence). The later one relates to the functional use of the language (illocutionary competence) and ability to use those functions appropriately (sociolinguistic competence). Grammatical competence comprises control of vocabulary, morphology, syntax, as well as phonemic and graphemic element; textual competence comprises cohesion and rhetorical organization. Illocutionary

competence involves a variety of language functions, such as ideational functions, manipulative functions, heuristic functions, and imaginative functions. Finally, sociolinguistic competence includes elements as sensitivity to dialect, register and naturalness (native-like use of language), and understanding of cultural referents and figures of speech (Bachman, 1990, p.87-98).

Although different, both frameworks revealed the complexity of language communication. As language educators, we should promote learners' holistic communicative competence with an awareness of its various components and registers and should design classroom activities in favor of this purpose. However, reports from the language classrooms indicate some common difficulties that teachers encounter when trying to enhance students' oral skill. Usually, language teachers are more willing to spend their precious class time on giving grammatical explanations rather than focusing on oral conversations because many L2 teachers do not have advanced conversational skills themselves in the target language. Furthermore, it is much easier to assess students' learning by giving them a paper-and-pencil test on the grammar instead of an oral examination. On the other hand, it is not uncommon to find students being anxious when participating in activities that involve the use of target language because of their low proficiency in the language as well as a fear of self-exposure and being judged negatively by peers or native speakers. Meanwhile, some students tend to dominant the discussion in a language course, thus lessen the opportunities for the shy students.

The easily accessible World Wide Web has broken down the barrier of time and space. With the computer conferencing technology, such as email, chat room and bulletin board, students have more opportunities now to practice their communicational skills beyond the classroom in a relatively low-anxiety environment.

Since the 1990s, interest in using computers to enhance L2 teaching and learning has been growing. Due to the fast developing nature of computer technology itself, the potential of its application on the pedagogical use is unlimited and still needs to be further discovered. Researchers and language educators have carried out various experiments on the applications of certain technologies in specific language areas in order to find out how we can teach and learn more effectively with it. Chun and Plass (1996a, 1996b) studied how multimedia annotations facilitate reading comprehension and vocabulary acquisition. Warschauer (1999) suggested that electronic literacy challenges our traditional view of reading. Kramsch and Andersen (1999) argued that multimedia technology could provide an authentic cultural context that is important for language learning.

More and more recent literature focused on asynchronous computer conferencing, both text-based and audio (Carey, 1999, 2001; Cho & Carey, 2001; Coghlan, 2004; Felix, 2004; Hampel & Baber, 2003; Kabata, Wiebe, & Chao, 2004; Levy & Kennedy, 2004; McIntosh, Brail, & Chao, 2003; Warschauer, 1997, etc.). Carey (1999) described a good example in using WebCT to develop a

highly-interactive graduate seminar for students with diverse backgrounds. By offering an extremely rich context of selected reading material and encouraging students to participate actively in online discussion, Carey enhanced both the quality and depth of students' involvement in the course. Meanwhile, students' ability in academic reading and writing also improved due to the frequent practice.

However, many other studies emphasized mostly the advantage of using computers in the classroom rather than trying to explain how they could be used to support L2 learning (Liu, Moore, Graham, & Lee, 2003). Liu et. al argued that the "contextual factors can significantly influence the process of L2 learning in a technology-supported environment" (p. 264). As Chapelle (2001) pointed out:

There is no shortage of general-purpose authoring and computer-mediated communication software from which some types of CALL activities can be constructed. What is needed are theoretically and empirically based criteria for choosing among the potential design options and methods for evaluating their effectiveness for promoting learners' communicative L2 ability. (p. 42)

Therefore, one urgent issue for language educators is how to maximize the benefit of technology on learning.

### *1.2 Purpose of the Study*

As mentioned before, literature in CALL (computer-assisted language learning) often lacked the element of explaining why and how technology could be used to

promote learning. This descriptive study attempted to investigate how Wimba was being used in a representative class process by examining students' and instructor's evaluation of their experience with this technology. More importantly, based on the feedback from the users, this thesis aimed to suggest ways for improving intelligent Wimba usage in L2 classrooms.

### *1.3 Research Questions*

To serve the purpose of the study, these following research questions were addressed:

1. What was students' perception on using Wimba in their language course?  
Did they feel it effective? Why was it effective for them?
2. What were the reasons behind the instructor's choices in implementing Wimba in teaching? Why did she decide to use this technology? In which way did she use it and what was the reason behind it? Did the instructor share the same point of view with the students towards the use of Wimba?
3. Did the Wimba-based activities designed by the instructor meet the objectives of the course?
4. Is there a certain type of learning that can be facilitated by Wimba and what it is?
5. What are the in-depth pedagogical suggestions for improving intelligent

Wimba usage for future students and instructors?

#### *1.4 Definition of Terms*

The following provides the definition of terms that are used in this study:

**Asynchronous voice:** “The interactive communication process of people leaving voice messages for other people and the other people responding to their voice messages” (Ross, 2003, p. 60).

**Audiolingual approach:** The approach that involves “a systematic presentation of the structure of the L2, moving from the simple to the more complex, in the form of drills that the students had to repeat” (Yule, 2006, p. 165). Proponents of this orientation believed that the fluent use of the target language was a “habit” that could be reinforced through a good amount of repetition and practice.

**CALL:** Computer Assisted Language Learning

**Cantonese:** The dialect of Canton. Cantonese is widely used in Canton province, Hong Kong, and North American Chinese society.

**CMC:** Computer Mediated Communication

**CLT:** Communicative Language Teaching, also known as the “communicative approach”.

**Communicative approach:** “Approaches to language teaching that are based on learning through using language rather than learning about language” (Yule, 2006, p. 239).



**Communicative competence:** “Communicative competence” is “the ability to function in a truly communicative setting – that is, in a dynamic exchange in which linguistic competence must adapt itself to the total informational input, both linguistic and paralinguistic, of one or more interlocutors” (Savignon, 1972, p.8).

**L2:** Second language

**Mandarin:** “The form of the Chinese language used by officials and educated people generally; any of the varieties of this used as a standard language in China, *spec.* the Northern variety, which forms the basis of *putonghua*” (Oxford English Dictionary, 1989).

**Pinyin:** “The standard system of romanized spelling for transliterating the Chinese language, adopted officially by the People's Republic of China in 1979 and based on the pronunciation of the Peking (now Beijing) dialect of Mandarin Chinese” (Oxford English Dictionary, 1989).

**Tones:** Mandarin Chinese has four basic tones, usually numbered as 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> tones, represented respectively by –, /, ∨ and \. When a syllable is pronounced in different tones, it has different meanings. Therefore, it is very important to say the tones in a correct way to achieve understanding.

**Wimba:** A software package of online voice tools designed by the Horizon Wimba Company including Wimba Voice Announcement, Wimba Voice Authoring, Wimba Voice Discussion Board, Wimba Voice E-mail and Wimba Voice Direct.

## Chapter 2: Literature Review

### *2.1 The Communicative Approach*

The focus on the development of oral skills can be seen as an influence of both audiolingual methodologies in the 1960s and the communicative movement that began in the 1970s. The audiolingual approach involves “a systematic presentation of the structure of the L2, moving from the simple to the more complex, in the form of drills that the students had to repeat” (Yule, 2006, p. 165). Proponents of this orientation believed that the fluent use of the target language was a “habit” that could be reinforced through numerous repetition and practice. This type of approach could still be found in many language classrooms. However, such isolated practice does not resemble real life language use. Moreover, the repetition of drills can be incredibly boring. Opposite to the audiolingual approach, the communicative approach focuses on meaningful language interaction and is more likely to encourage learners’ motivation (Canale & Swain, 1980). In the following part, I will first discuss what the communicative approach is and then introduce its pedagogical practice in teaching speaking.

#### *2.1.1 Theoretical Hypotheses*

The communicative approach, also known as “Communicative Language Teaching” (CLT), started from the theory of communicative competence (Richards &

Rodgers, 2001). It believed that the primary purpose of a language was to communicate; L2 education should focus more on the function of the language rather than its grammatical forms. Therefore, the classroom communicative activities should be meaningful, authentic, relatively-creative (Canale & Swain, 1980) and task-based (Richards & Rodgers, 2001). Language classrooms should prepare students for the genuine interaction with native or near-native speakers in the future. Furthermore, it is important for the teachers to know their students' needs and then give instructions accordingly (Richards & Rodgers, 2001). Teaching should be student-oriented.

#### *2.1.2 Classroom Applications*

Swain (1985) highlighted the role of output in language learning. By studying students enrolled in a French immersion program in Canada, she found that in spite of the large amount of comprehensible input in the target language they received, students were not showing native-like grammatical performance. She suggested that producing the target language might be the “trigger” for students to seek information in the language they hear. In other words, a student learns from his or her comprehensible output that “extends the linguistic repertoire of the learner as he or she attempts to create precisely and appropriately the meaning desired” (p. 252). Therefore, besides providing students more opportunities to speak the target language in classroom context, teachers should also “push” students to produce the language

appropriately and precisely (also known as “pushed output”).

Richards and Rodgers (2001) also suggested that the range of exercises and activities that are compatible with the communicative approach was unlimited.

However, there were five basic principles that teachers should be aware of when designing communicational classroom activities:

- Learners learn a language through using it to communicate.
- Authentic and meaningful communication should be the goal of classroom activities.
- Fluency is an important dimension of communication.
- Communication involves the integration of different language skills.
- Learning is a process of creative construction and involves trial and error (p. 172).

Based on the research findings from Swain (1985), I will add one more principle:

- Learners should be pushed to produce error-free output in the target language.

### *2.1.3 Pronunciation*

One important component of communication is pronunciation, because it helps learners to: 1) communicate more effectively; 2) feel more confident when speaking the target language. When listing the features for the communicative approach, Finocchiaro & Brumfit (1983) included seeking comprehensible pronunciation.

Coincidentally, in Harlow and Muyskens' study (1994), students also listed pronunciation as one of the most important language learning goals for them because it was associated with speaking. Celce-Murcia, Brinton and Goodwin (1996) suggested that the goal of teaching pronunciation was to "enable learners to surpass the threshold level so that their pronunciation will not detract from their ability to communicate" (p. 8). Therefore, helping students to achieve comprehensible pronunciation should be one important component of the communicative approach. However, the approach failed to deal adequately with the role of pronunciation in language teaching. In order to fill in the gap, the authors listed various ways to teach pronunciation, such as listen and imitate, visual aids, tongue twisters, reading aloud, recording learners' pronunciation.

Although important, teaching pronunciation is not an easy job, there are many difficulties in the pedagogical practice. First, when and how to correct pronunciation is always a question. Menking (2001) found that when the utterance was understandable, many instructors would choose not to correct the pronunciation because they were afraid to interrupt the flow of conversation or to destroy the joy of accomplishment of the students. However, the definition of "understandable" is arguable. Language teachers tend to be more tolerant of L2 learners' pronunciation. What is understandable to them might be not be as comprehensible when the learners try to communicate with native speakers.

Second, teaching pronunciation itself involves numerous imitating and repeating.

Therefore, it can be extremely tiresome and boring for both the teacher and the students. Murphy (1991) suggested that pronunciation instruction “needs to integrate with broader level communicative activities in which speaker and listeners engage in ... meaningful communication” (p. 60). However, it can be a challenge for teachers to weave pronunciation teaching effectively and harmoniously into a conversational course so that “it consists of more than ad hoc corrections, but does not take up so much that the communicative goals of the course are neglected” (Levis & Grant, 2003, p. 14).

The third difficulty in pedagogical practice in teaching pronunciation is that no matter how experienced the teacher is, teaching pronunciation is essentially one-on-one practice and can be very time-consuming. Practically, is it difficult to carry out in a large sized classroom. Researchers have suggested some traditional audiolingual activities by using a recording device to record students’ pronunciation for teachers’ evaluation (Levis & Grant, 2003). To echo with that, Tsubota, Dantsuji and Kawahara (2004) suggested that a CALL system could help with pronunciation acquisition. In order to assist Japanese students learning English, they developed voice recognition software that diagnosed speakers’ errors and provided instructions on how to improve. According to the authors, it was able to detect the most common errors that Japanese speakers make when speaking English and received high evaluation from students. The idea of using voice recognition software to help with pronunciation learning is very interesting. However, since the authors are also

the developers of this learning tool, their findings can be biased. At the same time, learners' errors are various; there might be errors that the system cannot detect. Moreover, the development for English voice recognition software is relatively advanced. For languages that involve tones, like Mandarin, designing such kind of software can be much more complicated. Therefore, teacher's feedback on pronunciation will be more helpful for students in that case.

In summary, language educators should view communication as the purpose of language learning and should integrate the communicative approach in their teaching practice. However, emphasis on communication does not mean that skills in other areas should be neglected. Instead, we must realize that all language skills are interrelated and it is crucial to develop students' holistic language proficiency. Pronunciation, as an important component of speaking, should integrate with meaningful communicative tasks. By using technology, we can maximize the opportunities for teachers to help with students' pronunciation individually. In the following section, I will introduce computer-mediated communication and its relevant research.

## *2.2 Computer-mediated Communication*

The rapid growth of internet and computer technology has seized the attention of language educators and researchers. Warshauer (1997) listed five features of computer mediated communication (CMC) that distinguished it from other

communication media: “1) text-based and computer-mediated interaction; 2) many-to-many communication; 3) time- and place-independence; 4) long distance exchanges; and 5) hypermedia links” (p. 470). With those features, CMC provides more opportunities for students to participate in communicative activities both inside and outside of the classroom. Omaggio Hadley (1991) pointed out that the difference between oral and written language became less distinct in the age of CMC, especially in interpersonal mode, which brought up an interesting question: can text-based CMC facilitate oral language learning?

#### *2.2.1 Text-Based CMC and Oral Proficiency*

Carey (2001) emphasized that students benefited greatly from the slow flow of conversation on the WebCT bulletin board. In the online activities, students were given the opportunity to control the speed, depth and complexity of their language output. Therefore, a student could “slowly construct his communication while checking grammar, lexicon and content and this constructive process is critical to SLA” (p. 136). Moreover, students’ output in L2 was highly influenced by their L1. In most cases, students found that they were not competent enough in L2 to express their highly developed thinking in L1. By using the bulletin board, students were given the opportunity to get familiar with important vocabulary for the related topics in L2.

Payne and Whitney (2002) did research to investigate whether L2 oral



proficiency could be indirectly improved through chat room interactions. Fifty-eight Spanish learners were divided into two groups: the experimental group and the control group. The former participated in both face-to-face instruction and chat room interaction while the latter only received face-to-face instruction during a 15-week semester. Oral proficiency tests were administered both in the beginning and at the end of the study. Findings suggested that students spending half of their instructional time in synchronous online interaction were advantaged in their oral proficiency development over those stayed in the classroom. To explain the results, the authors listed the following reasons:

1. Conversation online is many-to-many communication and does not need to obey the turn-taking rules. During the same amount of time, learners generate more communicative productions than in a face-to-face classroom.
2. In the chat room, students are required to be "present" all the time while there can be many passive listeners in the classroom.
3. With the absence of body, students cannot resort to paralinguistic strategies to express themselves; they have to communicate through language with clarity to get the message across. Therefore, learners are challenged to produce meaningful utterance, which in a way proved Swain's (1985) theory of output.
4. By verbalizing their speech, learners are more aware of the errors made by themselves as well as others. As a result, they learned from those errors.

While in the classroom, the mistakes in the speech can be easily neglected.

5. The speed of conversational exchange is slower when learners have to type things down. This nature of online chatting provides students more time for processing input as well as producing pushed output.

Abrams (2003) argued that we must distinguish synchronous communication (online chat room) from asynchronous communication (email, discussion bulletin board). Although these two types of communications share a great deal of similarities, they might function in different ways in assisting learning. Meanwhile, the author also pointed out that CMC did not require pronunciation, instead, it “relies greatly on literacy skills” (p. 158). Therefore, how can we practice our pronunciation through CMC? Warschauer (2004) suggested that one of the future developments of CALL was that information and communication were moving from text-based forms to audiovisual forms. Recent research also cast light on the “voice” on the internet (Cho & Carey, 2001; Coghlan, 2004; Felix, 2004; Godwin-Jones, 2003a; Kabata et al., 2004; Levy & Kennedy, 2004; McIntosh et al., 2003; Poza, 2005; Ross, 2003). In the next section, I will briefly introduce audio-based CMC and then discuss its potential on teaching and learning L2 conversation.

### *2.2.2 Audio-Based CMC and Oral Proficiency*

Like text, voice online can also be synchronous or asynchronous. We are already familiar with “synchronous voice” because of the popularization of instant

messenger and online voice chatting tools, but what is “asynchronous voice”? As defined by Ross (2003), asynchronous voice is “the interactive communication process of people leaving voice messages for other people and the other people responding with their voice messages” (p. 70).

Wimba, the software that allows users to put their voice online, becomes a popular web-based voice tool because it is reliable, functional, affordable, user-friendly and easy to learn for both instructors and students (McIntosh et al., 2003). The Wimba voice tools include Wimba Voice Announcement, Wimba Voice Authoring, Wimba Voice Discussion Board, Wimba Voice E-mail and Wimba Voice Direct. The functions of the tools are illustrated in the following table.

Name	Feature
Wimba Voice Announcement	A tool to post a personalized welcome.
Wimba Voice Authoring	A tool to add vocal commentary to any content area of a Blackboard site.
Wimba Voice Discussion Board	A threaded message board in which users click on message titles to hear messages and speak into a microphone to post messages.
Wimba Voice E-mail	A voice e-mail application.
Wimba Voice Direct	A tool that allows users to speak and listen in the chatroom.

Table 1: Functions of Wimba Voice Tools

### *2.2.3 Studies from the Horizon Wimba Company*

The website of the Horizon Wimba contains many case studies of its application in different universities, colleges and company training programs (HW 2002, 2003a, 2003b, 2004a, 2004b). Two of the studies used Wimba voice tools in L2 classrooms: one at the Center for Applied Language Studies at University of Reading (HW, 2003a); another in the Spanish program at Santa Monica College (HW, 2004b).

University of Reading used mainly the Wimba Voice Direct function and organized students to use this tool for group problem-solving tasks. The students worked first as a group to solve the task. After they reached a solution, they would go to individual rooms to discuss and evaluate their solutions through Voice Direct seminar. Anne Pallant, a lecturer of the course, suggested that her students were more concentrated on their language and ideas when they were talking to a microphone instead of the whole class because they were not distracted by others in a room. Wimba Voice Board was only used as a way for the instructor to give feedback on students' pronunciation. Students would post their recordings online for the instructor to pick up and comment on. However, she was considering using this tool in the future for asynchronous voice discussion.

Reports of the usage of Wimba voice tool in Santa Monica College came from one Spanish instructor named Erickson (HW, 2004b). Her "hybrid" Spanish course met two hours a week in class and then used Wimba voice tool for practice outside of the classroom. In order to supplement the classroom activities, Erickson asked small

groups of four to five students to have conversations with her online. In her summary, Wimba voice tool: 1) gave students the opportunity to talk in a student-centered manner; 2) made students more concentrated online when they could select discussion topics of their interest; 3) built up a friendly community; 4) encouraged students to be critical of their work; 5) lowered the students' anxiety when speaking; 6) allowed the instructor to know more about students' learning difficulties.

In addition, Erickson suggested the following applications of Wimba:

1. Use voice email to give students feedback on pronunciation.
2. Use voice board to ask students to post self-introduction and questions for other students.
3. Use voice board combined with visual tools to generate description of a house, a person, etc.
4. Use voice board to post oral questions for students to practice.
5. Use voice presentation to deliver lectures on grammar.
6. Use Voice Direct to ask students to interview each other.

Among the studies that Horizon Wimba company conducted, only the previous two were chosen in this thesis because they were related to L2 teaching. However, these two studies could be highly biased considering that they were conducted by the software developer and were posted on their website for the purpose of product promotion. In the following part, I will introduce some studies done by researchers outside of the Wimba company.

#### *2.2.4 Studies Conducted by Researchers in the Field of Language Education*

##### Cho & Carey's Study

As a university language instructor, Cho (Cho & Carey, 2001) used the Wimba voice tool in her first year Korean course for heritage students. Students were required to use Wimba for listening and speaking practice as well as oral examinations. In the beginning of the course, students had to record their pronunciation for the instructor to correct. With the help of Wimba, students could post their voice online and the instructor could give them feedback with ideal pronunciation. Wimba also enabled students to listen and correct their speech as much as they want, which encouraged practice and improved accuracy and fluency. When used for oral examinations, students felt less stressed because they had an opportunity to sit in front of a computer instead of the instructor. Furthermore, they could listen to the questions many times until they fully understood. In conclusion, Cho and Carey suggested that the benefits gained from using Wimba voice tools were: "1) handiness (no need to carry any equipment); 2) accuracy and fluency in listening and speaking; 3) positive assurance to students" (p. 123). In the end, the authors also indicated that teacher's enthusiasm was very important in the implementation of the Wimba technology.

### McIntosh, Braul, & Chao's Study

McIntosh, Braul and Chao (2003) argued that although CMC benefited learning, text-based communication did not necessarily facilitate the development of oral skills, which was essential for communicative competence. Therefore, they wanted to explore how voice-based asynchronous technology enhances listening and speaking skills through a project that implemented Wimba into the English for Academic Purpose program at the University of Alberta. Through the project, the instructor and students used Wimba for self-introduction; debate and note-taking assignments (students would listen to short notes posted by the instructor and practice taking notes). At the end of the academic term, forty-one student participants were required to fill in a "Wimba Use Survey", which invited open-ended written comments. During the project, the instructor obtained first-hand in-class observations of students' reactions to Wimba. Students' postings on the Wimba Voice Board were also analyzed.

Findings from most students indicated that they evaluated their experience with Wimba as positive and the quality of discussion improved. It was also helpful for the students to hear not only the instructor but also their classmates' accented pronunciation, which added authenticity to the communication. However, some students were not comfortable posting their voices online because they did not like people listening to their recorded voice. Some others did not like the time interval of waiting when Wimba was used for debate, feeling that the feedback from other

students were not instant enough. There were also concerns about some minor technical problems such as slow loading and quality of recording. Based on the findings, the authors concluded that overall, asynchronous voice technology was “a viable tool for language learning” and was “effective in enhancing students’ listening and speaking skills” (p.68).

However, this conclusion was drawn from the data of instructor’s observation and students’ survey results. The authors did not carry out tests before and after the academic semester to measure students’ actual improvement. As an active participant of the project, the instructor’s observation can be biased. Furthermore, all the qualitative data came from students’ short answers in the survey. It would be more convincing if the authors had interviewed the participants.

#### Kabata, Wiebe, & Chao’s Study

From the same university, Kabata, Wiebe and Chao (2004) studied the implementation of Wimba in the Japanese program. Participants included students from first-year and third-year Japanese courses and four instructors. Wimba was used for oral-reading assignments for beginner-level students. For third-year level students, it was used for extemporaneous speech practice, such as phone messages and short presentations. Both quantitative and qualitative data were collected in order to examine students’ and instructors’ perspective on using Wimba.

The authors found positive feedback from both the students and instructors.



The students felt that Wimba was helpful in improving their listening and speaking as well as their pronunciation. They liked Wimba because: 1) it was time-independent (as suggested by Warschauer, 1997); 2) it provided a low-anxiety environment; 3) it offered students individual feedback from the instructors; 4) it was more handy than traditional audio tape recording (as suggested by Cho & Carey, 2001). However, some students complained that online assignments were time consuming. Many students also expressed their frustration with some technical problems (i.e., computer crashes) they faced with the combined use of Wimba, WebCT, and NJstar (a software for displaying and inputting East Asian languages). Instructors, on the other hand, felt that classroom time was used more effectively because Wimba allowed students to work on the oral-reading assignments online. Also, they liked the fact that students practiced more when using Wimba, which improved their pronunciation and speaking skills. In other words, as expected, those ones who were enthusiastic in learning gained more through Wimba.

When discussing the technical problems that students encountered, the authors suggested that: 1) a training session of the software should be offered at the beginning of each term; 2) having a lab tutor available would be convenient and would take the burden off the instructors' shoulders. In the end, the authors emphasized the importance of the role of instructors, "only through instructors' creative and innovative contributions can technology shine in language teaching" (p.18).

### Felix's Study

Felix (2004) believed that anxiety was one of the main reasons that restrained students from performing well in speaking. Therefore, students would be less stressed when speaking in a non-threatening environment, which could be realized by online voice tools. In his paper, Felix examined one online German course in Monash University where Wimba was used. From his observation, students felt comfortable and confident participating in even complicated oral activities in the online setting. Therefore, the author concluded that voice synchronous chat served as a transition from classroom conversation to real-life conversation with native or near-native speakers. It prepared students for the authentic conversation in the target language outside of the classroom.

In summary, Felix argued that the goal of implementing technology was not to “replicate or simulate what can be done in the natural classroom but to maximize the potential for student engagement in a non-threatening climate” (p. 290). However, the author's assertion that voice-based online communication lowered students' anxiety was totally based on his own observation. No data from the students or instructors was collected. Therefore, no proof of his argument was provided.

### Poza's Study

Poza (2005) aimed to investigate how computer voice conferencing lowered learners' anxiety. Wimba was used in a university course for intermediate level

Spanish learners. Learning activities included answering instructor's questions and discussing on the voice board. Both qualitative interview and quantitative survey data were collected during the study.

Results indicated that students did experience a reduction in the level of anxiety when speaking in the computer environment; both the quality and quantity of students' speech were enhanced. Since students got enough time to improve their speech before recording, they felt more confident about the quality of their output. Therefore, they were not concerned with either the instructor or their peer classmates listening to their recordings.

The author suggested that Wimba technology itself had an anxiety-reducing feature. However, the language laboratory was crowded when some students posted their voice online and the congested environment might have made them more conscious of themselves and increased their anxiety. Therefore, she advised the educators to consider the following applications in order to achieve maximum benefit from reducing anxiety in oral communication:

- The physical conditions of the place of access to the technology must be controlled. These conditions must be such that the students have easy access to the technology and are not exposed to the presence of others that may hear their contributions to the voice board.
- To avoid negative attitudes regarding such environments, the technology must be available to students without time or space limitations.

- For that same reason, every effort should be made to minimize technical difficulties.
- To obtain greater benefits in the reduction of anxiety, the technology should be implemented as an instructional strategy over a long period of time.

(p.95)

### Conclusion

In summary, the result of these studies suggested that when integrated into language courses, web-based voice technology is helpful in lowering students' anxiety as well as promoting their pronunciation and speaking. As indicated in some studies (Cho & Carey, 2001, Kabata et al., 2004), teacher's role is very important in deciding how successfully and effectively technology can be used. However, most research focused mainly on the effect of Wimba on students, with only a few suggesting its possible influence on instructors. The limitation of such an approach is that with the focus on the students, it does not take into account the influence of teacher's experience and attitudes on using technology in the classroom (Lam, 2000).

Furthermore, current research fails to suggest: 1) which language proficiency level does the online voice tool facilitate the most? 2) what learning activities should be implemented into each level? 3) which language skill (speaking, listening, reading and writing) does the online voice tool facilitate the most? 4) how can the learning activities be designed to promote learning most effectively? 5) what is the

teacher's role in the learning facilitated by online voice tool? Future research is needed to answer these questions. Table 2 provides a description of the implementation of Wimba in L2 courses from former research.

<b>Implementation</b>	<ul style="list-style-type: none"> <li>• pronunciation practice (Cho &amp; Carey, 2001; HW, 2003a, 2004b)</li> <li>• oral examination (Cho &amp; Carey, 2001)</li> <li>• synchronous online debate/discussion using the Voice Direct (HW, 2003a, 2004b)</li> <li>• self-introduction at the beginning of a course (HW, 2004b; McIntosh et al., 2003)</li> <li>• using voice board combined with visual tools to generate description of a house, a person, etc. (HW, 2004b)</li> <li>• using voice presentation to deliver lectures on grammar (HW, 2004b)</li> <li>• using voice board to post oral questions for students to practice (HW, 2004b)</li> <li>• note-taking (McIntosh et al., 2003)</li> <li>• asynchronous online debate/discussion using the Voice Board (McIntosh et al., 2003; Poza, 2005)</li> <li>• extemporaneous speech practice (Kabata et al., 2004)</li> <li>• short presentation (Poza, 2005)</li> </ul>
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<b>Benefits</b>	<ul style="list-style-type: none"> <li>• Handiness (Cho &amp; Carey, 2001; McIntosh et al., 2003).</li> <li>• Increases students' opportunity to practice speaking the target language (Cho &amp; Carey, 2001; HW, 2004b).</li> <li>• Makes students more concentrated when communicating online (HW, 2004b).</li> <li>• Helps in building a friendly community (HW, 2004b).</li> <li>• Encourages students to be critical of their work and makes them practice more, thus improves the accuracy and fluency of their output (HW, 2003a, 2004b; McIntosh et al., 2003, etc.).</li> <li>• Provides a low-anxiety environment (Cho &amp; Carey, 2001; Felix, 2004; HW, 2004b; McIntosh et al., 2003; Poza, 2005).</li> <li>• Allows students to listen to classmates' accented pronunciation, which adds authenticity to the input (McIntosh et al., 2003).</li> <li>• Offers students individual feedback from the instructor (HW, 2004b; McIntosh et al., 2003)</li> <li>• Allows the instructor to know more about students' learning difficulties (HW, 2004b).</li> <li>• Enhanced the use of class time (McIntosh et al., 2003)</li> </ul>
<b>Drawbacks</b>	<ul style="list-style-type: none"> <li>• Some students are not comfortable posting their voices online (McIntosh et al., 2003).</li> <li>• Some students do not like the time interval of waiting when Wimba is used for asynchronous debate (McIntosh et al., 2003).</li> <li>• There are minor technical problems (McIntosh et al., 2003; Kabata et al., 2004; Poza, 2005).</li> </ul>

Table 2: Current Studies on the Implementation of Wimba

## **Chapter 3: Methodology**

### *3.1 Research Questions*

With a concern for the limitation of current research on online voice tools, this study was designed to investigate:

1. What was students' perception on using Wimba in their language course?
2. What were the reasons behind the instructor's choices in implementing Wimba in teaching?
3. Did the Wimba-based activities designed by the instructor meet the objectives of the course?
4. Is there a certain type of learning that can be facilitated by Wimba and what it is?
5. What are the in-depth pedagogical suggestions for improving intelligent Wimba usage for future students and instructors?

### *3.2 Participants*

This study was conducted on an intermediate conversational course for Cantonese speakers learning Mandarin in a post-secondary institute in western Canada. As described in its syllabus (see Appendix A), this course was designed for students from Hong Kong who could not speak Mandarin but had advanced Chinese reading and writing skills. Students received four hours' face-to-face instruction

every week during the 13-week semester. At the end of the term, students have learned standard Mandarin pronunciation and useful expressions of spoken Chinese through studying college-level text with situational conversations. Emphasis of the instruction was on the differences of pronunciation, vocabulary and grammar between Cantonese and Mandarin Chinese. The emergence of this type of program was probably because of the rapid economic development in Mainland China, the ceasing of UK's colony in Hong Kong in 1997 and the increasing number of Mandarin speakers overseas.

Wimba was used in the course for oral assignments once a week when a new lesson was taught. Students would be given a paragraph chosen from their textbook in either Chinese characters or pinyin to read aloud, record and then post online. The instructor, Ms. Jin (pseudonym, the gender was also chosen arbitrary and does not reflect the real gender of the instructor), would listen to all the recordings and give group feedback on some common mistakes in class. The students were also encouraged to go to the instructor's office hour for individual practice. During the individual session, Ms. Jin would listen to the recording together with the student and help him or her to correct his or her pronunciation. However, since students were mostly satisfied with the correction during class time, few of them went to her office hours for pronunciation practice. As Ms. Jin described, the purpose of the assignment was for students to practice their pronunciation and tones because pronunciation remained the biggest difficult for Cantonese speakers learning to speak



Mandarin. The interface of WebCT and Wimba is presented in Figure 2 and 3.

Course number and students' names were erased for the presentation of anonymity.

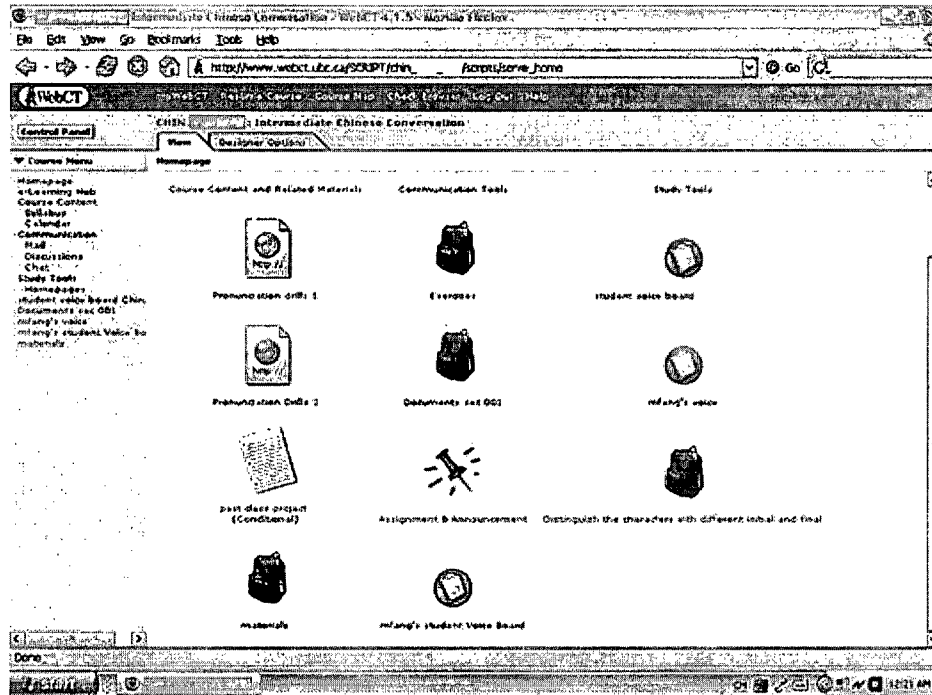


Figure 2: Interface of WebCT

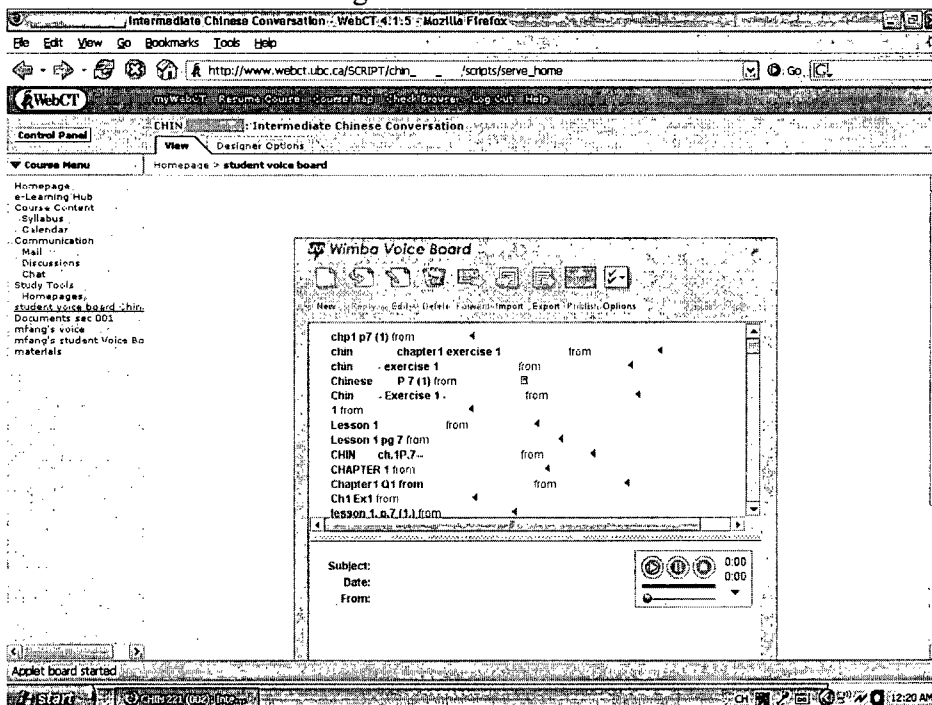


Figure 3: Interface of Wimba Voice Board

Participants included twenty-one students and one instructor from that particular course. There were various reasons for choosing this class for the study. First, this course was conversation-oriented, which met my desire to study the influence of Wimba on oral proficiency. Second, Wimba was used frequently for homework assignments. Therefore, it might have great influence on students' learning. Third, the instructor was enthusiastic about technology and had successful experiences in using Wimba for the same course for two years. In the previous year, three of her students participated in the provincial Mandarin Speech Contest and all won prizes. There might have been a correlation between the students' distinguished oral performance and the teachers' pedagogical use of Wimba. Last but not the least, most of the instructor's colleagues had not integrated Wimba in their teaching. When asked why, they explained that using Wimba could be time-consuming and troublesome, which made me more interested in understanding this instructor's decision in using it when she was aware that Wimba created more work for her.

All students of this study were native Cantonese speakers who were doing their post-secondary degree with an age range from 19 to 25. They all received formal education in Hong Kong for different numbers of years and came to Canada at different ages. In other words, in the same class, some students finished high school in Hong Kong and some only went through elementary school there. Therefore, there were a variety of reading and writing proficiency levels in this class. The potential participants consisted of nine male students and twelve female students.

Three of the students were celebrities in the city that they lived in and could be seen on Cantonese TV shows and commercials. They were studying Mandarin for the possibility of working in Mandarin TV programs for the increasing Mandarin speaking community.

Because of the tight schedule of the students and the time of data collection (it was collected at the end of the term), unfortunately, only six students volunteered to complete the survey and four students participated in the interview. Table 3 gives a detailed description of the background of those final participants.

	Number of students	Percentage
Gender		
Male	1	17%
Female	5	83%
Age		
Under 20	4	66%
20-24	1	66%
25-40	1	17%
Years of Formal Education in Hong Kong		
5 years	2	50%
9 years	1	25%
12 years	1	25%

Table 3: Background Information of Final Participants

The instructor has been teaching Chinese at post-secondary level for more than twenty years. Her education background is in Chinese literature and linguistics. Ms. Jin is a native Mandarin speaker and does not speak Cantonese. However, she had lived in Canton Province (where Cantonese is spoken as the local dialect) for ten

months in 1986 and has some aural comprehension of Cantonese. Ms. Jin used to teach Chinese literature to native speakers in China. In 1997, when she was 46 years old, she started teaching students Chinese as a L2 in an American university. She has become a Chinese instructor at the current institute since 2002.

### *3.3 Cantonese Dialect vs. Mandarin*

As a background to understanding the difference between Cantonese and Mandarin, one must consider the following questions: 1) What is the spoken difference between Cantonese and Mandarin? 2) Is the difference so extreme that students have to enter into a school or university course to study it?

Cantonese is considered as a dialect of Chinese. Defined by the Oxford English Dictionary (1989), dialect is “one of the subordinate forms or varieties of a language arising from local peculiarities of vocabulary, pronunciation, and idiom”. Yule (2006) indicates that “dialect” describes the “features of grammar and vocabulary as well as aspects of pronunciation” (p.195). Usually, inter-dialect differences are insignificant compared to the similarities that the dialects have. Also, the dialects of one language are often mutually intelligible to speakers of that language (Zhang & Kowloon, 1998). However, the differences among dialects are more complicated for the situation in China. There are seven major Chinese dialects: the Northern Dialect (with Mandarin as its standard version), Cantonese, Wu, Min, Hakka, Xiang and Gan (Yuan, 1989), and these separate dialects are mostly unintelligible to speakers of the

other dialects. As described in an article from the Chinese Education and Research Network (Chun, 2003), the difference between two Chinese dialects is sometimes more distinctive than between two languages in Europe. There are even companies offering translation services between dialects in China. Being a native Wu Dialect speaker, I am often told by people from northern China that they cannot understand me at all when I speak my dialect.

In order to popularize Mandarin throughout China, TV and radio stations are required to broadcast only in standard Mandarin. All teachers in public school system have to pass Mandarin proficiency test in order to obtain their teaching licence. No matter what dialect they speak at home, students in Mainland China only use Mandarin in schools. Even before the children reach school age, their parents will try to talk to them in Mandarin occasionally in order to make the transfer easier. However, due to certain political reasons (Hong Kong has been Britain's colony until 1997), students in Hong Kong did not get the opportunity to be exposed to Mandarin until 1997 when Hong Kong was returned to China. Therefore, many people from Hong Kong still have difficulty in understanding or speaking Mandarin.

In order to illustrate the distinctions between these two dialects, Zhang and Kowloon (1998) lists some examples in the four aspects of pronunciation, vocabulary, syntax and morphology. Since Mandarin and Cantonese share the same writing system, many of the vocabulary items are the same in writing but are pronounced differently. For example, the word “香港” (Hong Kong) is pronounced as

<sup>1</sup> In this thesis, pronunciation of *Mandarin* is presented in Mandarin Pinyin, and *Cantonese* in Cantonese Pinyin. Numbers are used to indicate the tones of syllables. There are four different tones in Mandarin but six in Cantonese and each has a different pitch level

xiang1gang3 in Mandarin, but hoeng1gong2 in Cantonese<sup>1</sup>. In other cases, those two dialects will use different vocabulary to describe the same object. For example, umbrella in Mandarin is “伞” (san3) and “遮” (ze1) in Cantonese.

With respect to syntax, Mandarin places adverb before the verb while Cantonese puts the adverb after. For instance, to express “you go first”, we have

Mandarin:

你	先	走
ni3	xian1	zou3
you	first	go

Cantonese:

你	行	先
nei5	hang4	sin1
you	go	first

Sentences with double objects often follow different word orders, too. In a Mandarin sentence with two objects, the one referring to person(s) must be put before the other one. Yet, in Cantonese the order is reversed, for example:

Mandarin:

我	先	给	他	钱
wo3	xian1	gei3	ta1	qian2
I	first	give	him	money

Cantonese:

我	俾	钱	佢	先
ngo3	bei2	cin4	keoi5	sin1
I	give	money	him	first

Morphologically, Mandarin and Cantonese also share different rules for word formation. In Mandarin, the prefix “公” (gong1) is used to indicate male animals, “母” (mu3) for female animals. In Cantonese, the suffix “公” (gung1) and “𪛗” (naa2) are used instead. For example:

Bull/ox:

Mandarin: 公牛      gong1niu2

Cantonese: 牛公      ngau4gung1

Cow:

Mandarin: 母牛      mu3niu2

Cantonese: 牛𪛗      ngau4naa2

The differences between Mandarin and Cantonese are not limited to those listed above. Therefore, Cantonese speakers are challenged with phonetic, lexical, syntactical and morphological difficulties when learning to speak Mandarin. Their background in Cantonese could be a hinderance to their acquisition of Mandarin.

### *3.4 Research Design*

The purpose of the course was to improve students' Mandarin pronunciation and conversational ability (see Appendix A for the course syllabus). During the 13-week course, students completed nine Wimba assignments. Usually oral Wimba

homework was assigned when a new lesson was taught. The assignments required students to record their reading of chosen paragraphs and then post the recordings on Wimba voice board. Students were informed that the instructor would evaluate this homework. Students never responded to each other's recording online. The voice board was only used as a place to post homework instead of a place for communication among students. The instructor listened to each recording because she wanted to understand students' errors. However, she did not post anything online. Instead, she noted down some common mistakes that most students made and corrected them altogether in class. Students were encouraged to go to practice with her during her office hour if they wanted individual assistance in pronunciation. Sometimes, if the instructor felt one student needed additional help with pronunciation, she would also request that student to practice individually with her.

During class time, the instructor would prepare some communicative activities such as debates, news reports and conversations. At the end of the term, students also had to give an oral presentation before the final exam. The author participated in the classroom occasionally through the semester when students had debates or presentations. As I observed in class, students' competence in oral Mandarin was diverse due to their various former Mandarin learning backgrounds. The classroom environment was very friendly and students liked to joke with each other. However, when they talked among themselves, students tended to use Cantonese only. They only switched to Mandarin when they talked to the instructor.



In order to study the influence of the online voice tool (Wimba) on the acquisition of communicative competence in the target language, I designed a survey for students and interviews for both students and the instructor to obtain quantitative and qualitative data. Meanwhile, additional data was also collected from classroom observations as well as the postings on the online Wimba voice board.

To provide a more accurate description of Wimba's influence on students' speaking, it would be ideal to have oral proficiency tests for the students before and after the course. However, students' development in oral proficiency can also be attributed to many other factors. Therefore, such tests can only show the effects of this conversational course, but not specifically the effects of Wimba. In addition, due to the small number of participants, it was not feasible in this project to divide students into an experiment group and a control group to investigate the discrepancy between groups. Therefore, the data collected here was mainly from students and instructor's personal opinions, insights and feelings of using Wimba. The author hoped to understand how to improve intelligent and creative Wimba usage from this in-depth investigation on how this technology was being used in this particular course.

### *3.5 The Survey*

The survey was developed from the questionnaire used in the study by McIntosh, Braul and Chao (2003), which included information about learner characteristics such

as age, gender, previous experience using Wimba, and overall assessment of Wimba as a tool for language learning (see Appendix B for the complete survey). Both discrete responses and open-ended written comments were solicited in the questionnaire and interviews (see Appendix C). Students and instructor were interviewed later to provide further insights and in-depth understanding of learners' and teacher's choices in using Wimba (see Appendix D and E for the interview questions). The administration of both the survey and interviews were anonymous and voluntary.

### *3.6 Data Collection*

Data collection was conducted after the instructor submitted the course marks in order to avoid its potential influence on students' marks. In addition, it was thought that students might provide answers that are more authentic without the preconception to "please" the instructor. However, this approach reduced the amount of participants in the survey and interviews. Also, it was very difficult to schedule appointments with students when the semester finished. Unfortunately, only six students completed the survey and four participated in the interview.

### *3.7 Results Presentation*

The participants' information from the survey was presented in the form of percentages, mean, mode, range and standard deviation. The interviews were

transcribed and organized in categories according to the issues raised. Finally, the data from interviews and surveys was compared against each other for the relationships and discrepancies in between. Both data gathering sources were checked against each other at this stage.

### *3.8 Limitations of the Exploratory Study*

The principle limitations of this study are:

1. Due to the difficulty in getting a larger sample size, cautions should be taken when generalizing the findings
2. Findings of the research was based on subjective evaluations of Wimba from the instructor and students; no objective measurements of students' real development in oral proficiency was provided.
3. Since this study has focused on the use of Wimba voice board, the results are limited to this specific technology.

## **Chapter 4: Findings & Discussions**

### *4.1 Findings*

The purpose of this study was to analyze in depth the process of how Wimba was used for the development of oral proficiency and therefore to investigate means of improving intelligent Wimba usage for future students and instructors. Data was collected according to the following research questions:

1. What was students' perception on using Wimba in their language course?
2. What were the reasons behind the instructor's choices in implementing Wimba in teaching?
3. Did the Wimba-based activities designed by the instructor meet the objectives of the course?
4. Is there a certain type of learning that can be facilitated by online voice tools and what it is?
5. What are the in-depth pedagogical suggestions for improving intelligent Wimba usage for future students and instructors?

In order to fully answer the research questions, both quantitative and qualitative research methods were used in the form of questionnaires and interviews. Findings are presented in according with the research methods. Qualitative findings are organized and presented in respect of students' and instructor's opinions as well as the issues raised above.

#### *4.1.1 Quantitative Data*

Quantitative data was obtained through a questionnaire for students. Both discrete responses and open-ended written comments were solicited. Six students (29% of the total potential 21) responded to the questionnaire. The low rate of response might be caused by the fact that data was collected after students finished their final exams. Therefore, perhaps only those students who were highly interested in the research participated. However, the number and percentage values should be interpreted with caution due to the small number of total participants.

#### Demographic Survey

The participants' age ranged from under 20 to over 25, most of them (four students, 66%) were under 20, indicating that they were in the first two years of their post-secondary program. Five participants were females (83%) and one was male (17%). However, the gender ratio of the potential participants was more equalized (twelve female students and nine male students). Only two of the six students (33%) had used Wimba before. The relatively small amount of students with former Wimba experience was expected because online voice technology was still not widely used in university courses. Table 4 describes students' demographic background.

Questions and response	Number of students	Percentage
Gender		
Male	1	17%
Female	5	83%
Age		
Under 20	4	66%
20-24	1	17%
25-40	1	17%
Have you used Wimba before in other courses?		
Yes	2	33%
No	4	67%

Table 4: Students' Demographic Background

#### How Students Did Their Recordings

During the 13-week course, students were required to finish nine weekly Wimba assignments. In order to complete the assignments, students needed to record their readings of certain paragraphs from the textbook. The length of the paragraph was always within one page. Students usually read the paragraph several times before the final recording. As indicated from the questionnaire, four students practiced reading from one to six times (66%) before they posted their recordings online. Two students (33%) actually practiced more than seven times. For the question "how much time did you spend on Wimba per week", four students (66%) indicated that they spent less than one hour. One (17%) spent one to three hours and one (17%) devoted more than six hours. This result suggested that students invested different amount of time and effort in accomplishing the same task. At the same time, their efficiency also differed. Among the six students, two practiced more than seven

times, but only one spent more than six hours each week. The findings indicated a wide discrepancy among participants. Furthermore, considering that the assignment was to read only one paragraph in Chinese character or pinyin, it will be interesting to know how that student spent his or her six hours and how he or she had improved after that. Table 5 offers a description of how students did their recordings.

Questions and response	Number of students	Percentage
How many times did you practice before posting your message online?		
1 – 3 times	2	33%
4 – 6 times	2	33%
7 – 10 times	1	17%
more than 10 times	1	17%
How much time did you spend on Wimba per week on average?		
Less than 1 hour	4	66%
1 – 3 hours	1	17%
4 – 6 hours	0	0%
More than 6 hours	1	17%

Table 5: How Students Did Their Recordings

### Peer Feedback

As indicated by former research, it is helpful for students to be more critical of their work by listening to the recordings of classmates (HW, 2003a, 2004b, McIntosh et al., 2003). Therefore, questions were designed to investigate how participants reacted to other students' recordings. The results indicated that four participants (66%) listened to other students' recordings sometimes (3-5 times), but nobody did it often (more than 5 times).

Five students (83%) admitted that they never replied to other students'

recordings and one said that he or she did it very often. It is understandable that most students did not want to reply because the assignment was reading off a paragraph instead of a debate. The students had nothing to comment on but the pronunciation of others because the paragraph was the same for everybody. It is important to realize that in the Chinese cultural context, it would be considered rude and inappropriate if one student gives negative comments on others' work. In addition, students might not consider it as their job to give this type of feedback. As a result, for the sequent question asking students whether they received any replies, five students (83%) said "never" and one (17%) said "sometimes". Table 6 describes the above findings.

Questions and response	Number of students	Percentage
Did you listen to other students' recordings online?		
Often	0	0%
Sometimes	4	66%
Rarely	1	17%
Never	1	17%
Did you reply to other students' recordings?		
Often	1	17%
Sometimes	0	0%
Rarely	0	0%
Never	5	83%
Have you received other students' replies to your recording?		
Often	0	0%
Sometimes	1	17%
Rarely	0	0%
Never	5	83%

Table 6: Peer Feedback



### Evaluation of Wimba on Learning

When asked about their overall impression of Wimba, all participants responded positively. However, one student (17%) reported having technical problems in using Wimba. He or she felt that the loading of the bulletin board was too slow and sometimes part of his or her recording would be cut off.

The researcher also designed a selection of questions to investigate students' evaluation of their learning experience with Wimba. In this section, students were asked to rate their experience on a scale of 1 – 5, with 1 indicating Strongly Disagree and 5 indicating Strongly Agree (Likert-type scale). The results were analyzed and calculated in terms of mean, mode, range and standard deviation. “Mean” is the arithmetic average of all scores. “Mode”, on the other hand, indicates which score occurs most frequently. Both “range” and “standard deviation” show the dispersion of the scores or how individual scores vary from the central tendency. “Range” is the number of points “between the highest score on a measure and the lowest score plus one” (Brown, 1996, p. 106). “Standard deviation” was calculated with the formula suggested by Brown for small number of participants ( $N \leq 30$ ) as indicated below.  $\bar{X}$  is the symbol for the mean,  $X$  represents the scores, and  $n$  is the number of participants. Standard deviation represents the average of the differences of all scores from the mean (Brown, 1996).

$$S = \sqrt{\frac{\sum (X - \bar{X})^2}{n - 1}}$$

Findings indicated that students expressed overall satisfaction with their Wimba-related learning experience. Most students either strongly agree or agree that they enjoyed using Wimba with one student exception, which caused a big standard deviation value. That student also indicated in the earlier part of the questionnaire that he or she had some technical difficulties with Wimba and his or her recording was cut off sometimes. The unpleasant technical experience might have prevented that student from enjoying using Wimba.

Consistent with the findings of McIntosh et al. (2003), all students thought Wimba was user-friendly. Participants in this study also felt that Wimba helped their listening and speaking skills. However, when presented as a mean, the value for Wimba's helpfulness in listening (4.17) is lower than that in speaking (4.83). This result suggests that students felt that Wimba was more helpful in enhancing their speaking than listening. The earlier findings that students did not listen to other classmates' recordings frequently might provide some insights into this response. However, the relationship between these two answers still remains uncertain. It might be that students did not listen to others because they felt the purpose of using Wimba was only for speaking. While it is also possible that students found Wimba not as helpful for listening because they did not listen to other recordings often.

In the next question, students were asked whether they felt more motivated when Wimba was used, five (83%) of the students either agreed or strongly agreed. Five (83%) students also felt that Wimba resulted in their learning more. However, three

(50%) students neither agreed nor disagreed that Wimba helped them to become more confident talking in class (see the interview data for detailed explanation).

Three of the students were looking forward to use Wimba in future sessions, another three chose “neither agree or disagree”. However, all participants felt that students should be given the opportunity to use Wimba in their language course. These two answers indicated a discrepancy. If students evaluated Wimba highly, why did half of the them remain neutral towards its use in future sessions? One explanation is that maybe some students were not expecting to select the following session of this course in the second semester. Therefore, they did not know whether to agree or disagree to this statement.

As for the future use of Wimba, three participants suggested that it should be used to practice pronunciation in language courses. One student indicated that Wimba was helpful in language courses because students could “listen to their own pronunciation”. Students provided a variety of answers to the question “what do you like most about Wimba”? Three of them enjoyed the opportunity to listen to the recording and identify their own mistakes. Two of them also liked the easy-to-use features of Wimba.

However, technical problems still occurred sometimes. For the open-ended question “what do you like least about Wimba”, two students listed the technical problems. One student complained that he or she could not redo a particular section of the recording when he or she made a mistake. Another student’s concern was the

one stated before: the loading of Wimba Voice Board was slow and his or her voice was sometimes cut off in the middle. (see Table 7)

	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree	Mean	Mode	Range	S
1. I enjoyed using Wimba.									
N	3	2	0	1	0	4.17	5	4	1.1690
%	50%	33%	0%	17%					
2. Wimba was user friendly.									
N	4	2	0	0	0	4.67	5	2	0.5146
%	67%	33%	0%	0%	0%				
3. Wimba helped my listening skills.									
N	2	3	1	0	0	4.17	4	3	0.7528
%	33%	50%	17%	0%	0%				
4. Wimba helped my speaking skills.									
N	5	1	0	0	0	4.83	5	2	0.4082
%	83%	17%	0%	0%	0%				
5. I felt more motivated when Wimba was used.									
N	1	4	1	0	0	4.00	4	3	0.6325
%	17%	66%	17%	0%	0%				
6. I felt that Wimba resulted in my learning more.									
N	1	4	0	1	0	3.83	4	4	0.9832
%	17%	66%	0%	17%	0%				
7. I felt more confident to talk in class after practicing on Wimba.									
N	1	2	3	0	0	3.67	3	3	0.8165
%	17%	33%	50%	0%	0%				
8. I am looking forward to use Wimba in future sessions.									
N	0	3	3	0	0	3.50	3 & 4	3	0.5477
%	0%	50%	50%	0%	0%				
9. I felt every student should be given the opportunity to use Wimba in their language courses.									
N	2	4	0	0	0	4.33	4	2	0.5164
%	33%	67%	0%	0%	0%				

Table 7: Students' Evaluation of Their learning Experience with Wimba

### *Conclusion of Quantitative Data*

In summary, participants in this study evaluated Wimba positively. The time they spent on Wimba varied greatly from less than one hour to more than six hours. Most of the students did not listen to classmates recordings frequently and did not reply to the recordings. Overall, students enjoyed using Wimba because it was easy to use and allowed them to listen to their own mistakes. Meanwhile, two participants had some technical problems when using Wimba and considered it a drawback. Students felt that both their listening skills and speaking skills improved. However, half of the students neither agree or disagree that Wimba had made a big difference to improve their confidence in talking in class. All participants agreed that students should be given the opportunity to use Wimba in language courses.

#### *4.1.2 Qualitative Data*

While the questionnaire indicated information about students' evaluation and habit of using Wimba, interviews were designed to provide detailed insights into the information obtained. By adding a "why" to many of the survey questions, the researcher aimed to find a reason behind students' and instructor's choice in using Wimba. In other words, the researcher intended to investigate both why the instructor chose Wimba for her course and why the students behaved in certain ways when using Wimba.

The instructor and four students volunteered for the interview. Their names

were changed to aliases by the author in order to protect their anonymity. Interview data was categorized and presented in relevance to the issues raised.

#### *4.1.2.1 Students' perspective*

##### Background

Tom (Interview #1, February 28, 2006) came to Canada at the age of eighteen after he finished high school in Hong Kong. There were Mandarin classes offered in his high school, but he did not feel that he had learned much about Mandarin because there were more than forty students in the class and the teacher could not help individuals with pronunciation. Alice (Interview #4, May 3, 2006) came to Canada around fifteen years old after she finished middle school in Hong Kong and took Chinese classes in high school in Canada. The Chinese class in Alice's high school emphasized reading Chinese literature so she did not consider it learning Mandarin either.

Stephanie (Interview #2, March 6, 2006) came to Canada in 1992 when they were eleven years old. She took some Mandarin classes in Hong Kong when she was in elementary school because according to her, the Hong Kong government decided to integrate Mandarin into the elementary school curriculum at that time. When describing her learning experience back then, Stephanie said, "It was experimental because it was a new program and nobody took the class seriously". She took Mandarin again when she studied in high school. However, all the teachers

she met in high school were not native Mandarin speakers and she said that she could not learn much from them. As Stephanie said:

It's (the Mandarin class) not so bad for my first teacher, her first language was English, then French and then it was Mandarin. So I find her writing was pretty terrible but her pronunciation is good in a sense that it wasn't like that she was trying to learn from Cantonese to Mandarin. It was fresh Chinese. Whereas my second teacher in Grade 11, his first language is Cantonese, second English, third Mandarin. So a lot of things he says have the same problems as I do which is because his mother tongue is Cantonese. He wasn't able to help with my pronunciation that much because he makes the same mistakes.

Stephanie chose to enter this course because it is mostly verbal and she wanted to practice speaking Mandarin.

Cherry (Interview #5, May 3, 2006) came to Canada in 1997 when she was eleven. Compared to the other participants, she had the least experience of learning Mandarin in formal school settings. She took Mandarin for one term when she had just come to Canada and found it easy. Cherry loved watching Mandarin movies and singing Mandarin songs. She had a good amount of input in the target language and learned to speak that way. As Cherry said, "I am highly motivated in learning Mandarin and do not mind spending extra time on the language." According to her, she just loved the language. Another reason for her to take Mandarin in university

level was that she wanted to speak more “like a Mandarin person” and she saw the importance of mastering the language for her future career. Cherry also emphasized the importance of accuracy in speaking. Quoting from her, “if I cannot speak accurately, that means my Mandarin is still not very good”. (See Table 8 for a description of the participants’ background.)

Name	Tom	Alice	Stephanie	Cherry
Gender	Male	Female	Female	Female
Age	19	22	25	19
Age Coming to Canada	18	15	11	11
Years of Formal Education in Hong Kong	12	9	5	5
Mandarin Learning Experience in Canada before entering this course	None	2 years at high school IB Program	2 years at high school	one term in a Chinese school

Table 8: Background Information on Interview Participants

I observed and listened to students’ debates and presentations in class as well as postings on the voice bulletin board throughout the course. Based on my observation, Cherry had the highest proficiency level in speaking among the four from the beginning to the end of the course. I could hardly identify any mistakes in her speech. Tom’s pronunciation was also native like with only a few mistakes in certain vowels and tones. Alice had difficulty with tones sometimes, but overall it was good. Stephanie, on the other hand, spoke with a very thick Cantonese accent.



She had difficulty in pronouncing some words and the inaccuracy was big enough to influence understanding. However, Stephanie performed better on the voice bulletin board than communicating in real life. She had more time to practice and think before posting anything online, but concurrent conversations in Mandarin can be quite challenging for her.

All participants expressed their difficulty in learning different aspects of Mandarin. Tom said that he had problems in identifying the tones. He also wished to use more sophisticated vocabulary in conversation but did not know how to say the equivalent Mandarin expression. Cherry wanted to sound like a native Mandarin speaker and she emphasized that she still needed to improve her speaking ability. Sometimes she would translate directly from Cantonese in her conversation which would cause confusion. Stephanie, on the other hand, expressed her frustration in pronouncing certain initials such as “zh”, “ch” and “sh” as well as her difficulty in searching for words when having a spontaneous conversation. Furthermore, she wanted to “get rid of that Cantonese accent”.

Alice described her difficulty in speaking Mandarin as:

Cantonese is a dialect; it's completely different from the writing system...

And there are a lot of grammatical differences and regional differences

also. So that took a lot of depth too... Sometimes I even need to

reorganize my thoughts. Because I usually think in Cantonese,

sometimes English, right now I am finding myself thinking more in

Mandarin, because it is like writing Chinese, I have to actually use a different thinking system.

Interestingly, three of the students considered Mandarin as a formal and polite language while Cantonese is more like slang. One reason can be that all Chinese dialects share one writing system for easier communication. Writing is sometimes used as a way to convey messages when people have difficulty understanding each other's dialect. Also, it is obviously less cumbersome when the government wants to send any written documents throughout the country. Mandarin, as the official language in China, is consistent with the writing form. In other words, people around China speak different dialects but read and write Mandarin. As a language that is associated with literacy, Mandarin might be considered formal to Cantonese speakers.

Another reason can be that Cantonese speakers in this case are only exposed to formal Mandarin. As Cherry said:

It just feels like more polite to speak Mandarin for me. Probably because I am not a Mandarin person, I only learned Mandarin from textbooks and newspapers. So I don't learn slang and other stuff, that's why it makes me feel it's more polite than Cantonese.

When I asked her whether she heard any slang in the Mandarin movies that she watched, she said that she heard some but could not understand any. Cherry's comments brought up the significance of bringing authenticity into language

education. As an important component of the language, slang and idioms should also be integrated into language classrooms. Students need to be able to use the target language not only for reading, writing and formal conversation, but also for informal talks among friends. Instructors should teach the language in a way that students could engage in diverse registers.

I observed in class that Mandarin conversations only occurred between students and the instructor. Students used Cantonese when talking to peers. The classroom atmosphere was very lively and students were friendly towards each other and enjoyed joking around. As described by Alice, Cantonese was their socializing language. Joking in Mandarin would be too difficult for them. All students were highly motivated to learn Mandarin for a variety of reasons, most of which were related to future careers or current jobs.

#### Overall Impression of Wimba

Consistent with the findings from the questionnaire, the interviews showed that students felt positive towards their learning experience with Wimba. Tom especially liked the homework assignment with Wimba because it was fun. As described by him:

I guess I enjoyed saying all the pronunciations correctly, I guess it is hard to say it correctly, so to me that's fun cause I am satisfied with what I am saying. And I've never done anything like this before. So it's my first

time experience.

Like Tom, all student participants who were interviewed said they had never used Wimba before they took this language course. Stephanie said that she thought it weird when she first heard that they had to use online voice board to post homework because she had not done a lot of lab work for any of her other courses. Also, she could not understand why this was necessary with such a small language class (the other Chinese classes at the same university range from 25 to 30 students). However, all students reported that Wimba was very simple and they had no difficulty in learning to use it. Most students did their recordings at home, except Stephanie, who used the computer lab because she did not know how to attach the microphone to her home computer.

#### Recording Procedures

Students followed similar procedures when they recorded their reading. If the paragraph was in Chinese characters, they would look in the dictionary first to note down the pinyin, practice for several times, then record. After recording, they would usually listen to it once more to make sure that there was no mistake. Tom practiced three to eight times before the recording depending on the difficulty of the task. Alice also reported a similar amount of practice. Cherry only spent eight to ten minutes for each assignment. It took Stephanie five to ten minutes to practice reading at home and another fifteen to twenty minutes at the lab for recording.

However, the preparation before practicing could consume a long period. Tom and Alice both complained that they had to spend too much time on finding the pinyin for the characters that they did not know how to pronounce in Mandarin. The recording process could be tedious also. Since Wimba does not allow students to erase part of their speech when they make a mistake, participants would have to re-record the whole thing sometimes. As Alice said:

...you have to erase your whole message if you are not satisfied with your work, so you can't start just right in the middle. Like sometimes I speak one word wrong, but I didn't want to say "um...um...um..." too many times on the Wimba. So I have to do it all over again. So that takes a while...that took me two hours to do each assignment.

Cherry said that was not a big problem for her except once when she made a mistake near to the end and had to record again. Stephanie, on the other hand, developed her own strategy in recording by using the "pause" function. She would just read half of the paragraph, stop in the middle, practice a little bit more, then record again. According to her, she liked practicing beforehand, but when the paragraph was too long, she would forget some parts of it. The "pause" function allowed her to segment the paragraph into several smaller parts that are easier to accomplish.

### View on Peers' Work

Most participants in this study reported in the interviews that they would listen to their peers' recordings sometimes, which is consistent with the data collected in the questionnaire. Cherry and Alice would listen to the whole recording while Victor would just listen to part of it. Stephanie never did so because she did not consider her peers' recording standard and did not see why she could benefit from it. If she had time, she would rather watch Chinese TV and listen to Chinese radio for the standard pronunciation. Meanwhile, according to the other participants, they chose to listen to other students' recording due to the following reasons:

1. To check for information for the homework assignment, e.g. which section to read, in which form to record, etc. (Tom)
2. To see how other people are doing and get a sense of one's own level in class.  
(Alice & Cherry)
3. To learn one's own mistakes from the mistakes that the classmates made.  
(Alice & Cherry)

Interestingly, opposite to Stephanie's opinion, Alice and Cherry both thought that listening to classmates' recordings was more helpful than listening to standard pronunciation from the media. Alice mentioned that she realized her own mistakes through listening to others. Sometimes she would ask herself, "Do I sound like that as well?" Cherry also commented that listening to her classmates reminded her not to make the same errors. When asked why they did not find listening to the TV or

radio more helpful, Alice said:

Honestly in terms of our levels, at what level I am currently at...you can't really compare to the standard level. Well, obviously that (comparing to the standard pronunciation) will be helpful too, but when I compare to my own classmates, you can really tell.

Former studies suggested that listening to peers' recordings allowed students to be exposed to accented pronunciation, which added authenticity into language learning (McIntosh et al., 2003). However, in the case of the participants in this study, the purpose of accessing others' recordings was not only to improve their listening skills. Instead, it indicated a need of the students to assess their own learning. The availability of peers' recordings provided them something not intimidating to compare with. That comparing process could build up students' confidence in a way when they saw that they were not the only ones making mistakes. At the same time, paying attention to others' mistakes made them more aware of their own. It is always easier to improve when one can identify which part he or she needs to work on.

Different from the findings of McIntosh et al. (2003) but consistent with that of Poza (2005), participants in this study did not mind other people listening to their voice online. First of all, this was a conversational class and students got the opportunity to listen to each other in class already. Secondly, it was "common sense" that they should not comment on each other's recordings in class. Therefore,

students did not need to worry about being heard by classmates.

On the other hand, Stephanie thought as students, they did not have the authority to comment on others. All participants also mentioned that they would feel very uncomfortable if other students commented on their recordings. As Alice said, “I don’t really mind as long as they (classmates) don’t talk about it (recording) right in front of my face.” However, Tom mentioned it to a classmate once just to joke around and make fun of him as a friend.

The findings suggested that perhaps out of curiosity, students would listen to others’ recording. However, they did not consider themselves as legitimate to give instructional comments and feedback. The reason might be related to students’ self-esteem of their Mandarin proficiency. As Stephanie commented, “It’s hard to critique as a student. I think it will be good for the teacher to listen to what they are speaking and how they are speaking”. Meanwhile, there was not much to comment on because of the nature of the assignment. Furthermore, students would feel uncomfortable if other people talked about their recording. As a result, students would listen to the recordings privately but would not communicate about it in the open.

#### Reasons to Consider Wimba Helpful

All participants agreed that Wimba helped with their learning, and the reasons can be summarized as follows:



First, Wimba “forced” them to practice their pronunciation. Students admitted that they would not have practiced so hard if the instructor had not asked for evidence of their oral assignment. When the students knew that the instructor would evaluate their recordings, they put extra effort into it because they wanted good marks.

Therefore, students might have practiced their pronunciation more in this course compared to similar courses that these same students took where Wimba was not used.

As Tom said:

...Wimba actually take like over half an hour to practice, so if there was no Wimba, I probably wouldn't have spent this much time, I probably would listen to tapes or practice once or twice. Definitely not as much as I do now.

Second, consistent with former research, students liked being able to listen to the recordings of themselves and others. It encouraged them to become more aware and critical of their own mistakes (HW, 2003a, 2004b; McIntosh et al., 2003). All the participants who were interviewed in this study could identify exactly what pronunciation problems they had. Stephanie mentioned that being able to hear herself definitely helped. She never realized certain mistakes of her speech before she listened to the recording. Alice also expressed her surprise at finding out how many mistakes she was making. As she commented:

Because when we talk to people, we don't usually listen that closely to ourselves. But when we are recording Wimba for assignments, for

marks, then we will give it more attention. That mostly helped with my speaking and helped my awareness.

However, students still expressed the need for instructor's assistance in correcting their mistakes. In other words, although they were aware of their errors, it was difficult for them to adjust on their own. Constructive instructions on how to correct the errors from the instructor were preferred by the students.

Third, as suggested by former studies, Wimba provided a low-anxiety environment for practice speaking (Cho & Carey, 2001; Felix, 2004; McIntosh et al., 2003; Poza, 2005; HW, 2004b). Some students were more willing to speak on Wimba than in front of the class. Cherry commented that she felt more comfortable when talking on Wimba, because it was not as intimidating, "you are all by yourself when recording, so you can focus more".

Fourth, Wimba allowed the instructor to listen to each individual student and give them diagnostic feedback (HW, 2004b; McIntosh et al., 2003). Meanwhile, students felt secure and supported that the teacher could get access to their recordings and know exactly what their learning difficulties were. Overall, they were happy with the group feedback that the instructor offered regarding to their Wimba assignment because as Cantonese speakers, they made similar mistakes when speaking Mandarin. Alice and Stephanie would love to receive individual feedback from the instructor if it was confidential. However, they also commented that individual feedback was not that necessary in this particular language course.

Fifth, all students except Stephanie felt that they became more confident talking in class after practicing on Wimba because their pronunciation improved and they practiced more. As Alice described:

It helps to build my confidence. Because when I speak more, I can grasp it. Like it's a really clear comparison. In the beginning, I didn't even speak to Ms. Jin in Mandarin, I spoke English all the time. Now I am more confident and yeah... Like when we are discussing topics, debating in class, I am usually the one with the opinion and I am not scared to say them aloud any more. And even though I don't know the words, I am now confident to ask and have the teacher to correct me and stuff... I am not afraid of exposing my weakness any more because I am not as bad as I was and I know I could improve.

Stephanie did not feel that Wimba improved her confidence because she was very confident to begin with. Tom also commented that he never felt uncomfortable talking in front of class because he was a highly confident person. However, all students mentioned that they were only confident enough to talk in class because it was a less-threatening learning environment. Students were still intimidated when talking to native Mandarin speakers. They commented that when they talked to native speakers, they were more conscious of their accent. In addition, the lack of skills in negotiating meaning in Mandarin was an obstacle for them to communicate effectively.

Sixth, this particular Wimba assignment helped students in mastering the pinyin system. Tom was accustomed to reading Chinese articles in Cantonese. Now he had to associate the character with pinyin, which indicated Mandarin pronunciation. By noting pinyin on the characters, Alice found that she could now type characters on the computer with the pinyin inputting system.

#### Limitations of the Wimba-based Activities

All students agreed that their pronunciation had improved greatly after working on the assignments except Tom, who said that he was not sure whether his oral competence had improved, but he said that he had improved in associating Chinese characters with Mandarin pronunciation. Although the other students noticed the improvement in their pronunciation, they expressed that they still had difficulty in participating in conversations. Cantonese is different from Mandarin in a variety of ways and students did not get an opportunity to practice on the part other than pronunciation, at least not in the Wimba-based assignments.

Stephanie appreciated that her instructor corrected her when she used Cantonese expressions in Mandarin in class. However, the instructor could not correct her on her expression in her Wimba assignment because the homework did not allow her to make such mistakes. When Stephanie talked to native speakers, she felt that she had a hard time expressing herself. Tom also mentioned that he could only use simple words and would appreciate to speak more sophisticatedly. Being the most

advanced learner of the four participants, Cherry said that she could make herself understood by native speakers, but she noticed that she was translating directly from Cantonese sometimes when she talked.

Students' comments suggested that although their pronunciation improved, they still had difficulties in having conversations because they did not know the proper vocabulary in the target language for communication. It would be helpful if the instructor could have included exercises on vocabulary training. However, since students would be using various vocabularies for different purposes in different situations, it is even more important for the instructor to teach students strategies to negotiate meaning in Mandarin when they do not know the exact word. Also, students should be taught how to engage in conversations that require different registers.

#### What Type of Learning Wimba Facilitated

The students who were interviewed all agreed that Wimba was more beneficial for their pronunciation than listening. As Stephanie commented, they could improve their listening better through standard Mandarin pronunciation through TV and radio. Her comment was consistent with the relatively lower rate on the benefits of Wimba on listening in the data collected from questionnaires.

Participants all agreed that by listening to their own recording, they paid more attention to the mistakes they made in pronunciation and then put more effort in

improving it. Knowing what to work on and constant practicing might be the reasons why students improved in pronunciation.

However, since Wimba was only used for pronunciation practice in this course, students' comments were limited to this usage. Wimba could improve other language abilities when used for other purposes.

When asked which language proficiency level they thought Wimba facilitated most, all students chose the beginning level and intermediate level because for them Wimba was most helpful in developing their standard pronunciation. Therefore, they considered those two proficiency levels needed this kind of support the most. Yet, Alice thought that beginning level students would not appreciate using Wimba because they might feel frustrated when listening to their own recordings.

As in the comments above, the findings from the students here could also be limited to their learning experience. Caution should be taken when generalizing the findings.

#### Future suggestions on using Wimba

Only Stephanie suggested that she would prefer a training section on how to use the software in the beginning of the course because she had been struggling with it. She also recommended having some online discussions or assigning one student to critique another. That would make students listen to each other more attentively.

Tom felt it would benefit him if the teacher posted some questions that require

complicated and challenging answers. He thought this type of exercise would make him concentrating on both form and meaning of his speech.

Cherry thought that instead of asking students to write a journal, the instructor could ask students to keep an online voice journal. In that way, the students would be more motivated to listen to each other and the Wimba-based activity would not just focus on pronunciation.

Alice expressed that she would appreciate it if the teacher could post her reading of the text online. Because students had to go get the CD for the textbook, their teacher's voice on Wimba would be more accessible to everyone. However, she did not consider having a debate on Wimba a good idea. According to her, Wimba voice board was not an ideal tool for discussion because it was not synchronous. However, it was just her personal view. Previous research indicated that asynchronous conversation on the bulletin board allows students enough time to construct elaborate output in the target language (Carey, 1999, 2001). Furthermore, Alice expressed her opinion of Wimba and student's motivation as follows:

Wimba itself is just a tool, so it really depends on the person, if they want to do it better, they could through Wimba.

Alice's comments are consistent with the findings from Kabata et al. (2004): the students who are more motivated will gain more from Wimba because they would put more effort into it. In other words, Wimba offers a way through which learners can accomplish more with practicing. Therefore as language instructors, we should

focus on: 1) how to utilize the potential of the software in a most effective way for both teaching and learning; 2) how to motivate the students so they would use the learning tools more. In the next part, I will examine how the instructor used this software to promote students' learning and why she chose to do so.

#### *4.1.2.2 Instructor's perspective*

As mentioned before, Ms. Jin (Interview #3, March 28, 2006) is a devoted instructor who has been teaching Chinese for over twenty years. She heard about Wimba through other instructors at a conference and started using it two years ago. At first, she used the software to post her readings of texts online because there was no CD available for the textbook she taught. Later on, she started using it for students' oral assignments. Ms. Jin would listen to students' recordings first, write down the mistakes that students made and then correct them in class. She commented that one-on-one feedback would make students feel different because she could tell them their specific strength and weakness. When she had a class of students from diverse backgrounds, this method was very helpful because she could offer individual feedback on each student's mistakes. However, since this class was composed of students with the same first language background (Cantonese), they tended to make similar errors. Therefore, she would just summarize the mistakes and correct the students all together in class.

Ms. Jin spent almost four hours on marking each oral assignment. It took even



longer when she provided oral feedback to individuals. She insisted on listening to students' recordings by herself instead of letting her teaching assistant do it because she wanted to understand students' learning difficulties better. When asked why she would choose to assign oral homework on Wimba, Ms. Jin said:

Because I think Wimba gives students more chances to practice. If I didn't give students this kind of assignment, students will not practice by themselves... In class, I cannot correct all the students, because we don't have enough time in class, right? I cannot correct every student with their problems in pronunciation. Some students learned, but some students' level is very low, and the office hour is not enough. So I want to give some students a chance to practice at home.

Ms. Jin commented that for non-native students of beginning level, she would post some questions online for them to answer, thus also to improve their listening comprehension ability. However, for this course, she thought the students already had very advanced listening skills, so she focused on correcting their pronunciation and learning pinyin. Ms. Jin emphasized the importance of pinyin because she thought pinyin was the bridge to speaking standard Mandarin. She also realized that she did not focus much on the conversation when she assigned the homework. According to her, the students already had very high conversational skills because of their Cantonese background. The only thing that they needed to improve was their pronunciation.

Compared to her former teaching experience without using Wimba, Ms. Jin suggested that this software enabled her to check every student's pronunciation. Therefore, it was easier for her to evaluate each student's improvement and progress. When she knew exactly what the problems students had, she could give individualized assignments focusing on those specific learning difficulties. Students' speaking competence improved as a result of pertinent practices. Ms. Jin was very happy with students' improvement when Wimba was used. Therefore, she did not mind spending extra time on marking the Wimba assignments.

As for the future use of Wimba, Ms. Jin commented that she would definitely use this software again because it helped students in their speaking. When asked whether she would use Wimba in some other ways, she answered: "I don't know whether Wimba will have more functions." Her answer suggested that her ways of using Wimba depended and was limited to the basic functions that the software was designed for. Therefore, the instructor focused more on the new improvement of the technology in the future instead of creative ways of using the already available functions. As Lam (2000) suggested, instructors should be provided training on how to use the technology most effectively. Therefore, my interest grew in knowing how Ms. Jin could get her support in that aspect.

Ms. Jin said that she did go to workshops for teachers' development provided by the institute. However, the workshops focused mostly on using WebCT instead of Wimba because this software was not as widely used. When she had questions, she

would go to the lab and ask the technicians for help because people there were informative and it was more convenient for her. When told that her institute offered courses in helping teachers to combine technology with their teaching (see Appendix F for the course syllabus), Ms. Jin did not show much interest because she was not sure whether she would have time to attend this type of formal courses. Furthermore, she expressed her concern in learning to use technology:

I think it's something very complicated. I think I learn this kind of things very slowly. So it's just using the basic things, simple things. I think for different subjects it will be different because the workshop is for many kind of subjects, but different subject uses different technology.

In conclusion, the instructor in this study chose to use Wimba because she thought it was beneficial for the students. As a devoted instructor, she did not mind the extra work that Wimba created as long as her students could improve with constant practice. She also realized the benefit of providing students individualized support. Therefore, she felt it important to know each student's specific errors and encouraged students to practice pronunciation with her individually after class. However, the Wimba learning activities she chose to use reflected an older orientation of the audiolingual approach, which was very common to many Asian instructors because of the education they received when they were students many years ago.

The choice of Wimba assignments also depended greatly on Ms. Jin's perception of what students needed to improve and what was important in learning. She did not

involve much communicative activities in the assignments because she thought that students needed most to practice their pronunciation. However, understanding students' needs in this course was not an easy job. Unlike other conversational Mandarin courses for non-heritage learners, this course was to teach students Mandarin as a second dialect instead of a second language. Many students already had advanced reading and writing skills in the target language before they took the course. As someone who also spoke a dialect other than Mandarin, Ms. Jin learned to speak and read Mandarin concurrently when she attended school as a child. It would be difficult for her to understand why students would still had difficulty in vocabulary use and grammar when they could already read and write the language. For her, speaking Mandarin might just mean saying whatever you would write down on paper. Therefore, she concentrated mostly on pronunciation instead of other communicative skills.

It was important to understand that Ms. Jin's implementation of Wimba in her course was already an innovation among her fellow instructors. She spent extra time and effort on Wimba because she cared greatly for students' improvement. However, without other instructors working with her as a team, it was difficult for her to become too creative in using the software while she was busy concentrating on the extra work Wimba created for her. Therefore, her concept of the usage of the software was limited to its standard functions. Furthermore, the related workshops she attended did not offer her much suggestions on how to use Wimba more

creatively or effectively for teaching. Ms. Jin was aware of the courses available on implementing technology in teaching. However, she felt that those courses were for people who were more advanced in technology instead of people of her level. In addition, she stressed the importance in providing different training for instructors from different fields because they would use the same technology differently.

#### *4.1.2.3 Comparison between Students' and Instructor's Feedback*

Both the students and instructor evaluated Wimba positively. Ms. Jin was concentrating on using Wimba to correct students' pronunciation and students did feel that their pronunciation improved. However, Ms. Jin's understanding of Wimba's benefits was not exactly the same as students. Students discovered more benefits of the software than she expected. The students wanted more communicative activities while the instructor focused mainly on using the audiolingual approach. Furthermore, Ms. Jin's imagination of possible pedagogical application of Wimba was limited to the standard functions provided by the software. Meanwhile, students needed activities that required diversities of registers as well as strategies for meaning negotiation. The detailed comparison between students and the instructor's feedback is illustrated in Table 9.

	Students	Instructor
Overall evaluation	Positive*	Positive
The role of peers' work	<ul style="list-style-type: none"> <li>Listening to other students' recording was helpful in giving them information on how to accomplish the assignment.</li> <li>Classmates' mistakes made them more aware of their own.</li> </ul>	<ul style="list-style-type: none"> <li>Students could learn from each other especially by listening to the homework with good quality.</li> </ul>
Why Wimba helped learning	<ul style="list-style-type: none"> <li><u>It forced students to practice.</u></li> <li><u>It helped students to learn by listening to themselves and classmates.</u></li> <li>It provided a low-anxiety environment.</li> <li><u>It allowed the instructor to know each student's mistakes.</u></li> <li>It helped students to become more confident talking in class.</li> <li><u>It improved students' knowledge of pinyin.</u></li> </ul>	<ul style="list-style-type: none"> <li><u>It forced students to practice.</u></li> <li><u>It helped students to learn by listening to each other.</u></li> <li><u>It allowed the instructor to know each student's mistakes.</u></li> <li><u>It improved students' knowledge of pinyin.</u></li> </ul>
Limitation of Wimba-based activities	<ul style="list-style-type: none"> <li>It did not provide students opportunities to practice other communicative competence such as vocabulary, syntax, morphology, etc.</li> </ul>	<ul style="list-style-type: none"> <li>Students had very advanced skills in conversation already. All they needed to practice on was pronunciation. Therefore, there was no limitation of the activities.</li> </ul>
What type of learning Wimba facilitated	<ul style="list-style-type: none"> <li><u>Pronunciation</u> and some listening</li> <li><u>Beginning level and intermediate level</u></li> </ul>	<ul style="list-style-type: none"> <li><u>Pronunciation</u></li> <li><u>Beginning level and intermediate level</u></li> </ul>
Suggestions on future use of Wimba	<ul style="list-style-type: none"> <li>A variety of activities that integrate different language skills.</li> </ul>	<ul style="list-style-type: none"> <li>It depends on what functions that Wimba will have in the future.</li> </ul>

Table 9: Comparison of the Feedback from Students and Instructor  
 \* Underlined part indicates the agreement between students and instructor

#### *4.1.3 Comparison between Quantitative and Qualitative data*

The quantitative and qualitative data collected in this study were mostly consistent with each other. Students evaluated their learning experience with Wimba positively and felt that it resulted in more learning. They also suggested that they benefited from listening to the mistakes made by themselves and classmates. At the same time, participants felt that Wimba was user-friendly and simple to use. However, there were technical limitations that could be improved.

The data collected during the interview provided insights into the discrepancies from questionnaire answers. Findings from the questionnaire indicated that different students spent different amount of time on using Wimba. The interview data suggested that the variation of the time students spent on recording was caused by the preparation beforehand and the correction of errors afterwards. The focus of the assignment was on practicing pronunciation and students felt that their speaking ability improved more than their listening skills. Students commented that they learned more because they were forced to practice more when this oral assignment was required.

One student indicated in the questionnaire that he often replied to other classmates while the others all said that they never did so. Data from the interview suggested that the student responded to other students' recording just for joking. Usually students listened to each other sometimes but did not reply because it was common sense that they should not do so. (see Table 10 for a detailed comparison)

	Quantitative data	Qualitative data
Habit of using Wimba	Most students practiced from one to six times before posting online. One student devoted more than six hours on practicing.	The preparations for recording and correction of errors could be very time consuming. Some students spent more time on those parts.
Peer feedback	Most students listened to their classmates sometimes but almost no student replied to any or received any feedback from others.	Students listened to each other for various reasons. However, it was common understanding that they would not comment on each other.
Overall evaluation	<ul style="list-style-type: none"> <li>• Positive</li> <li>• Wimba was user-friendly.</li> <li>• Wimba was more helpful in improving listening than speaking.</li> <li>• Most students felt that Wimba resulted in more learning.</li> <li>• Half of the students neither agreed nor disagreed that Wimba helped them becoming more confident talking in class.</li> <li>• Students felt they benefited from listening to their own mistakes.</li> </ul>	<ul style="list-style-type: none"> <li>• Positive</li> <li>• Wimba was user-friendly.</li> <li>• The focus of the homework assignment was on speaking rather than listening. Also, students felt that they would improve more by listening to standard speech on the TV or radio.</li> <li>• Wimba forced students to practice more, therefore, they learned more.</li> <li>• Some students suggested that they were already confident to talk in front of the class in the beginning.</li> <li>• Students felt they benefited from listening to the mistakes made by themselves and classmates.</li> </ul>
Technical limitations	<ul style="list-style-type: none"> <li>• Loading was too slow</li> <li>• Voice was cut off in the middle</li> </ul>	<ul style="list-style-type: none"> <li>• Students had to re-record the reading if they made a mistake in the end.</li> <li>• Wimba had a limited recording time; therefore, the voice might be cut off when time was up.</li> </ul>

Table 10: Comparison between Quantitative and Qualitative Data



Findings from the questionnaire showed that half of the students neither agreed or disagreed that Wimba helped them to become more confident to talk in class. In the interview, one participant said that she was very confident in speaking even before taking the course. The other students said that they were still not confident in talking to native speakers after using Wimba. That might be the reason why three students in the survey provided neutral answers on whether Wimba improved their confidence in talking in class.

#### *4.2 Discussion*

##### Research Question #1: What was students' perception on using Wimba in their language course?

Consistent with former research, students evaluated their learning experience with Wimba positively. They practiced more and became more aware of their own mistakes. Also, they felt secure and supported in learning when the instructor knew what their problems were. Overall, students built up confidence through their practice on Wimba. However, that confidence only stayed in the classroom; students still felt intimidated when talking to native speakers in real life.

In addition to former studies, findings from this research suggested that students listened to classmates' recordings for information on completing the assignment as well as information about their own level in the classroom. Comparing themselves against classmates increased students' confidence when they saw that other people

were also making mistakes. Meanwhile, students used their classmates' errors to remind themselves not to make the same ones.

Since those Wimba-based activities were designed to practice pronunciation, students did not feel that their listening skills improved as much as their speaking skills. Furthermore, they would like to have more integrated activities that require a variety of language skills.

Lastly, some students felt frustrated with some technical limitations that Wimba had, such as slow loading, limited session time, and not being able to revise part of a speech.

Research Question #2: What were the reasons behind the instructor's choices in implementing Wimba in teaching?

The instructor chose to implement Wimba in teaching because she thought it would benefit her students by forcing them to practice their pronunciation. Also, she could listen to each student and offer individualized feedback. However, the activities she designed depended on her understanding of students' needs and the importance of certain component of communicative competence. The instructor's behavior was consistent with the findings from Berge (1991): "how instruction is designed is based largely on the designer's interpretation of the world, filtered through his or her instructional philosophy. It is the instructional design, not the delivery system, that frequently sets the limits on the quality of instruction" (p.5).

Moreover, the instructor's vision of how Wimba could be implemented was limited to the most obvious functions of the software. When she searched for information on using Wimba, her first resort was the technical support group. She was aware of the importance of technical workshops but unfortunately, she did not have much information about relevant trainings. Although as someone who was already using one of the most advanced technologies, she still considered herself a novice in this field. Therefore, she was reluctant to attend the courses that teach teachers how to implement technology in teaching because she was afraid that she was not advanced enough for it.

In conclusion, recognizing the instructor's initiation and good intention in using Wimba, it is important to realize that Wimba can be used in a more comprehensive way to promote communication and negotiated meaning which are critical to optimizing L2 learning.

Research Question #3: Did the Wimba-based activities designed by the instructor meet the objectives of the course?

I examined the effectiveness of those activities according to the basic principles proposed by Richards & Rodgers (2001) as well as Swain (1985). The detailed comparison is presented in Table 11.

<b>The basic principles</b>	<b>Wimba-based activities</b>
Learners learn a language through using it to communicate.	Learners were only asked to read a paragraph, no communication was required.
Authentic and meaningful communication should be the goal of classroom activities.	Communication was not the goal of the activities. Also, the task was not meaningful.
Fluency is an important dimension of communication.	The task required only fluency in reading.
Communication involves the integration of different language skills.	Accurate pronunciation and reading skills were required. Other language skills were not involved.
Learning is a process of creative construction and involves trial and error.	The activities only involved errors in pronunciation and did not ask for creativity.
Learners should be pushed to produce precise and appropriate output in the target language.	Learners were required to provide accurate output in pronunciation. Other skills were not demanded.

Table 11: Evaluation of Wimba-Based Activities

In summary, the activity designed for Wimba in this course did help students to improve their pronunciation. However, they reflected and older orientation of the audiolingual approach instead of the communicative approach and focused on pronunciation rather than more authentic communication. They also failed to integrate other language abilities and sociolinguistic skills and did not challenge students with “pushed output”. Therefore, the activity did not prepare students for

authentic communication with native speakers and the potential of Wimba was not fully realized.

Moreover, the syllabus suggested that the purpose of this course was to improve the students' Mandarin pronunciation as well as conversational ability. Emphasis of instruction should also be on the differences of pronunciation, vocabulary and grammar between Cantonese and Mandarin. More importantly, students should be taught strategies to negotiate meanings in Mandarin so they are less likely to become passive learners. Based on the feedback from the students, they lacked practice on their conversational skills in the Wimba-based activities. Therefore, those activities did not fully meet the communicative purpose of the course.

Research Question #4: Is there a certain type of learning that can be facilitated by online voice tools and what it is?

The instructor and all students agreed that Wimba most facilitated learning pronunciation and speaking for learners of novice and intermediate level. However, this finding should be interpreted cautiously. The online voice tool in this case was only used for practicing pronunciation by intermediate students. The instructor and students' opinions could be limited to their experience. Wimba might also be beneficial for other language skills or for other proficiency levels.

Research Question #5: What are the in-depth pedagogical suggestions for improving intelligent Wimba usage for future students and instructor?

As mentioned above, when asked whether she would use Wimba differently in future teaching, the instructor suggested that it depended on whether the software was going to have any new functions. Meanwhile, the students brought up some interesting suggestions on how they would like to learn with Wimba. In summary, the suggestions were:

1. A training session at the beginning of the semester on how to use Wimba.
2. Online voice discussions.
3. Assigning students to critique each other.
4. Communicative thought-provoking questions that require complicated answers.
5. Asking students to keep an online voice journal.
6. More communicative activities and less audio-lingual ones.

Some of those suggestions are not practically applicable. Students might not feel comfortable being critiqued by others in a language-learning environment. Also, an online voice journal can be too private for some learners. However, those suggestions expressed students' need for integrated activities that require a variety of language skills. Instructors should keep that in mind when designing the assignment.

Moreover, as Alice suggested, Wimba Voice Board provided students unlimited

access and extended study sessions outside of the classroom. Students would put more effort in learning when they are motivated. By using the communicative approach, the utility of Wimba could be maximized. Therefore, the instructor should work on how to use the technology in motivating the students; and more importantly, after students are motivated, how to design and implement communicative activities through which students can achieve maximum benefit from the technology.

## **Chapter 5: Conclusions, Applications and Recommendations**

In order to address the specific need in the field of voice technology for L2 acquisition, this thesis looks into Wimba as a tool that provides students more opportunities to practice speaking the target language. More specifically, the purpose of this study is to investigate how Wimba was used as an online tool in a representative class process as well as to suggest ways of maximize utility of this technology.

Based on previous and current research, the focus of L2 education is on enhancing students' communicative competence (Ommagio Hadley, 2001). Considering the complicated nature of communicative competence, students should be given the opportunity to develop integrated language skills through meaningful communicative tasks (Canale & Swain, 1980). In order to improve students' speaking, they should be challenged not only with comprehensive input but also with comprehensive output (Swain, 1985). Pronunciation, as an important component of communicative competence, should be woven into communicative activities (Levis & Grant, 2003).

Oral proficiency development still remained difficult and challenging to both students and teachers. Since 1990s, studies started to focus on the potential of CMC in enhancing learners' communicative competence (Abrams, 2003; Carey, 1999, 2001; Godwin-Jones, 2003a; Hamper & Baber, 2003; Payne & Whitney, 2002; Warschauer,



1997, 1999, 2004). With the development of technology, we are now able to move from the text-base phase to audio-video stage. Therefore, we must consider how can this technology be optimally used to influence L2 education?

Wimba, as one of the most convenient and widely used online voice software, attracted attention from many researchers (Cho & Carey, 2001; Coghlan, 2004; Felix, 2004; HB, 2003a, 2003b, 2004a, 2004b; McIntosh et al., 2003; Poza, 2005; Kabata et al., 2004). Research indicated that Wimba was user-friendly and convenient (Cho & Carey, 2001; McIntosh et al., 2003). Students got more opportunities in speaking the target language by using Wimba outside of the classroom (HW, 2004b). Meanwhile, listening to one's own recordings made students more critical of their work and more aware of their mistakes (HW, 2003a, 2004b; McIntosh et al. 2003). Exposure to their classmates' accented pronunciation added authenticity to the language input (McIntosh et al., 2003). Moreover, Wimba-based online communication provided students a low-anxiety environment (Cho & Carey, 2001; Felix, 2004; HW, 2004b; McIntosh et al., 2003; Poza, 2005). From the instructor's perspective, this software allowed her to know about each student's mistakes, strengths and progress and to individualize needed activities (HW, 2004b).

These studies suggested that when implemented into the curriculum, Wimba had the potential in enhancing students' communicative competence in various ways. However, former research failed to look into the instructor's role in the success of implementation. At the same time, they did not suggest what proficiency level and

what language skill (speaking, listening, reading and writing) Wimba facilitated most. Furthermore, the focus of the studies was usually on the advantage of Wimba instead of how it could be used most effectively for communicative learning. Therefore, the research questions of this exploratory and descriptive investigation were formulated as follows: How can we maximize the benefit of Wimba on L2 acquisition based on the feedback from students and faculty?

The design of the study was set up as a mixed methods study. Both quantitative and qualitative data were collected through questionnaires and interviews in order to understand not only students' and instructor's behavior in using Wimba but also the reasons behind it.

### *5.1 Conclusions*

The conclusions were organized and presented around three aspects: students, instructor and the effectiveness of implementation of the software. When combined together, these three aspects offered a full picture of the implementation of Wimba in this particular case and therefore answered the research questions.

#### *5.1.1 Students' Perspective*

Students enjoyed using Wimba because it was helpful and simple. There were some technical limitations of the software, but overall students' learning experience with the software was pleasant.

Most students indicated that they improved their pronunciation and pinyin due to the result of extra practice when Wimba-based assignments were required. They also realized through their experience that listening to their own pronunciation helped them to identify the mistakes. Some even noticed that listening to peers' work prevented them from certain potential errors that they might make. However, it might have been more effective if the instructor informed them the benefits of paying attention to others' mistakes in the beginning of the course.

Students expressed that they became more confident when they knew that their pronunciation was better. However, since the assignments were not designed for the purpose of communication, students still felt it difficult to become involved in conversations, especially conversations with native speakers. Similarly, the activities did not integrate language skills in different fields, so only students' pronunciation skills improved through the practice. Therefore, students needed meaningful activities that required them to use various language skills to produce comprehensive output.

#### *5.1.2 Instructor's Perspective*

Before analyzing the instructor's perspective, it is important to realize that Ms. Jin initiated using Wimba for students' benefit. She tried her best in implementing this technology into the curriculum and did help her students with pronunciation. Her student Alice won a scholarship to study in China recently because of her

extinguished performance in a Mandarin speech contest. However, we should also believe that there is always a better way to optimize the usage of a certain type of technology. As educators, it is our job to discover the unlimited potential of that technology. Therefore, only with a thorough analysis of what the instructor did that could we propose a more effective way of using Wimba in the future.

The qualitative data collected from the interview suggested that the instructor chose to use Wimba because she saw its benefits for students and she liked the fact that it allowed unlimited practice for students outside of the classroom. Her choice of its implementation was based on her understanding of what skills students needed to develop. Instead of designing activities that required integrated language competences, she focused only on pronunciation.

Her imagination of the application of the software was also limited to the current obvious functions of Wimba. There were courses offered by the institute on educating teachers on how to use technology effectively. However, she viewed the courses as high-tech oriented and therefore too advanced for her. Meanwhile, as a full time instructor, this type of courses might be too time-consuming for her. Furthermore, she commented that teachers' training should be more specific because instructors from different fields might use the same technology in different ways.

Former research indicated that instructor's enthusiasm in technology was very important (Cho & Carey, 2001; Kabata et al., 2004). As expected, findings from this research suggested that being enthusiastic is not enough for successful

implementation of the technology. Instructors need support not only on the technical problems that they might face, but also on how to implement the software into the course most effectively and creatively. As Lam (2000) suggested, technical training should not be limited to the simple “how-to” of technology, but more on how the software works and how it could be effectively integrated into the curriculum. Unfortunately, many relevant workshops that Ms. Jin attended remained in the stage of teaching instructors how to use the technology.

Moreover, considering the fact that post-secondary instructors could be extremely busy, it would be beneficial if the workshops are offered regularly for their convenience. In addition, a simple list of possible applications of the technology would also be useful for the busy instructors.

#### *5.1.3 The Effectiveness of Implementation of Wimba*

Students’ evaluation suggested that Wimba served its purpose in developing their pronunciation in this case. However, although important, pronunciation is only one component of the communicative competence. The assignment of reading a paragraph was helpful in practicing pronunciation but could be quite boring and did not require other skills needed in conversation. Students could have benefited more if other meaningful integrative activities had been designed. Furthermore, students will also benefit from learning strategies in negotiating meanings when they have difficulty expressing themselves in the target language. Therefore, in this study,

Wimba was effectively integrated into the course but did not meet its full communicative potential.

### *5.2 Applications*

The suggestions of applications were based on the belief that students should not only be taught the knowledge of subject area, but also ways to learn. Similarly, instructors should not only be taught the simple functions of the technology, but also how to integrate it in the most effective way. Moreover, instructors should “view the functionality available in the system they are using as a starting point, not the final word in creating a language learning environment for their students” (Godwin-Jones, 2003b, p. 55). With those beliefs in mind, the following criterias are suggested for future implementation in order to achieve the maximum benefit for developing students’ communicative competence:

1. Students should be assigned tasks that required them to identify their own mistakes consciously. For example, instead of giving feedback directly, the instructor could ask the students to evaluate their own recordings.
2. Learning tasks should be meaningful, authentic and communicative. For example, asking students to prepare a self-introduction for job interviews in Mandarin will be helpful for students in this class because they will be looking for jobs that require Mandarin proficiency.
3. Learning tasks should integrate multiple language competences as well as

multiple registers. Taking that job interview exercise for example, it requires not only comprehensible pronunciation, but also correct vocabulary, accurate syntax and appropriate social-linguistic competence.

4. Students should be challenged with “pushed output”. For example, the instructor can post a debatable statement online and ask students to give their opinions. The topic should be interesting so students will be motivated to construct elaborate comments.
5. Students should be encouraged to listen to other students’ recordings so they can learn from peers. In order to do so, the instructor could assign the task in a way that students have to provide different answers. At the same time, the topic will be so interesting that students would like to know their classmates’ postings. For example, Cherry’s suggestion of having an online voice journal will serve this purpose. Furthermore, if the class environment is friendly and students are comfortable with each other, the instructor can even require them to give peer feedback to each other to enhance their awareness of the language use.
6. Instructors should be provided the opportunities to learn how to integrate the software into teaching. A formal technology and teaching related course will be very helpful. However, for instructors with less time, frequent workshops or even a simple list of possible applications of the software would be useful too.

7. Since the instructional design is largely influenced by the designer's experience (Berge, 1999), it is recommended that the instructor does a survey with students at the beginning of the course to fully understand learners' needs. Instructional activities should be designed to meet students' needs.

### *5.3 Hypothetical Applications of An Ideal Use of Wimba*

As mentioned above, Wimba was beneficial for students in this study but did not meet its full potential. Therefore, I intend to provide some hypothetical applications of an ideal use of Wimba for this particular group of students.

In the beginning of the course, the instructor can post a welcoming message on the Wimba voice board to establish a non-intimidating instructor-students relationship. Because all students have some Mandarin knowledge before taking the course, the first Wimba assignment can be a one-minute self-introduction. Every student is required to listen to each other's recording in order to get familiar with their classmates.

During the first two weeks of the course, students will be learning pinyin and the basic Mandarin pronunciation intensively. Through those two weeks, Wimba voice board can be used for students to record their pronunciation and for the instructor to listen and correct. The instructor can sort out some common mistakes to correct in class. If there are uncommon mistakes that are made by students, she can correct



them through Wimba voice email. After the intensive training, students' next Wimba assignment will be to listen to their self-introduction that they posted two weeks ago and find five pronunciation errors that they want to work on. For the Wimba assignments later on, the instructor can post questions online that require complicated answers. When students record their answers, they will be asked to focus on the mistakes that they found of themselves. Usually students will improve after this intensive pertinent training. If a student has difficulty constantly on certain pronunciations, the instructor can provide individual help either during her office hour or through voice email. When listening to the students' answers to the questions, the instructor should focus on both pronunciation and expression.

After students get better in pronunciation, which is about the middle of the term, the instructor can combine WebCT forum with Wimba voice board for discussion and debating. Students can start their discussion and negotiation on WebCT, so they will have time to construct their idea in proper Mandarin expression as well as getting familiar with the vocabulary. Later on, they can record their final statement on Wimba voice board. Students can be assigned randomly to critique another student's statement.

Since Cantonese and Mandarin have many different expressions of the same object. The instructor can also set up a section on the WebCT forum about the different expressions of those two dialects. Students are encouraged to post the differences they noticed through their daily interaction with people. The instructor

can select some useful ones and post her standard pronunciation of those expressions on Wimba voice board occasionally for students to imitate.

### *5.3 Recommendations for Further Research*

The current exploratory study is limited to students learning another dialect using Wimba online voice board for pronunciation practice. Data was collected from students' and instructor's personal perspective. No scientific measurement was used to indicate how much improvement students actually made after using the software. Also, the student participants are the ones that are highly interested in learning with Wimba. They only represent views from motivated learners as themselves. Recognizing the limitations of this study, further attention should be given to better understanding of the effectiveness of the software for a bigger number of L2 students when other learning activities are implemented. Additionally, oral tests before and after the course on both experimental and control group should be used to provide more scientific measurement on how the students improved.

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## Appendix A

### Intermediate Chinese Conversation – Mandarin for Cantonese Speakers

#### Course Syllabus

**Course Description:** This is a special conversational course only for Cantonese speakers. The purpose of this course is to improve the student's Mandarin pronunciation and conversational ability. Through studying college-level text with situational conversation, students will learn Mandarin pronunciation, approximately 500 new vocabulary, useful expressions of spoken Chinese. Emphasis of instruction is on the differences of pronunciation, vocabulary and grammar between Cantonese and Mandarin Chinese. Lectures are coordinated with aural-oral practice sessions in the classroom. After completing this course, students are expected to lay a solid foundation for further study of the second part of Mandarin for Cantonese Speakers.

**Prerequisite:** Enrolment is restricted to students who speak Cantonese and can read and write 2000 or more Chinese characters.

**Format of the course:** The format of the course will be one and half hours of lecture and two and half hours of aural-oral exercises per week.

#### **Evaluation:**

Attendance and classroom performance	10%
Homework	15%
Dictations	10%
Written Tests	15%
Presentation	10%
Mid-term Exam (Oral)	20%
<u>Final Exam (Oral)</u>	<u>20%</u>
Total	100%

**Tentative Schedule:**

Note: The following schedule is tentative and is subject to change due to student need, class delays, and the introduction of additional course material. (HW = hand-in Homework due)

<b>Week</b>	<b>Dates</b>	<b>M</b>	<b>T</b>	<b>W</b>	<b>F</b>
1	Sept.7-9	<b>Labor Day</b>	Introduction	Introduction	L1
2	Sept.12-16	L1	L1	L1	L3 (L1HW*)
3	Sept.19-23	L3	L3	L3	L4 (L3HW)
4	Sept.26-30	L4	L4	L4	<b>Test I (L1,3,4)</b> (L4HW)
5	Oct.3-7	L5	L5	L5	L7 (L5HW)
6	Oct.10-14	<b>Thanksgiving</b>	L7	L7	L8 (L7HW)
7	Oct.17-21	<b>Mid-term Exam (Oral)</b>	<b>Mid-term Exam (Oral)</b>	L8	L8 (L8HW)
8	Oct.24-28	L10	L10	L10	L11 (L10HW)
9	Oct.31-Nov.4	<b>Test II (L5,7,8,10)</b>	L11	L11	L13 (L11HW)
10	Nov.7-11	L13	L13	L17 (L13HW)	<b>Remembrance Day</b>
11	Nov.14-18	L17	L17	L17	L18 (L17HW)
12	Nov.21-25	<b>Test III (L11,13,17)</b>	L18	L18	L18
13	Nov.28-Dec.2	<b>Review</b>	<b>Presentation</b>	<b>Presentation</b>	<b>Presentation</b>

\* Wimba assignment

## Appendix B

### Wimba Survey Results (N=6)

Questions and response	Number of students	Percentage
Gender		
Male	1	17%
Female	5	83%
Age		
Under 20	4	66%
20-24	1	17%
25-40	1	17%
Have you used Wimba before in other courses?		
Yes	2	33%
No	4	67%
What was your overall impression of Wimba?		
Very negative	0	0%
Negative	0	0%
Neutral	0	0%
Somewhat positive	3	50%
Positive	3	50%
Did you have any problems in using Wimba?		
Yes	1	17%
No	5	83%
How many times did you practice before posting your message online?		
1 – 3 times	2	33%
4 – 6 times	2	33%
7 – 10 times	1	17%
more than 10 times	1	17%
How much time did you spend on Wimba per week on average?		
Less than 1 hour	4	66%
1 – 3 hours	1	17%
4 – 6 hours	0	0%
More than 6 hours	1	17%
Did you listen to other students' recordings online?		
Often	0	0%
Sometimes	4	66%
Rarely	1	17%
Never	1	17%

Did you reply to other students' recordings?		
Often	1	17%
Sometimes	0	0%
Rarely	0	0%
Never	5	83%
Have you received other students' replies to your recording?		
Often	0	0%
Sometimes	1	17%
Rarely	0	0%
Never	5	83%
I enjoyed using Wimba.		
Strongly disagree	0	0%
Disagree	1	17%
Neither agree or disagree	0	0%
Agree	2	33%
Strongly agree	3	50%
Wimba was user friendly.		
Strongly disagree	0	0%
Disagree	0	0%
Neither agree or disagree	0	0%
Agree	2	33%
Strongly agree	4	67%
Wimba helped my listening skills.		
Strongly disagree	0	0%
Disagree	0	0%
Neither agree or disagree	1	17%
Agree	3	50%
Strongly agree	2	33%
Wimba helped my speaking skills.		
Strongly disagree	0	0%
Disagree	0	0%
Neither agree or disagree	0	0%
Agree	1	17%
Strongly agree	5	83%
I felt more motivated when Wimba was used.		
Strongly disagree	0	0%
Disagree	0	0%
Neither agree or disagree	1	17%
Agree	4	66%
Strongly agree	1	17%

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I felt that Wimba resulted in my learning more.		
Strongly disagree	0	0%
Disagree	1	17%
Neither agree or disagree	0	0%
Agree	4	66%
Strongly agree	1	17%
I felt more confident to talk in class after practicing on Wimba.		
Strongly disagree	0	0%
Disagree	0	0%
Neither agree or disagree	3	50%
Agree	2	33%
Strongly agree	1	17%
I am looking forward to use Wimba in future sessions.		
Strongly disagree	0	0%
Disagree	0	0%
Neither agree or disagree	3	50%
Agree	3	50%
Strongly agree	0	0%
I felt every student should be given the opportunity to use Wimba in their language courses.		
Strongly disagree	0	0%
Disagree	0	0%
Neither agree or disagree	0	0%
Agree	4	67%
Strongly agree	2	33%

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## Appendix C

### Wimba Survey Results – Written Comments

In which way do you hope Wimba to be used in the future?

1. In language courses – so students can listen to their own pronunciation.
2. No idea.
3. To allow other students to practice.
4. To practice pronunciation in language courses.

What do you like most about Wimba?

1. It's a good way to practice speaking the language.
2. Easy to use and being able to listen to my own playback.
3. Can hear my own voice.
4. Allows me to hear what I am doing wrong.
5. You can record many times until you satisfy, and then send the work...

What do you like least about Wimba?

1. Nothing much.
2. I can't redo just a particular section of the recording.
3. No particular.
4. None.
5. Loading is slow sometimes, also my voice sometimes get cut off in the middle.

## **Appendix D**

### **Interview Questions for Students**

1. Could you please tell me briefly about your learning experience with Wimba?
2. How did you perceive your experience of using Wimba on learning Chinese?
3. Did you ever listen to other students' recordings online? Did you find it helpful?  
Why?
4. How did you feel about putting your own recording online and everybody had access to it? Why?
5. Did you feel that Wimba was helpful to improve your listening and speaking skills? Why?
6. Have you taken other language courses where Wimba was not used? If so, how do you compare that to your experience with Wimba? Please explain.
7. Is there a certain type of learning that is facilitated by Wimba? If so, what it is and why?
8. Do you think that every student should be given the opportunity to use Wimba in their language course? Why and why not?

## **Appendix E**

### **Interview Questions for the Instructor**

1. Could you please tell me briefly about your experience in teaching Chinese at the post-secondary level?
2. Could you please describe your experience in using Wimba?
3. How do you perceive your experience of using Wimba in teaching Chinese?
4. Is there a certain type of learning that is facilitated by Wimba? Why?
5. How do you perceive your students' learning experience with Wimba?
6. Will you use Wimba again in your future course? Why?
7. Do you think that every teacher should use Wimba? Why?
8. You must have been teaching the Chinese course without using Wimba before, how do you compare that to the experience of using Wimba?



## **Appendix F**

### **Using Technology to Enhance Second/Foreign Language Acquisition**

#### **Course Syllabus**

This course will provide student-teachers of diverse second and foreign languages (French, Spanish, English, German, Mandarin, Japanese, Korean, Punjabi) with the opportunity to consider how they could utilize technology in keeping with the constructivist principles of second language acquisition to enhance students progress in SLA. The course will provide student-teachers with an overview of the current second language acquisition approaches with an emphasis on social construction of SLA and communicative/experiential approaches. Students will be encouraged to consider how technology can be exploited to help promote SLA within this social construction model of SLA with an emphasis on the communicative/experiential approach. The diversity of languages/cultures and grade levels being taught by student teachers in this course will be viewed as an opportunity for students to consider the wide range of levels of expertise in target languages/cultures that they may be called upon to teach in their professional careers. Students will also be required to consider how technology can be used for different levels of target language/culture mastery and how individual differences in student ability, learning styles and cultures can be accommodated within the use of technology. Students will be given the opportunity to explore and evaluate websites and software for their individual primary and secondary language specializations at the appropriate grade level and program that they will likely be teaching in September.

Each student-teacher will be required to:

- write and present a language/culture/identity autobiography of both their informal and formal educational experience with languages/cultures starting with their earliest experiences and continuing through schooling and university programs including the B.Ed. Students should include in their autobiography their opinions on how their languages/cultures experiences influenced their identity and self-concept. Based on this autobiography students will be required to develop a personal theory of how they believe language should be ideally taught/experienced/acquired including the use of technology where possible. This could include a discussion of immersion, core, extended or intensive programs. 35%
- Present and discuss with the class a summary of an assigned chapter from the required readings for the course. This presentation should stimulate discussion and evaluation of technology aids among students. 25%
- Participation in all of the class discussions of presentations and critiquing of

technology resources. 15%

- Provide a defensible summary of the websites and software as well as methodology that they believe would be useful in teaching their target language/culture in a school setting and grade level of their choice. This methodology should be consistent with their personal theory of language acquisition, readings from this course and with IRPs and Provincial Guidelines as well as their likely assigned teaching in September. This summary of portfolio of technology aids will be accompanied by a rationale for the choice of these resources based on theoretical and practical considerations. Since there is an abundance of poorly designed language software, a judicious choice of technological approaches is critical. 25%