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Students’ Perspectives From A Learner-centered CALL Class: A Report of the Research of the Technology-based Chinese Class in O’Neill High School

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STUDENTS’ PERSPECTIVES FROM A LEARNER-CENTERED CALL CLASS

A REPORT OF THE RESEARCH OF

THE TECHNOLOGY-BASED CHINESE CLASS IN O’NEILL HIGH SCHOOL

by

Nan Wang

A THESIS

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Major: Teaching, Learning and Teacher Education

Under the Supervision of Professor Jenelle Reeves

Lincoln Nebraska

May, 2013
This thesis explores the implications of integrating CALL (computer assisted language learning) into a high school level Chinese II language classroom in O’Neill High School at O’Neill, Nebraska. This thesis reflects the findings of a case study of four high school students and their responses to CALL in the classroom. The study integrates interviews, surveys and data collected from education websites the teacher added to the teaching strategy to test students’ learning skills on listening, speaking, reading and writing. The main purpose of this study was to collect students’ perspectives from a student-centered computer assisted language learning class. The study implies that CALL in the classroom can help foreign language learners to gain confidence, practical practice and encouraged self-directed learning. The study also implies that CALL can be adapted to many different classroom situations. The author argues in favor of integrating technology into the language classroom.
# Table of Contents

## Terms

54

### Chapter 1 Introduction

6

- **Context of the Study**
- **Purpose of the Study**

### Chapter 2: Literature Review

8

- **Technology in Foreign Language Instruction**
- **Concerns in the language classroom**
- **Pros and Cons of the CALL Class**
- **CALL research in the categories: Listening, Speaking, Writing, Teacher’s Feedback and Reading**

### Chapter 3: The Study

1948

- **Methodology**
- **Sampling Method**
- **Participants Selection**
- **Data Collection**
- **Interviews**
- **Resources**
- **Preparation and Use of Websites and Applications During Instruction**
- **Typical Sequence of Events in an Instructional Unit**
- **Research Goals**
- **Procedures to Achieve the Goals**

### Chapter 4 Findings

3735
OC1

“We are getting to work on our own and at our own pace.”  
“It is still be better if you can hear other people ask questions.”

OC2 (2012)

“ It tells you how well you’re learning.”

OC3

“if there is grid note in E-portfolio, we could practice writing Chinese characters [with computer]”

OC4

“ Using e-portfolio, you lost some opportunity to talk to others.”

Improvement Shown in Key Categories

Chapter 5 Discussion

Chapter 6 Limitations of the Study

Chapter 7 Conclusion

References

Appendix A IRB Files

Appendix B Graphs of Self-assessments

Oral Input and Outcome

Written Input and Outcome

Appendix C Interviews and Survey Questionnaires

First Session:

Second Session:
Third Session

Appendix C Post-research Investigation Questionnaires

Figure 1 The screen capture from the supplementary materials provided with the textbook

Happy Chinese

Figure 2 Screen capture of designing an assignment from Lingtlanguage.com

Figure 3 Screen capture of a verbal practice from Lingtlanguage.com

Figure 4 Screen capture of a student-teacher interaction on Edmodo.com

Figure 5 Screen capture of a video-question test uploaded to Edmodo.com

Figure 6 Screen capture of an e-portfolio translation journal from OC1

Figure 7: Minutes Spent in Each Website Per Session. Class Spanned Three Sessions.

Figure 8 Screen shot of character practice in Lingtlanguage.com

Figure 9 Screen shot of speaking practice in Lingtlanguage.com

Figure 11 The Overall Improvement of Foreign Language Ability by Percentages

Figure 12 a screen capture of OC3’s writing practice on Edmodo.com

Figure 13 screens capture of OC3’s writing practice on Edomo.com

Figure 14 screens capture of OC4’s writing practice on Edmodo.com

Figure 15 a screen capture of OC4’s translation journal on sites.google.com

Figure 16 a screen capture of OC4' progress on writing practice from Edmodo

Table 1 Demographic Information of Nonnative Chinese Student Participants

Table 2 Multiple sources of information were collected in this study

Table 3 Average time of each application usage in O'Neill Chinese CALL class

Table 4 List of students' test score during three sessions

Table 5 The self-assessments averages of OC1 throughout three sessions
Table 6 The self-assessment averages of OC2 throughout three sessions

Table 7 The self-assessments averages of OC3 throughout three sessions

Table 8 The self-assessments of OC4 throughout three sessions
Terms

CALL- Computer assisted language learning
SCI- Student-centered Instruction
CALT- Computer assisted language teaching
TBCLL- Technology Based Chinese language learning
CILT- Certificate in Learning and Teaching
AI- Artificial intelligence
OHS- O’Neill High School
Lingtlanguage- www.lingtlanguage.com
Edmodo- www.edmodo.com
E-portfolio- sites.google.com
LinguaFolio- LinguaFolio Nebraska, linguafolio.unl.edu
Chapter: 1 Introduction

Context of the Study

As a foreign language teacher in the field for nine years, I have always been interested in constructing a learner-centered learning atmosphere to motivate students’ interests in learning foreign languages. As a graduate student in a foreign language education program, I have been well educated in a variety of methods and approaches to foreign language teaching as well as learning classroom management strategies. However, while working at O’Neill High School and teaching Chinese classes in two other rural high schools at the same time, I was challenged by a new teaching method – teaching via teleconference with a MacBook Lab component. It was this challenge that sparked my interest in learning more about how technology can assist and support students in a language learning class. This led to my approach to teaching using technology at O’Neill High School in 2009 through 2012.

Technology was necessary to meet the differences in schedules and to make it possible to teach at three sites in the same school year, especially considering that I wanted to use e-portfolios at all three sites. In order to meet the demands of teaching at three different schools in the school year of 2009-2010, Computer Assisted Language Learning (CALL) became the core teaching approach in my classes. Through CALL, I attempted to implement online surveys in order to test the students ability to use Chinese in Linguafolio, used e-portfolio to track student work, and used the websites wikipedia.org and Voki.com as support in my classroom.

At the end of the school year of 2009-2010, students were asked to express their views on the technology-based way of learning. During the school year of 2010-2011, I
added Edmodo.com as well as LingtLanguage.com into my teaching procedures. I paid close attention to students’ experiences with and preferences for each technological learning tool. As student preferences were met, students’ interest in learning Chinese continued to grow. Therefore, I decided to conduct the research study reported here, “Students’ Perspectives from a Learn-Centered CALL Class,” in order to record and analyze students’ voices and insights concerning the CALL. This thesis documents the students’ perception of the CALL classroom which will help educators better understand the needs of non-native Chinese learners in the rural areas in America.

**Purpose of the Study**

“Education is a process of changing the behavior patterns of people.”

---- Ralph W. Tyler

The purpose of this study is to better understand foreign language learners’ perspectives from a student-centered class concerning the implementing of CALL. This study involved in-depth interviews, observations and document analysis in order to explore students’ learning interests and classroom practices under the learning environment of CALL.

In O’Neill High School, each student is offered a laptop, considering these advanced utilities; I started questioning how I might use them in the Chinese language classroom. I started with the grounding question of what websites are useful in assisting students in learning Chinese? Through the course of my research study, I included personal interviews as well as paper-based questionnaires to collect information because I found students’ perspectives towards the Chinese CALL classes are unique and an important area of study. Therefore, I altered the grounding question into what happens to
students’ interests in learning Chinese while using Computer Assisted Language Learning?

While observing students’ attitudes towards CALL classes, I worked through writing and reading sessions with students. In order to better understand the most effective way to utilize and structure the sequence of education websites and computer applications, according to their worth, I came to understand the question I would explore was how could I structure the curriculum using educational websites in the Chinese language learning classroom for high school students?

In addition to paper-based questionnaires students also took surveys of foreign language learning data. After tracing the data and reviewing the results, I also concluded that my research addressed the question what criteria students use to determine what makes websites most valuable in their Chinese Language Learning classroom?

Throughout the course, students kept expressing their perspectives towards the websites as well as computer applications, which led me to the question what are students’ perspectives towards the technology-based Chinese language classroom?

In the end, my research study evolved to address the overarching issue of students’ perspectives towards the technology-based Chinese language classroom. This big picture question folds the previous questions in and presents a comprehensive view of the implications of technology in the Chinese learning classroom.

Chapter 2: Literature Review

“Education is a progressive discovery of our own ignorance.”

-----Will Durant (1885-1981)
This literature review will survey learner-centered computer assisted foreign language teaching. It will introduce the current research about Computer Assisted Language Learning (CALL) classes. It will consider the advantages and disadvantages of CALL, as well as considering the importance of listening, speaking, reading, writing and teachers’ feedback in CALL classroom, and it will address ways to motivate students’ interest through a learner-centered language classroom.

**Technology in Foreign Language Instruction**

Computers are playing an increasingly important role in second and foreign language instruction as they are in virtually all fields of instruction (Szendeffy 2005). Andrew (1987) makes the argument that students can achieve higher self-confidence and scores with the increased motivation that technology brings to class. Szendeffy (2005) considers the computer a powerful tool for language learning, partly for its ability to access and deliver multimedia material. In addition, valuable learning opportunities remain using technology that predates this capability.

Technology use in the foreign language classroom is not new, but it has changed recently. Language teachers have moved from using audiotapes to using audio CDs, and from videotapes to multimedia. With the development of advanced technology, according to Singh (2012), change is a fundamental feature of modern life, and it is necessary to develop social systems that can learn and adapt. The twenty-first century presents a knowledgeable society where knowledge is neither static nor absolute; this calls for a learner-centered perspective in education. This is also true for Chinese language learning and teaching (Xie 2008). During the past decades, the extensive use of computers and the Internet in teaching language is evidenced by a proliferation of web
resources and multimedia software for learning (Bourgerie 2003; Xie 2007). Many researchers have found that use of computer-mediated communication (CMC) for language instruction benefited EFL (English as a foreign language) students; they perceived that their confidence in using English (the target language) increased in a CMC environment (Ortega 2009). Students seem to like technology in the language class. For instance, research shows that students react positively to using PowerPoint (PPT) in classrooms, and they consider it to be a more effective learning tool than textbooks (Corbeil 2007). The role technology has played in the area of foreign language learning is called Computer Assisted Language Learning (CALL). The following is a review of the main studies on learner-centered education together with the pros and cons of the CALL class.

**Concerns in the language classroom**

In ELL classes, students’ confidence in language use, in large part, is reflected in whether they are willing to communicate [in the target language] (Yashima, 2002; Yashima, Zenuk-Nishide, Shimizu, 2004). Students may decline to use English because they are embarrassed about their lack of fluency (Shamsudin, & Nesi, 2006), or because of conflicts and misunderstanding about the language and the culture (Muller-Harmann, 2000). CALL, however, allows students to practice the target language without the possible embarrassment of face-to-face, simultaneous interaction. CALL, therefore, opens new learning opportunities for students.
Pros of the CALL Class

CALL provides diverse opportunities for language learning. Yvan Rooseleer (1997) concludes in the paper Dealing with Information Systems that a database system offers the learner an environment in which to learn words and train language functions in a realistic context. By incorporating relevant tasks, which relate to real life communicative needs, the learner may be motivated to perform well. As a medium for education the computer also has the ability to interact with the students (Nelson et al. 1976). The computer can be a partner for the learner to participate in educational games. It can be a very efficient reference book as well as giving individual attention to the learner at the console and replying to him (Kenning & Kenning 1983).

CALL assists students in building up the confidence to speak a foreign language in front of groups, including the classroom. Moskowitz (1978:2) raised the idea that people’s emotions and feelings are influenced by humanistic teaching strategies. For example, a network-based group used emails, chats, and online discussions to help students increase their awareness of different aspects of the target language and increasingly focus their attention on their own language learning process. They learned that this increases students’ confidence in using the language (Dooly 2007). Moreover, the computer promotes the acquisition of new knowledge, develops the learner’s critical faculties, demands active participation and encourages vigilance (Kenning & Kenning 1983). As Altman & James (1979) proposed, “We can say, then, that in self-directed learning the definition of objectives can be made to correspond very closely to the learner’s needs (both linguistic and in terms of the learning process itself) insofar as the learner’s personal characteristics can be taken into account at any time (p.34).”
CALL can also provide interactive experiences, perhaps entirely outside more traditional institution-based environments (Searle 1980, Searle 1982; Michael Levy 1997). Role-playing computer games in a virtual world convey real-life cognition to learners who are not living in the target-language environment (Xie 2010). These findings hold potential for providing interaction in a foreign/second language.

CALL helps document learner differences and preference and this information can help teachers better construct learner-centered language teaching. Learner-centered language implies tailoring teaching to the needs of learners, regardless of whether they work individually or in groups of any size (Altman & James 1979). Computers can easily and accurately document learner differences of interactive learning strategies. Learner differences can affect learner strategies, learning gains, and attitude in CALL. As a consequence, students tend to demonstrate a more positive attitude towards CALL written by their own instructor (Pederson 1988). In the survey of using Linguafolio, throughout the course, learners compile all their work, which “gives them the opportunity to really see their progression.” “It’s really empowering to hear them, to have them realize about their own growth” (Cote 2009, P.90)

However, while teaching Chinese characters via CALL, Li (2006) argued that though websites of learning Chinese are useful, students could not process the solid skills of memorizing the character writing. Similarly, Xie (2003) found that nonnative Chinese students typed characters without checking them carefully. Teachers should be aware of the strategies of teaching characters writing, according to Mayer (2009), an effective multimedia presentation is as follows: (1) the presentation should contain both words and pictures, (2) corresponding elements should be presented simultaneously, (3) only
content-related elements (e.g., images, words, or sounds) should be presented on the screen, and (4) dual-channels (verbal and nonverbal) design should use audio instead of printed text to represent the verbal channel. Chuang and Ku (2010) raised their idea of two different types of dual coding designs. The first group was the text group and the second was the narration group. Then they compared image plus on-screen text against image plus narration in Chinese character acquisition. In their research “The effect of computer-based multimedia instruction with Chinese character recognition,” the tutorials used animated pictures to show the transformation of the 20 Chinese pictographic characters. They divided participants into two tutorial groups. They found that all participants spoke highly of both the tutorial design factors and the cognitive load factors. Additionally, participants expressed learning Chinese characters to be an interesting learning experience, and that the language was easy to learn in this CALL research.

**CALL research in the categories: Listening, Speaking, Writing, Teacher’s Feedback and Reading**

Except for character writing, learning Chinese is similar to other foreign language learning in listening, reading, speaking as well as writing. CALL affects each of these four skills differently, and a discussion of each is presented below.

**Listening:**

Nowadays CALL seems to give learners and listeners the flexibility they need to better deal with oral messages. O’Bryan and Hegelheimer (2007) attempt to integrate CALL activities in the form of podcasts into an academic English as a Second Language (ESL) course and describe its effect on listening strategies. Roussel (2011) pointed out
that it is possible for educators to interpret students’ listening ability in terms of cognitive load: the pupils with better knowledge have more resources free for using more elaborate strategies, contrary to those having poor knowledge (p17). In his research, the use of metacognitive strategies represents an important cognitive load but is also a resource to facilitate comprehension. He considers that, for learning in CALL environments, teachers should be encouraged to prepare guidelines for listening from which learners could choose specific instructions, depending on their initial level. Roussel (2011) also considered that it is necessary to provide poor listeners with very precise guidelines and to allow higher skilled learners more freedom to choose their own way of listening in order to develop their listening metacognitive strategies (p.18).

Speaking:

In a qualitative synthesis of CALL research, Liu, Moore, Graham and Lee (2003) suggest that future studies have solid theoretical foundations, focus on the less-explored skills of speaking and listening, include learner variables such as anxiety and attitude, and focus more on the effectiveness of CALL technologies in primary and secondary education. Huang& Lin (2011) considered, in the research study, ‘Enhancing classroom interactivity and engagement: CFL Learners’ perceptions of the application of Web 2.0 technology,’ _121 students shared the perception that online recordings enabled them to rehearse and self-monitor the tone and pronunciation of their own speech, with the added benefit of being able to submit their recording only when they felt satisfied with it.

Writing:

Conducting a writing class in the computer lab may provide the smoothest foray into CALL because word processing is a skill that nearly every language teacher with
access to a computer engages in daily (Szendeffy, 2008). Huang & Lin (2011) consider using blogging for supplementary writing, students had to use their conceptual knowledge to compose their writing in grammatical forms and consider the meanings of sentences in context and the instructor was able to monitor each student’s linguistic progress and errors, also provide form-focused suggestions in the form of corrective feedback. Similarly, CMD could decrease the gap between the students with weaker and stronger language skills. In Bloch’s research (2011), he shows the example, because asynchronous discourse allows the participant as much time as needed to think and compose a message, it may help the students with weaker language skills to respond in ways that are just as complex as those of students with stronger language skills. Thus, both students and teachers must be able to “think digitally” about the nature of the writing environment in order to take advantage of the potential of the technology. Bloch (2011) concludes, while lurking, or not participating, is usually acceptable in an online community, participation in class-based online discussions is more of a necessity, which means students often need an incentive to participate. Oxford (2009) mentions, in the research study, “The Influence of Technology on Second-Language Writing”, that practice with a computer-based grammar-instruction software program may enhance written communicative competence in the L2 learning environment. Note that a composition “test” is an imperfect measure of the construct of composition ability, which provides only a sample of writing or language behavior (Jacobs et al., 1981). However, there also exists danger in CALL process. The danger of misleading students using these proofing tools lies not with the rules presented in the grammar-checker or in options
provided by a spell-checker or thesaurus but the application of a rule where the tool cannot possibly analyze the larger context, tone, or intent (Szendeffy, 2008).

Reading:

According to Abraham (2008), research on CALL-based advantages is mostly conducted in university level. In the research study, ‘Computer-mediated glosses in second language reading comprehension and vocabulary learning: A meta-analysis,’ Abraham indicates that learners who have access to computer-mediated text glosses perform consistently better on measures of L2 reading comprehension than learners who do not have that support. Pichette (2005) finds that glosses were not as useful for beginning learners is consistent with studies showing that learners at higher levels of L2 proficiency perform better on measures of reading comprehension. Similar findings were reported for incidental L2 vocabulary learning and the large positive effect appears to remain over time for intermediate-level learners. Therefore, modifications of authentic L2 readings by using computer-mediated text glosses in this accumulated body of CALL research seem to be important for enhancing L2 comprehension and incidental vocabulary learning (Abraham 2008)

One possible explanation also may be that beginning learners not only need vocabulary (lexical) glosses but also other types of glosses that would help them to monitor and facilitate comprehension while reading authentic L2 texts (Chun, 2006; Overstreet, 2006). In fact, Chun & Plass (1997) recommended that instructional multimedia materials ‘be designed as adaptive systems to support learners with different traits, such as learning preferences and cognitive styles, so that different learners can receive the type of information in the mode they need or prefer’ (p.73)
Teachers’ Feedback:

Asking students to talk about, and even assess, their own learning is so simple that—whether we are teachers, parents, researchers, or policymakers—we may forget to do it (Cushman 2010). Yet getting such information from students can be critically important. Intermediate/advanced learners typically have a certain level of language knowledge and skills that allow them to make judgments about the correctness of sentences, so that they were able to share some responsibility for their own writing accuracy or provide peer feedback. However, they trusted their instructor’s feedback to a greater degree, because of the instructor’s level of expertise and base of knowledge in the language. Therefore, teacher feedback can leverage the effectiveness of peer feedback for checking the appropriateness and credibility of opinions provided by students (Huang & Lin 2011). Students (who have access to these online references when they write) submit their documents, insert pre-defined and individualized comments based on what the students are expected to have mastered, and post the document back to the Web (often within the same day assignments are submitted). Students can be requested to resubmit their work if substantial changes are needed based on the comments (Holmberg, Shelley & White, 2005). Teachers can also use the normal commenting and tracking features of their word processor to make individualized remarks if necessary (Holmberg, Shelley & White, 2005).

**Students’ Perspectives and Learner-Centered Education**

Letting students talk about their ideas assists educators’ cognition of noticing and cherishing the sparks of student interest. Cushman (2010) considers inviting students to share their ideas could inspire educators with effective strategies to motivate them and
comprehend individual’s mastery. Likewise, a learner-centered approach can help students develop a “can-do” attitude. It is effective, motivating, and enjoyable (Leo Jones 2007).

In the 1970s, the emergence of Communicative Language Teaching (CLT) improved the philosophy of “learner-centered” education. According to Nunan (2004a, p.8), “a learner-centered” classroom is one in which students were actively involved in their own learning processes. On the other hand, educators should create a learning atmosphere with student-centered instruction [SCI] (Leo Jones 2007). Collins & O’Brien (2003) defined, student-centered instruction [SCI] is an instructional approach in which students influence the content, activities, materials, and pace of learning. This learning model places the student (learner) in the center of the learning process. The instructor provides students with opportunities to learn independently and from one another and coaches them in the skills they need to do so effectively.

In other words, in a “learner-centered” classroom, students are encouraged to take more responsibility for their own learning processes, including making decisions, plans and so forth; in addition, teachers are supposed to maximise the classroom time for students’ interactive activities (Lu, Hou& Huang, 2010). Cushman (2010) asserted that as we move through various aspects of students’ pursuit of different goals, educators would see the powerful effect that learner-centered practice has on young people, increasing their belief that they can succeed and their motivation to continue to succeed.

In terms of the kinds of activities one might see in a learner-centered classroom, Froyd and Simpson (2008) report that the SCI approach may include such techniques as substituting active learning experiences for lectures, assigning open-ended problems and
problems requiring critical or creative thinking that cannot be solved by following text examples, involving students in simulations and role plays, and using self-paced and/or cooperative (team-based) learning. Properly implemented SCI, proponents argue, can lead to increased motivation to learn, greater retention of knowledge, deeper understanding, and more positive attitudes towards the subject being taught.

Chapter 3: The Study

I started to plan this research because of the implementation of technology in O’Neill High School as well as teachers training sessions of the Nebraska Department of Education.

The Nebraska Department of Education conducted methodology training for foreign teachers, who come to Nebraska to teach foreign languages, at least twice a semester. The training sessions are not required but it was strongly suggested. I have attended six sessions, and an immersion institute for Chinese teachers held and hosted at UNL during the summer of 2010, during my teaching career in O’Neill. At these training sessions, I first heard of the applications I eventually used in the classroom. During the immersion institute, one of the things we talked about was various types of classroom applications of technology. This was where I first heard about websites voki.com and Google sites. Once I realized there was technology available, I began searching the Internet for sites. I also began discussing classroom technology with my colleagues including the technology specialist in O’Neill high school, who pointed out edmodo.com. I spent time working with the technology and decided on specific sites to use in my Chinese language classroom: voki.com, edmodo.com, Google sites, and
lingtlanguage.com as well as how to use Keynote to make animation slides. I also learned how to implement those websites into my Chinese classes.

**Methodology**

This section reviews methodology and resources implemented in the research process. This research study utilized a qualitative case study and interview methodologies as the major methods of data collection. The following provides a rationale for the qualitative approach and outlines the procedure used in data collection and analysis.

Qualitative researchers are interested in meaning—how people make sense of their lives, experiences, and the structures of the world. People experience the world and develop schemas to make sense of the world. This study aimed to describe the challenges that teenage nonnative Chinese speaking students experienced with CALL in their Chinese class and, in particular, the students’ preferences and views of efficacy on the CALL strategies. It details how the participants made sense of their experiences and it was the interpretations of their experiences that was of most interest to me as their Chinese language teacher and as an educational researcher. For the current study, I interpreted and analyzed what I learned from these interviews and triangulated the data with class surveys, Linguafolio self-assessments, profiles, e-portfolios, Edmodo tests and Lingtlanguage oral practices done by the participants.

Given the complexity of issues the nonnative Chinese speaking students tended to encounter in the Chinese classroom in rural Nebraska, it was desirable to obtain a rich and thick description of the students’ learning experiences and preferences through a qualitative design. In depth interviews with the nonnative Chinese participants allowed
for a more complete expression of ideas in a realistic context of one-on-one dialogue.

This study attempts to answer these specific questions:

**Grand Tour Question:**

In what ways can introducing Computer Assisted Language Learning (CALL) to a rural high school classroom affect the students’ interest and engagement in Learning Chinese as a foreign language?

**Sub-Questions:**

1. How might teachers use technologies to construct an interactive and student-centered, Chinese language learning opportunity for high school students?

2. What criteria do students use to determine what makes technological applications (e.g. websites) most valuable for their Chinese language learning?

3. What are students’ opinions towards the technology-based Chinese language classroom?

**Sampling Method**

The selection of participants was guided by the purpose of this study that attempted to understand the nonnative Chinese speaker’s experience as the result of implementing CALL strategies. This included a close look at the participants’ preferences, views of efficacy, and challenges. According to Stake (1995), the goal of sampling is to “maximize learning” through studying particular cases, therefore the guiding principle for this study was: diversity and participants’ willingness to share. I used purposeful sampling (Creswell, 2009), which I considered the type of sampling procedure that would be most promising and useful for the intention of this study. When developing a purposeful sample, researchers use their special knowledge or expertise
about some group to select subjects who represent this population (Berg, 1998; Xu, 2012).

**Participants Selection**

There were four students in the Chinese classroom in O’Neill High School. It was a face-to-face class, which allowed for a more personal environment in comparison to the two districts with Chinese learning classes, which were distance learning. They all had taken CALL enhanced Chinese class for more than one year. Since I mainly taught in O’Neill, the schedule of doing the surveys and oral interviews with the participants was more flexible than in the other two school students. To protect participants’ privacy, in this paper, I used pseudonyms for the four participants: OC1 (O’Neill Chinese 1), OC2 (O’Neill Chinese 2), OC3 (O’Neill Chinese 3) and OC4 (O’Neill Chinese 4). The following is a brief overview of each participant from my perspective as her / his Chinese language teacher.

- **OC1**: Caucasian, a freshman and hardworking student. OC1 started learning Chinese in 8th grade without any high school credits, and continued Chinese II in freshman year.

- **OC2**: Hispanic American, sophomore student, English language learner. OC2 was often distracted by boy-girl-friend’s issues. OC2 loved dancing, and had competed Chinese folk dances in the Language Fair in UNL as well as performed in the Chinese Mid-autumn Festival show 2011 in UNL.

- **OC3**: Hispanic American, sophomore student, English language learner, the best friend of OC2’s. OC3 was talented in learning foreign languages. He liked to help
OC2 during and after school. OC2 and OC3 liked to talk in Spanish more than their other two languages (English and Chinese).

- OC4: Caucasian, a sophomore student, was passionate about playing soccer.
  
  Unfortunately, there was no soccer club in O’Neill. OC4 liked to learn Chinese and history.

### Table 1 Demographic Information of Nonnative Chinese Student Participants

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Category</th>
<th>Number</th>
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<tr>
<td><strong>Gender</strong></td>
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<tr>
<td></td>
<td>Female</td>
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<td><strong>Age</strong></td>
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<tr>
<td></td>
<td>16-19</td>
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<td><strong>Chinese Proficiency Level</strong></td>
<td>1,2</td>
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<td><strong>Grades</strong></td>
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<td><strong>Native Language Backgrounds</strong></td>
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<tr>
<td><strong>Years of Learning Chinese</strong></td>
<td>1-2</td>
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</tbody>
</table>
Data Collection

Upon IRB approval in November of 2011, I started the data collection from December of 2011 through April of 2012. All data were collected from one-on-one audio-recorded interviews, paper-based questionnaires, and self-assessment from Linguafolio. The detailed amount and collection dates are shown in the table below.

Table 2 Multiple sources of information were collected in this study

<table>
<thead>
<tr>
<th>Collecting Sources</th>
<th>Amount</th>
<th>Date of each collection</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
<td></td>
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<td>Feb 13, 2012</td>
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<td>Mar 8, 2012</td>
</tr>
<tr>
<td>Personal interviews</td>
<td>4</td>
<td>Dec 7, 2011</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dec 9, 2011 (two)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dec 19, 2011</td>
</tr>
<tr>
<td>Questionnaires</td>
<td>6</td>
<td>Dec 13, 2011</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Feb 7, 2012</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Feb 14, 2012</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Feb 23, 2012</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mar 8, 2012</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Apr 10, 2012</td>
</tr>
</tbody>
</table>

Interviews

All interviews and surveys followed an interview protocol (see Appendix A and B). I used open-ended questions that I clarified and rephrased as needed to get full answers from participants. The relaxed pace of these interviews allowed the interviewees to explore and recount events that helped me collect the appropriate data. As Hatch (2002) stated: “Although researchers come to the interview with guiding questions, they are open to following the leads of informants and probing into areas that arise during
interview interactions” (p.94). The interviews were conducted after the class observations and elicited information in order to answer the Grand Tour Question: What happens to student interest of learning Chinese by using Computer Assisted Language Learning strategy? I audio recorded the interviews in order to transcribe and analyze the conversations. During the interviews I took notes about the most remarkable features stated by the participants, the variations and spontaneous follow-up questions. According to Hatch (2002), “these notes help me keep track of what guiding questions have been addressed and where I want to go next with the interview” (p.112). Through these interviews I obtained the participants’ perspectives about what happens to students’ interests with CALL strategies.

Resources

In this research study, technology allowed for the use of a task-based approach to teach language. While the main curriculum resource in the classroom of this study was the textbook, Kuai Le Han Yu, the websites were a secondary resource of this Chinese class. Following are brief summaries of these resources.

Textbook, Kuai Le Han Yu (Happy Chinese):

A workbook and a visual electronic combination supplemented this text. Happy Chinese can be appropriately used for beginning level learners of Chinese. The content is not very complex and easily practiced in the companion workbook. At the same time, students could play the word games as well as sentence games to get a deeper impression of the Chinese characters.
It also offers a series of Chinese version videos related to the lessons. As Kenning (1983) states: Making computer assisted language learning enjoyable has sometimes meant computerizing games or simulations available in book form…. (p.147). The Happy Chinese videos served the purpose of helping to make learning enjoyable. By implementing the language games from this relevant textbook, the students at O’Neill reported having had an enjoyable experience learning Chinese language through technology.

LinguaFolio Nebraska:

Dr. Ali Moeller (2005) describes the features of Linguafolio Nebraska:

LinguaFolio Nebraska is a student centered self-assessment tool that consists of three important characteristics: it helps develop reflective and autonomous learning; demonstrates the value of multi-purpose language learning, heritage
languages, and interculturality; and provides common criteria for evaluating language competence (Moeller et al., 2005, p.135).

In the O’Neill classroom Linguafolio functioned as a self-assessment tool.

Lingtlanguage:

Lingtlanguage is a website where teachers can create their own virtual classrooms and assign work using voice bubble, text input or online video. Students can also reply using voice bubbles with text input. In the O’Neill classroom students used lingtlanguage.com to practice speaking Chinese.

Figure 2 Screen capture of designing an assignment from Lingtlanguage.com
Edmodo:

Edmodo is a social learning network for teachers, students, and parents, on which teacher can upload exam sheets, videos, simply computer games, as well as
communicating through texting online. Students can download the features that the teacher uploaded or experience them online. In the test grade collection aspect of Edmodo, it creates a graph automatically with the grade that learners earn. Students in the O’Neill classroom used Edmodo interactively to communicate with their teacher and peers. Following is a sample interaction from Edmodo.

![Figure 4 Screen capture of a student-teacher interaction on Edmodo.com](image-url)
Sites.google.com (e-portfolio):

This is a website where students post their own work and share it with whomever they like. I instructed students to create their Chinese translation journals via e-portfolios. In the O’Neill classroom, students used e-portfolio to gather and share their writing with me, their teacher, as well as using it to share their translations of their work from Chinese to English and vice versa.

I used e-portfolios as an overarching technology, one that students used consistently to report on their goals and accomplishments each semester. I created e-portfolios from sites.google.com during my Chinese teacher immersion program in 2010 at the University of Nebraska-Lincoln in my role as teacher learner, and I imported this technology into my own instruction of Chinese at the school site. Seldin, Miller and Seldin (2010) states in The Teaching Portfolio that “[a] teaching portfolio is a factual
description of a professor’s teaching strengths and accomplishments.” (p.4) I believed a students’ portfolio could serve the same function: to identify a students’ strengths and accomplishments in the learning of Chinese. During the semester, students continuously kept e-portfolios of their learning Chinese, the e-portfolios are their factual description of students’ learning strengths and accomplishments. Below is a sample of student work and teacher feedback on an e-portfolio.

![Figure 6 Screen capture of an e-portfolio translation journal from OC1](image)
Preparation and Use of Websites and Applications During Instruction

At the beginning of the study, I set up email accounts for each participant in gmail.com, in order to ensure that everyone had an account for their e-portfolios and to meet the need for other websites. Then, I created a classroom for O’Neill Chinese II in lingtlanguage.com so that I could upload all listening and speaking assignments from each lesson to Lingtlanguage.com.

In linguafolio.unl.edu I created a Chinese survey group, in this way, students could take self-assessment surveys, and the results could help the teacher plan the lessons specifically suited to students’ ability.

In edmodo.com I set up a class assignments group. I could upload video games of words and sentences from each lesson to this website. Additionally, learners could choose to play the games online or download them into their laptops. On the other hand, participants could submit their test sheets and check their grades whenever and wherever they want to. Finally, I set up self-assessments after every two lessons in linguafolio.unl.edu for students to report their progress and for me to check their self-assessments.

Typical Sequence of Events in an Instructional Unit

Below is a timeline that portrays the typical instructional sequence for a lesson in my Chinese language classroom. The use of technology applications is highlighted.

When starting to learn a new lesson, students were practicing identifying new words and sentence patterns with the games uploaded to Edmodo, also in the same lesson, they practiced speaking out the new learning with Lingtlanguage. The rest days of the learning session, students were practicing writing and reading in Edmodo and E-portfolio. There were three lessons in one session. After each session, students took a
self-assessment from Linguafolio to check their learning process. A typical lesson proceeded like this: on day one, the students came in and started with Edmodo in order to review vocabulary and sentence patterns. Then they used lingtlanguage.com to practice pronunciation. On day two, students posted their short writings on edmodo.com and got comments from the teacher immediately, so that they could correct their sentences. On day three, students did translation practice on their own e-portfolio sites. The teacher gave immediate feedback on their translations. On day four, students checked over teacher’s feedback from the day before. They performed video dialogues and sent it to the teacher. On day five, students took a video-question test from edmodo.com. Lessons were designed to prepare the students to take the test while offering them time and opportunity to practice reading, writing, and speaking. The following table shows how much time the students spent using CALL during each section.

Table 3 Average time of each application usage in O’Neill Chinese CALL class

<table>
<thead>
<tr>
<th>Applications</th>
<th>Average time Before first session</th>
<th>First Session (Dec 7th-Feb 4th)</th>
<th>Second Session (Feb 7th-Feb 21st)</th>
<th>Third Session (Feb 23rd-Mar 8th)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lingtlanguage</td>
<td>2 hours</td>
<td>2 hours</td>
<td>2 hours</td>
<td>2 hours</td>
</tr>
<tr>
<td>Edmodo</td>
<td>3 hours</td>
<td>3 hours</td>
<td>3 hours</td>
<td>3 hours</td>
</tr>
<tr>
<td>E-portfolio</td>
<td>2 hours</td>
<td>2 hours</td>
<td>2 hours</td>
<td>2 hours</td>
</tr>
<tr>
<td>Linguafolio</td>
<td>20 mins</td>
<td>20 mins</td>
<td>20 mins</td>
<td>20 mins</td>
</tr>
</tbody>
</table>

**Research Goals**

My instructional goal during this research study and throughout my career as a language teacher was student success with language learning, which I believe hinges on
students’ engagement. In consideration of Duane E. Campbell’s (2010) argument concerning student’s success in school:

Students succeed more when they have a sense of purpose to their school life. Essentially, success at school is their job. School needs to provide its worth to them. Students benefit from lessons on and experiences with decision making and cooperative problem solving. (p.198)

It was therefore crucial to set up specific goals and procedures of the research that allowed my students to make decisions and cooperatively problem solve, while meeting the expectations of Nebraska K-12 Foreign Language Frameworks:

1. Communicate in Languages Other than English;
2. Gain Knowledge and Understanding of Other Cultures;
3. Connect with Other Disciplines and Acquire Information;
4. Develop Insight into the Nature of Language and Culture;
5. Participate in Multilingual Communities at Home and Around the World.

Therefore, input includes vocabulary and grammar structures as well as oral comprehension. Language output includes using the target language verbally, writing characters, and writing in paragraphs.

**Procedures to Achieve the Goals**

One of my primary concerns while teaching Chinese to American students was student comfort and anxiety level. In a language leaning class, “to talk in the target language” is a basic communicative skill, however, my students were often concerned about sounding wrong. One of my priorities was to help students get rid of, or work through, their shyness. One way technology helped me do this was through
Lingtlanguage.com, which gave the students the opportunities to talk without worrying about experiencing embarrassment by allowing them to record their voice as they practiced vocabulary and sentences at their own pace until they were ready to talk to the class.

If talking is considered an outcome, then another expected outcome is writing. The writing of Chinese has two important aspects, Chinese characters and writing passages. Besides the normal handwriting, there is practicing the typing of Chinese on students’ computers. For character writing practice, edmodo.com offers a chat strategy similar to Facebook. In addition, sites.google.com offers E-portfolio for students’ writing products. The word games and sentence games can be uploaded to edmodo.com to help them identify the characters. While students are familiar with the characters, they can do the passage writing on e-portfolio.

It is commonly assumed that students need practice to figure out Chinese characters while typing, and the school encouraged us to find ways to provide that practice. The e-portfolio and edmodo.com offer helpful places for students and teachers to correspond through writing. Students have their own e-portfolio journals where they write passages assignments and they can “talk” in Chinese by typing in the virtual classroom in Edmodo, which is designed like Facebook.

Additionally, for all students with various abilities and talents on learning languages, a self-assessment is practical for teacher and student him/herself get to know what ability he/she already possesses. LinguaFolio Nebraska is designed to meet this need. The combination these websites encourages positive self-esteem because according to Campbell (2010):
Teachers encourage positive self-esteem when they recognize, validate, and respect students’ own cultures. Cooperative learning and other human relations strategies teach students how to achieve positive interdependence and how to create and maintain a cooperative working environment.

Students used Linguafolio as their self-assessments at the beginning of the first session and the end of each session. Figures of listening, speaking, reading and writing were presented in graphs (see Appendix B) so that I can tell the students’ progresses of each session.
Chapter 4 Findings

Overall, the data from this study suggested that CALL in the Chinese classroom improved students learning. The findings presented below are organized first by students’ perspectives (with case presentation of each participant students) and then by improvements shown in four key categories: verbal practice, to follow instructions independently, self-assessment, feedback, other results, challenges and responses to class structure. Each category and supporting data is provided below.

The findings section covers first student perspectives in their own words about their experience with the websites. Then it explores the way students learned in the four categories. The following graph shows in minutes how much time the students spent using each website in the CALL classroom. Each participant and his/her experiences are summarized in the following cases.
Students practiced their Chinese language skills through a variety of online interactive activities, for example, video-question practice, listening and writing characters, identifying and reading characters, translations, etc. Students interacted with both the websites and teacher using features like chat and voice recordings that allow them to hear the teacher speak in Chinese and allow the teacher to listen to them respond in Chinese.
Translate the words below into Chinese and write down the characters:

Figure 8 Screen shot of character practice in Lingtlanguage.com
With the assistance of these four websites, students took three online writing tests and three video-question exams during the three sessions. Although the teacher designed these tests, the scores reflected the students’ learning ability. In the second and third session, character-identifying was the core element, which is reflected in the way the scores first drop and then rise. Considering Chinese character identifying is particularly difficult. This indicates that students struggled until they gained confidence in their ability to meet their task. The dropping score reflects the rise in difficulty of the work and the rise in this score in the final week reflects students’ confidence in their ability.
Considering the scores, it is reasonable to argue that the students’ confidence in characters improved.

<table>
<thead>
<tr>
<th>Students</th>
<th>Writing test</th>
<th>Comparison practice</th>
<th>Writing test</th>
<th>Video question</th>
<th>Writing test</th>
<th>Video question</th>
</tr>
</thead>
<tbody>
<tr>
<td>OC1</td>
<td>80</td>
<td>90</td>
<td>100</td>
<td>80</td>
<td>67</td>
<td>40</td>
</tr>
<tr>
<td>OC2</td>
<td>74</td>
<td>83</td>
<td>100</td>
<td>100</td>
<td>50</td>
<td>60</td>
</tr>
<tr>
<td>OC3</td>
<td>75</td>
<td>99</td>
<td>100</td>
<td>100</td>
<td>84</td>
<td>60</td>
</tr>
<tr>
<td>OC4</td>
<td>/</td>
<td>/</td>
<td>90</td>
<td>100</td>
<td>100</td>
<td>80</td>
</tr>
</tbody>
</table>

The self-assessment module in Linguafolio tests the students in four categories: listening, reading, speaking and writing. Figure 11 below shows the percentile changes over the course of the three sessions.

<table>
<thead>
<tr>
<th></th>
<th>First</th>
<th>Second</th>
<th>Third</th>
<th>Fourth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listening</td>
<td>4.2%</td>
<td>16.7%</td>
<td>62%</td>
<td>66.7%</td>
</tr>
<tr>
<td>Reading</td>
<td>3.6%</td>
<td>17.9%</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>Speaking</td>
<td>3.3%</td>
<td>25%</td>
<td>43.3%</td>
<td>50%</td>
</tr>
<tr>
<td>Writing</td>
<td>4.2%</td>
<td>34.5%</td>
<td>37.5%</td>
<td>45.8%</td>
</tr>
</tbody>
</table>

Figure 1011: The Overall Improvement of Foreign Language Ability by Percentages
OC1

“[We are] getting to work on our own and at our own pace.”

When asked his opinion of the use of technology in our Chinese class, OC1 stated, “[we are] getting to work on our own and at our own pace.” OC1 started to take Chinese class when he was an eighth grader. In the first year, he was the sole student in his Chinese class due to scheduling. He routinely practices paper-based Character writing, reading and speaking practice with the teacher as well as kept an e-portfolio translation journal in Chinese in the first-year of learning. Therefore, in the second year of studying Chinese, he conveyed the enjoyment of using CALL.

“It is still be better [to ask the teacher face-to face], if you can hear other people ask questions [in the talking bubble].”

Despite his overall enjoyment of technology use in his Chinese classes, OC1 complained when asked about his view of practicing speaking throughout Lingtlanguage. “The strangest [thing] probably we don’t get to hear what the teacher said, the words and stuff, and if we want to hear, we can ask you but it is still be better if you can hear other people ask questions.”

OC1’s complaint focused on two aspects main points:

1. He could not understand the teacher’s expression and the teacher didn’t give enough explanation before students used the website.

2. When the Lingtlanguage started to record, it recorded everything clearly.
Due to the different sentence structures between English and Chinese, sometimes students were confused when they had to interpret a complex sentence into Chinese. For example, “Grandpa is planting roses in the garden” should be 爷爷正在花园里种玫瑰，whose order is “Grandpa is in the garden planting roses.” If students need to accomplish the assignment as homework away from school, they may lose the chance to communicate with the teacher. In other words, it is possible that without teacher’s assistance they could not complete the technology-based spoken foreign language homework. Hence, I shortened the time of grammar learning and lengthened the period of practicing, i.e. students learn 1 - 2 sentence patterns in class within 10 minutes, and students used the following 20 minutes to practice oral translation in Lingtlanguage. In this way, I used the remaining 15 minutes to check and give feedback individually, so that students would have enough time to master the sentence patterns and make the consolidation.
During the second session, his opinion towards Lingtlanguage shifted slightly to, “I like the different ways to learn and review words. It is a helpful way of learning the language.”

Fortunately, his negative view on the teacher’s expression does not recur during the second session. And he thinks the Lingtlanguage offers “the different ways to learn and review words.” In the third session, his positive comments on Lingtlanguage continue
with, “I can say my favorite hobby and how to explain my homework, if it’s difficult or easy.”

OC1’s critical comments about Lingtlanguage in session one were particularly insightful. Though it does help students to practice their speaking in a foreign language, the design of the website is wide open. Teachers can set up classes and assignments but cannot categorize the assignments. OC1’s experience highlights a need for Lingtlanguage to permit users to save and categorize the assignments, which would, perhaps, be better for learners to review their learning process. Fortunately, OC1 makes steady progress in Listening and Speaking despite the technology’s limitations.

Table 5 The self-assessments averages of OC1 throughout three sessions

<table>
<thead>
<tr>
<th>Items</th>
<th>First Session</th>
<th>Second Session</th>
<th>Third Session</th>
<th>Fourth Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listening</td>
<td>4.2</td>
<td>4.5</td>
<td>6.5</td>
<td>7.5</td>
</tr>
<tr>
<td>Reading</td>
<td>4</td>
<td>3.4</td>
<td>5.1</td>
<td>5.4</td>
</tr>
<tr>
<td>Speaking</td>
<td>3</td>
<td>3.3</td>
<td>4.5</td>
<td>4.7</td>
</tr>
<tr>
<td>Writing</td>
<td>2.7</td>
<td>3.3</td>
<td>4.2</td>
<td>3.7</td>
</tr>
</tbody>
</table>

*For the details see Appendix B, Mean value=5

“Computers would be communication devices not symbol manipulating devices.”

--- W.Brett McKenzie (1997)

**OC2 (2012)**

“It tells you how well you’re learning.”

The surveys on Linguafolio seemed to document the students’ learning progress accurately. However, the technology not only “documented”, it also provided students with insights into their own learning, especially, OC2.
Table 6 The self-assessment averages of OC2 throughout three sessions

<table>
<thead>
<tr>
<th>Items</th>
<th>First Session</th>
<th>Second Session</th>
<th>Third Session</th>
<th>Fourth Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listening</td>
<td>1</td>
<td>3.7</td>
<td>4.7</td>
<td>4.2</td>
</tr>
<tr>
<td>Reading</td>
<td>1.4</td>
<td>4</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Speaking</td>
<td>1.7</td>
<td>2.6</td>
<td>2.3</td>
<td>3.9</td>
</tr>
<tr>
<td>Writing</td>
<td>1.3</td>
<td>2.3</td>
<td>2.5</td>
<td>3.5</td>
</tr>
</tbody>
</table>

*For the details see Appendix B, Mean value=5

From all figures shown above from the LinguaFolio, it is not difficult to note that OC2 was not a confident foreign language learner. If he had had no opportunities to experience positive achievements that he could accomplish by himself, what would happen in his life?

In Brown and Adams (2001)' study of The Student As a Case, a student’s experience echoed OC2’s struggle with academic achievement. The student had a weakness in the area of language arts. The student’s handwriting and spelling were equivalent to that of a second grader. Because the student struggled in writing, he did not feel confident in writing activities. He never wanted to share stories with the class and he hated the idea of even having to write at all. The student’s major weakness was in the area of social development. The student did feel comfortable in-group situations. Without his medication, he was easily frustrated when things did not go his way. He was withdrawn from his classmates. In return, his classmates often avoided him. Because he had a negative opinion of his classmates and himself, his performance in school was hindered. He would just as soon be somewhere else. (p.21)

OC2 is a Hispanic student, who often delivered a negative message before being asked to read the text in Chinese, “I cannot read it”, looking at me, he doubted himself. I could read a lack of confidence from his eyes. Therefore, I asked him to document what
he had learned via Linguafolio throughout the three sessions. At the same time, he continuously gave me some comments on the CALL class. He reported some success with the technologies.

“Lingtlanguage helps me learn vocabulary, because the Lingtlanguage makes me pronounce what it asks you [me].” “The feedback part of Lingtlanguage helps, because you know how to say it and then you know if you go right or wrong then you can correct it.” He mentioned about his having to say the words, and the correction, as a feature that he liked about Lingtlanguage. Thus I see Lingtlanguage as a practical and fun “power” to “force” students to record their talking to complete the assignments. However, the correction of their recording is not from the website, but the teacher. OC2 does like the feedback from Lingtlanguage, which can be sent to their email addresses separately.

OC2 felt that the positive feedback offered by LingtLanguage helped him overcome the embarrassment that in the beginning was causing his insecurity. The power of positive feedback reminds me of Nieto and Bode (2008) who wrote, “the most common characteristics of effective teachers in urban schools are (1) a belief that their students are capable learners and (2) an ability to communicate this belief to the students”. Providing students feedback through technology offered me the opportunity to talk with students about their abilities, particularly with OC2 who lacked confidence in other academic areas. The route to send feedbacks directly to their email addresses provided a confidential, personal way to communicate feedback of their progress.

Assignments on E-portfolio and Edmodo allowed students to complete at their own pace before the due date. If Internet is available, they can do them anywhere they feel comfortable. With the solid websites, students don’t need to worry about losing
assignment sheets. Their feedback from teachers are also sent via emails and protect their privacy. If corrective feedback is needed, the teacher could post his/her suggestion on the student’s own field in the websites. In a word, OC2 didn’t need to worry about his slow learning in the technology-based language class. He started to practice more in both orally and written as he gained confidence.

![Figure 1](image1.png)

Figure 1.1 a screen capture of OC3’s writing practice on Edmodo.com

Apparently, from the self-confidence on academic aspects only, OC2 was depressed at the beginning of his study of Chinese. His change started in the second session.

In a student-centered class, students don’t depend on their teacher all the time, waiting for instructions, words of approval, correction, advice, or praise. They don’t ignore each other, but look at each other and communicate with each other. They value each other’s contributions; they cooperate, learn from each other, and help each other. When in difficulty or in doubt, they do ask the teacher for help or advice but only after they have tried to solve the problem among themselves. The emphasis is on working together, in pairs, in groups, and as a whole class. Their teacher helps them to develop their language skills (Jones 2007, p.2).
During the research period, OC2 shared his struggle with peers’ bullying. Because of this situation, he could not concentrate well on academic learning during that time.

Though OC2 didn’t want to discuss the depression from which he suffered, the conflicts between his test score (see Table 4) and self-assessment grades (Table 5) from LinguaFolio helped me detect the struggles that student was having with academic learning. This showed that technology could have a broader application than simply promoting and assessing learning. The program indicated inconsistency in performance and that indication led the teacher to further investigate the cause. In so doing, the teacher was able to discuss the issue with the student, learn the cause, and assist the student in coping with some important challenges that were occurring outside the classroom but reflected within it.

As OC2’s case suggested, the self-assessments in LinguaFolio helped build confidence as well as demonstrate the progress of students. The detailed graphs of each student and their opinions impressed me as regards the practical use of websites. (The details of single students’ data are in appendix B)

**OC3**

“If there is grid note in E-portfolio, we could practice writing Chinese characters [with computer]”

Technology in the classroom allows students to be self-motivated problem solvers. For example, OC3 inspired me with his suggestion to use fewer websites to achieve the same goals. He was not satisfied with using so many websites to complete assignments from one lesson. He was tired of typing his accounts with different
passwords to log into different websites. Therefore, he suggested “if there is grid note in E-portfolio, we could practice writing Chinese characters [with computer]” (See Appendix C) and “if you could record your voice [in Edmodo]” we could streamline the amount of websites in the classroom.

Considering OC3’s learning ability and the talents of learning foreign languages, I took OC3 as an able target language learner. It is significant to consider his ideas towards these education websites. One of Cote’s studies of LinguoFolio featured Rachel, and Rachel was learning to think outside the box using LinguoFolio in her class. Similar to Rachel, OC3 is using LinguaFolio, Edmodo as well as E-portfolio as his evaluation and practice of written Chinese. He is presenting his advanced skills of learning Chinese and considering critically of using websites efficiently.

Figure 1213 screens capture of OC3’s writing practice on Edomo.com
OC3 expressed his preference for using lingtlanguage.com to practice his Chinese speaking ability. It should be noted, as well, that OC3 was one of the students that had created a close relationship with another student and showed willingness to practice and work with his classmate, OC2. This engagement in Chinese language learning extended beyond the classroom, as well, OC3 also earned much praise for his Chinese music and introduction performance in UNL 35th Language Fair, O’Neill 2011 Chinese Spring Festival Show and Chinese video presenting before the research. He was proud of his speaking ability and won accolades for it.

Linda Mauro (1998) “Providing opportunities for native language use has been found to have a positive effect on the academic success of ELL students in predominantly English-medium settings” (p.9) I have transferred Mauro’s (1998) idea of establishing English-medium settings into my classroom, creating Chinese-medium settings in the design of the use of Lingtlanguage in this research. For OC3, he was not only a quick language learner, but also a model student in this language learning circumstance. The opportunity as well as the confidence he gained through using technology was also helping his peers to self-reflect on learning the Chinese language. In this classroom, no student was a native speaker; therefore, every one was equal at the start line. However, as one student such as OC3 emerged as a leader in the language learning, that student could push or encourage others to work to develop greater language proficiency.

OC3 confirmed this in his observation about his own progress. Though the computer prompted language practice was not enjoyable to him, the classroom interactions between teacher and student were. At this point he seemed to have moved
beyond the drill work of the computer program and was ready for the more dynamic interaction between speakers.

Table 7 The self-assessments averages of OC3 throughout three sessions

<table>
<thead>
<tr>
<th>Items</th>
<th>First Session</th>
<th>Second Session</th>
<th>Third Session</th>
<th>Fourth Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listening</td>
<td>3.2</td>
<td>4.8</td>
<td>9.8</td>
<td>10</td>
</tr>
<tr>
<td>Reading</td>
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<td>5.7</td>
<td>9.7</td>
<td>10</td>
</tr>
<tr>
<td>Speaking</td>
<td>1.6</td>
<td>6.8</td>
<td>9.1</td>
<td>10</td>
</tr>
<tr>
<td>Writing</td>
<td>2</td>
<td>5.7</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

*For the details see Appendix B, Mean value=5
OC4

“Using e-portfolio, you lost some opportunity to talk to others.”

Figure 13|4 screens capture of OC4’s writing practice on Edmodo.com

Figure 14|8 a screen capture of OC4’s translation journal on sites.google.com
From OC4’s post on edmodo, it was not difficult for me as his teacher to see his
growth while he utilized edmodo. However, he denied that edmodo and e-portfoliol
provided him much assistance with his language learning. “If you using e-portfoliol not
Lingtlanguage ones, you lost some opportunity to talk to others. I don’t really like e-
portfoliol, because you don’t really learn how to type characters, because the computer
change[s] the new character for you and you don’t really learn anything. Typing it.” Due
to the demand of the assignments, OC4 continued the writing practice on Edmodo.com
and sites.google.com. The reality was that the percentage of correction in his writing was
improving, though he didn’t want to admit that this was the result of continued practice.
Though students in Chinese II class (including OC4) did not create their own topic for their journals, they had writing practice regularly with several topics, which were similar to keeping journals. Weil and Anderson (2000) claimed Progoff’s (1975)
experience of conducting workshops and training a network of individuals to do workshops, “the individual needs to draw upon inner resources to arrive at the understanding of the whole person, the journal is a tool to reopen the possibilities of learning and living.” (p.176)

Table 8. The Self-assessments of OC4 Throughout Three Sessions

<table>
<thead>
<tr>
<th>Items</th>
<th>First Session</th>
<th>Second Session</th>
<th>Third Session</th>
<th>Fourth Session</th>
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<td>3.9</td>
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<td>3.2</td>
<td>3.7</td>
<td>5.3</td>
<td>6.3</td>
</tr>
</tbody>
</table>

*For the details see Appendix B, Mean value=5

The work of typing Chinese characters was difficult for students, yet the identification of characters from pinyin spelling was, I felt, a necessity of learning Chinese. The participants, particularly, OC4, thought that they did not learn anything about Chinese language during typing, however their writing self-assessment data indicated otherwise. Though OC4 refuses to admit the growing of his writing ability stemmed from utilizing Edmodo and keeping an e-portfolio, these two websites served him through identification with Chinese characters as well as writing passages in Chinese.

Participant Suggestions

Students provided many creative suggestions for improving CALL in this Chinese language-learning context. Some suggested putting an electronic grid book in e-portfolio so they could “write” Chinese characters and check the order of strokes. OC3 (2012), for
example, write, “[if we could] write the characters [on websites], (so) we know how to write characters. Set the grid book on the e-portfolio, student can type characters.”

Some students considered implementing the CALL strategy especially to kids who are shy to social, so it could help them to build up confidence. OC4 (2012) “It’s maybe kids are not able to talk to other kids, it’s easy for them to do it on computer or that way what they need talking to other kids but they don’t need to worry about being embarrassing…[it is]not [for] every kid, because every kid has different learning style. Not also for most kids but for kids who do have a different learning style. It is their learning style that help they [them] have a chance to learn.”

For students who liked edmodo.com, they suggested adding a voice recording function so they could do all their Chinese assignments in one website. OC3 (2012), wrote, “If you could record your voice [in Edmodo.com, it would be good].” The students’ suggestions were not only helpful to me as a teacher and researcher but also indicated students’ depth of engagement with each technology.

**Improvement Shown in Key Categories**

In addition, students showed their improvements at other aspects as follow: Verbal practice, classroom structure and routines, self-assessment, feedback, and other results.

**Verbal Practice**

Communication is one of the five goals of learning a foreign language. It is practical to help students build up the interest of identifying Chinese characters and their sounds first. Lingtlanguage.com offered the opportunity to speak and to practice speech. Result showed that students enjoyed being able to control their speech practice, such as
OC1 who wrote, “I like to use it because we get to learn how to read Chinese characters, but also along with Chinese pinyin…[Using technology could help me] how to say [Chinese better].” OC4 concurred, stating, “Lingtlanguage.com helped me review the vocabulary and sentence patterns, because] we could hear them being said and reply back.”

Participants also noted the importance of daily verbal practice and shared that Lingtlanguage.com allows participants to focus on speech patterns before they focused on writing, which helped them verbalize on a daily basis. OC3, for example, stated “We can talk instead of write by using Lingtlanguage.com.”

When given verbal assignments, students were required to identify the characters and speak them out loud. OC2 (2012) “[lingtlanguage.com and e-portfolio] helped me learn more and pronounce more.” OC4 (2012) “[Lingtlanguage.com] helped when [I] have to say [characters] and figure out what they mean.” OC2 (2012) “[Lingtlanguage.com helped me review the vocabulary and sentence patterns] because I had to say them and read them.”

Participants reported that they learned how to read Chinese also with Chinese pinyin and that they identified characters gradually. OC1 (2012) “[under the help of technology-based class], I can say my favorite hobby and how to explain my homework-if it’s difficult or easy…. Edmodo.com [helps me connect the knowledge learned before with new knowledge], because we can learn how to say new things.” Clearly, all participants benefited from being able to gradually build knowledge space of Chinese characters through using CALL.

Classroom Structure and Routines
Technology creates the opportunity for the teacher to build classroom routines that include self-instruction for the students. This gives the student more control within a set structure. The opportunity to follow self-instructions while learning Chinese raises students’ curiosity and allows the teacher to create a framework for the classroom that encourages independent learning. For example, students were required to speak Chinese words and sentence patterns in Lingtlanguage.com, and OC1 said “[Lingtlanguage.com helped me review the vocabulary and sentence patterns] by giving me different ways to review them…. [it also] gave me different ways to learn the curriculum.”

Students expressed how helpful a predictable routine was in assisting their comprehension. Thus the order of implementing the websites was settled after the test in one and half sessions. OC1 (2012) “I like using the routine of edmodo.com and Lingtlanguage.com. I don’t like using e-portfolio though. The other ones have helped me by explaining things better…I have been familiar [with] Lingtlanguage, Eportfolio and Edmodo.”

OC2 (2012) “[We] do our list[en] and practice words, type sen[ten]ces patte[r][n]s in the i[e]-portfolio and have a test every Monday.”

OC4 (2012) “Study the lesson Tue[day]-[through] Thursday. Fri[day] [we] do workbook and Mon[day] [we take a] test.”

OC3 (2012) “First we go over a lesson than [then] we have to play game[s] about the words and the sentences in edmodo than [then] we put in e-portfolio the read aloud [,] at the end we do a test…[They help me] reviewing [review what I have learned] so I don’t forget [them].”
I worked to offer the students control over their own learning that still allowed me to guide and shape the overall curriculum. They could review their assignments even after they had submitted it in Lingtlanguage.com, edmodo.com and e-portfolio. OC3 (2012) “[In CALL class], I can just look in a website when I want to come back to review something instead of going through papers.” OC4 (2012) “[With CALL class] you can write, hear and say the words [whenever and wherever you need].” OC3 (2012) “Edmodo.com [helps me connect the knowledge learned before with new knowledge].” “Because I think [it] is better than the other websites that we have used.” Students found it was not hard to learn and remember new Chinese words when speaking them out loud as often as possible and practicing identifying them in Edmodo.com and e-portfolio. OC2 (2012) “[Using the websites] we learn new words and I think it’s easy.” They liked to post Chinese sentences in edmodo.com, which was like Facebook. When asked which was their favorite website experienced in the CALL class, OC3 said “[I liked] Edmodo.com, [because] you can post [information] like Facebook.” OC1 (2012) “[The website helped me] by letting [me] review even after I’ve submitted it.” Students enjoyed the games uploaded in edmodo.com. Students also took Chinese video-question tests in edmodo.com. OC2 (2012) “[With technology based class] we play games, hear[ing] [someone] ask for the words and we could know how you pronounce it. OC3 (2012) [The CALL class helps], when we play games or do the quizzes.” OC4 (2012) “[Lingtlanguage.com] is a different way of learning. And it offers the different way for different kids of different learning styles… Edmodo.com do[es] [help me], [be]cause it has numerous techniques.” These statements show the students enjoyed and benefited from controlling their own learning, which is only possible because technology in the
classroom allowed the teacher to create classroom routines and structures that the
students could follow even when the teacher was not in the classroom.

**Self-assessment**

One of the most difficult aspects of teaching a foreign language is making time
for reflection and self-assessment. However, self-assessment has clear benefits for the
students and the teacher. The students can see their progress in detailed, which allows
them to focus on problem areas. Teachers can use data from self-assessments to plan and
eexecute curriculum. Technology offers many new ways to help students reflect and self-
assess. In my class, Linguafolio made self-assessment much more efficient and effective
for the students. Using Linguafolio.unl.edu, students mapped their progress to see
changes or trends in their own Chinese learning. OC4 said, “… It has helped me measure
what I have learned, which is good to know.” As Cote (2009) stated, “LinguaFolio has
fostered a learning approach that involves more than doing and handing in assignments.
Learners are truly committed to self-assessing their performance, keeping track of their
growth and suggesting ways of improvement (p.100).”

Also the detailed survey questions helped students measure what they had learned
and traced their progress in different areas. OC2 said, “[Linguafolio.unl.edu] tells you
how well your learning is,” and OC4 added, “[linguafolio.unl.edu] helps you see your
growth.” Considering the importance of self-assessments, it is crucial that teachers find
innovative ways to encourage students to self-reflect and self-assess.

**Feedback**

Some students expressed their appreciation of the feedback function. The
feedback function of Linglanguage.com helped students correct their pronunciation and
characters so that they could not only get higher grades but also improve their proficiency. OC2 (2012) “I like that we say words in lingtlangauge.com and [teacher’s feedback can help to] correct them… [the feedback part helps] because you know how to say it and then you know if you go[t] right or wrong then you can correct it…Lingtlanguage.com helps me know if I pronounce the words correct[ly]. Edmodo.com helps me learn the words. [e]-portfolio helps me learn the character[s].”

Other Results

While students expressed their perspectives on verbal practice, following self-instructions, self-assessment and feedback, they also expressed some other concerns. For example, students enjoyed working on their own and at their own pace. OC1 (2012) “[with those websites assistance, we are] getting to work on our own and at our own pace. Students can comprehend new knowledge well…[we have learned] lots. I’ve [learned] some new things and comprehend it better.”

They can type Chinese characters instead of writing them. OC3 (2012) “[I like Lingtlanguage.com] that we don’t have to write all the Chinese characters.” Students are familiar with the new vocabulary and sentence patterns by playing games in edmodo.com. OC4 (2012) “[I like] the games [in edmodo.com].” They took video-question tests in edmodo.com. OC4 (2012) “Listening to your test is good and the fact that it also has the characters in the test video [in edmodo.com].”

Although the students found the CALL class useful, students also stated some frustrations about the technology.

Challenges
There are still many challenges in using CALL strategies in Chinese language class. The top four that surfaced from the data were: 1) the computer programs are not always user-friendly; 2) using technology reduced teacher-students face-to-face interaction; 3) using technology reduced student-to-student interaction; and 4) the technology often had glitches.

When students typed characters using Chinese input on their laptops, the program offered a large variety of Chinese characters to choose from and they had to identify which was the correct one. OC3 (2012) it’s harder [to type Chinese]…. “When you type, there are a lot of different words and you don’t get the one you want. Like the pronunciation is like the same you get different words when you type it. OC2 (2012) I don’t like typing [Chinese characters].”

When students needed to record speech in lingtlanguage.com, they might not hear the words clearly, thus the teacher may need to explain the content of the assignment more than once. OC1 (2012) “… we don’t get to hear what you say[,] the words and stuff [,] and if we want to hear we can ask you [,] but it is still be better if you can teach us some [more vocabulary], [ it helps when] you can hear other people as[k] questions…. [The least favorite aspect of using this websites/software is that] [I] don’t get it explained to us, unless we ask.”

Some students were concerned about losing the opportunity to communicate with others by only using e-portfio, because they didn’t communicate verbally but only through typing Chinese. OC4 (2012) “For using e-portfio not lingtlanguage ones, [we may lose some opportunity to talk to others], because you are saying and you are translating that. … [It is] definitely preventing kids from social skills because they are not
socializing with kids at all but I guess if you trying to go for social skill learning then don’t do it but if you go for just learning particular [words] and some kids aren’t good at social skills, you just let them read it.”

Sometimes there were technical issues and the students were easily confused. OC4 (2012) “I don’t really like e-portfolio, because you don’t really learn how to type characters, because the computer change the new character for you and you don’t really learn any thing. [Just] typing it.” OC4 (2012) similarly stated, “[The questions in Linguafolio.unl.edu] seem so repetitious…[edmodo.com didn’t help me review the vocabulary] because it would be just as easy to just give us a sheet of papers… the [same] unnecessary in some cases… Sometimes the assignments seem really long but other not a whole… Everything can [be] done on Edmodo.com. We don’t need E-portfolio…Sometimes the quizzes seem long.” Technology in the classroom is not the only answer nor is a complete solution instead it is one way to improve the teaching of foreign language, however, it is not without its own challenges. The following are some statements the students made in regard to their frustrations with the technology.

OC1 (2012) “[The negative aspect of edmodo.com is that] not being to do the assignment right there, instead we have to download it… I don’t like using Lingtlangauge.com because it has no aspect or something. It sometimes doesn’t work either… E-portfolio isn’t good because you don’t get to hear somebody saying the words.” Here OC1 pointed out that technology doesn’t always offer as many functions as we might like, which means we were forced to use several websites or applications instead of just one. This presents its own issues as OC3 pointed out, “[The negative aspect of edmodo.com is] that sometime I forget my user name and password.” Although
the students thought there were some issues with technology their overall response to
technology in the classroom was positive.

Chapter 5 Discussion

The merits of student-centered technology in the CALL classroom

Every great classroom shares some core features, a competent teacher, inspiring
lessons, clear structure, and quality assessment. These features can be present with or
without technology. What technology offers is an almost endless variety of activities that
a competent teacher can employ to individualize instruction for each student. This study
took into consideration student perceptions towards technology in the CALL class. These
students are nonnative Chinese learners who clearly benefited from the technology in the
classroom. The findings supported the notion that CALL can offer the same amount of
content while helping to shorten the learning cycle; the use of technology reduced the
first session of 21 days to 18 days in the second session and finally 15 days in the third
session. The technology-based pedagogical strategies used in this study helped improve
the efficiency of students’ learning in this difficult foreign language.

From an assessment perspective, the continuous data that technology can make
possible can help teachers get to know students’ progress, a critical efficiency for
teachers wishing to improve their practice. At the same time, a deep analysis of the data
can help the language teacher comprehend and keep track of the students’ confidence
through the sessions. Technology brings that consistency to the classroom in a way the
students have obviously enjoyed. The overall growth in confidence as shown by the self-
assessment in LinguaFolio Nebraska (Table 6) indicated a clear improvement in the areas of listening, reading, speaking and writing.

In a US classroom, with a diverse student body, a teacher often finds herself negotiating issues outside of content, such as students’ accomplishment of homework, their cognition of the subject as well as their achievement of skills. Technology is a way of teaching each student at their own pace. So even when the students cannot see the value of the technology, it shows itself in their mastery of the content. Syed and Burnett (1999) conclude from their study of Acculturation, Identity, and Language: Implications for Language Minority Education:

Education program developers and language educators need to understand that cross-cultural adjustments are not linear (or unidirectional) in nature and can be difficult and often exercise a cost on the individuals concerns…. Individuals caught in this process are often presented with difficult and conflicting choices, and have to deal with a number of issues (alienation, racism, survival, etc.) that leave them psychologically, emotionally, and physically drained. It is precisely in negotiating their emerging identities and managing their multiple cultural memberships that these tensions come to light. (p.57)

Even in a small town in Nebraska, students are dealing with many of same issues Syed and Burnett reference. Technology helps the teacher to negotiate the complex classroom more effectively.

Students all experienced the new technology-based pedagogical strategies in a strange language with a Chinese teacher, and it was important to encourage students to
avoid a negative perspective and to open a positive space for students to gradually gain Chinese competency.

Rooseleer (1997) proposed the idea of communicative skills practice:

A number of specific, task-oriented communicative skills can be trained in the context of a real-life database system. Many tasks engage the learners in activities like searching, understanding, managing, processing and transferring information in the target language. (p.99)

Students had to completely overcome the difficulties with the language and expand their improvements. Using technology in the classroom proved to be a bridge between the language learning and the language they already knew. While my study cannot be generalized to all populations, the potential for technology to encourage students’ positive interaction with a language is clear.

The websites implemented into the CALL class offer a variety of options for students to perform their skills in Chinese. Altman & James (1979) proposed, “We can say, then, that in self-directed learning the definition of objectives can be made to correspond very closely to the learner’s needs (both linguistic and in terms of the learning process itself) insofar as the learner’s personal characteristics can be taken into account at any time (p.34).” Further, students could complete their assignments at their own pace, which enhances their confidence in mastering this foreign language. The students’ perspectives reflect the value of a learner-centered classroom. During the second session, OC1’s opinion, for example, towards Lingtlanguage was “I like the different ways to learn and review words. It is a helpful way of learning the language.” OC2 felt
that the positive feedback offered by LingtLanguage helped him overcome the embarrassment he felt in the beginning, which had caused him much insecurity.

Participants could finish their assignments on E-portfolio and Edmodo, which allows students to complete them at their own pace before the due date. If the Internet is available, they can do them anywhere they feel comfortable. With the solid websites, students don’t need to worry about losing assignment sheets. Their feedback from the teacher is also sent via emails, which protects their privacy. If the teacher becomes aware of problems or concerns, the teacher could immediately post his/her suggestion on the student’s own field in the websites. In a word, OC2 doesn’t need to worry about his slow learning in the technology-based language class. He starts to practice more both orally and written when he gains confidence back.

OC1’s experience with CALL highlights the importance of learner-centered education. Learner-centered language teaching can be viewed from four perspectives: goals, means, rate and expectations. The teacher can personalize the goals of instruction, which allows different learners to pursue different curricular goals in the same course; the teacher can personalize the means of obtaining the goal(s) whereby different learners pursue the goal(s) in different ways; the teacher can personalize the rate of instruction, so that the pace of learning becomes unique to each learner; and the teacher can personalize the expectations as a result of instruction, whereby different learners are held accountable for meeting different quantitative or qualitative criteria. (p.4)

Students’ abilities in utilizing Chinese are improving with the assistance of technology. Altman and James’ (year) discussion of the value of personalized education fits directly with the strength offered by a technology-rich classroom. The variety and
versatility available to the teacher via technology offers the teacher endless ways to personalize instruction to the most diverse student groups. Both the technology available for delivery of language instruction and the technology available for assessment offer the students tremendous opportunities to both grow in language mastery and to measure real growth. This produces a very motivating learning environment.

Altman & James (1979) mentioned that learner-centered language implies tailoring teaching to the needs of learners, regardless of whether they work individually or in groups of any size, and this study demonstrated that technology can be an aid in tailoring instruction to the individual learner. And Pederson (1988) found that students tend to demonstrate a more positive attitude towards CALL written by their own instructor. In this study, I have put these two essential factors together: student-centered and CALL. Student centered CALL can allow students to do their work at their own pace and facilitates teachers giving feedback individually to meet students’ needs.

Furthermore, this study seemed to indicate that typing Chinese on the keyboard made it easier to identify Chinese characters. While teaching Chinese characters via CALL, Li (2006) argued that though websites of learning Chinese are useful, students could not process the solid skills of memorizing the character writing. Similarly, Xie (2003) found that nonnative Chinese students even typed characters without checking them carefully. Typing Chinese characters cannot be considered to be an entertainment, which is apparent from my own experiences and the data collected in this study, however, the identification of characters from pinyin spelling is a necessity of learning Chinese. The participants thought that they did not learn anything about Chinese language during typing, however, their writing self-assessment data indicated otherwise. Though OC4
refused to admit that the growth of his writing ability resulted, at least in part, from utilizing Edmodo and keeping an e-portfolio, these two websites seemed to assist him with the identification of Chinese characters as well as writing passages in Chinese. The websites opened the possibilities of his learning after his self-doubt, especially after doing better than he expected at the Language Fair. If the teacher could point out the necessity of correcting characters in students’ assignments, the progress of participants’ writing ability in the self-assessment (Table. 7) provided contradicting evidence. In addition, this study found that it was not hard for students to learn and remember new Chinese words when speaking them out loud as often as possible and practicing identifying them in Edmodo.com and e-portfolio.

Roussel (2011) pointed out that it is possible for educators to interpret students’ listening ability in terms of cognitive load: “the pupils with better knowledge have more resources free for using more elaborate strategies, contrary to those having poor knowledge (p17).” In the research, he considered that, for learning in CALL environments, teachers should be encouraged to prepare guidelines for listening from which learners could choose specific instructions, depending on their initial level. Roussel (2011) also considered that it is necessary to provide poor listeners with very precise guidelines and to allow higher skilled learners more freedom to choose their own way of listening in order to develop their listening. Students enjoyed the games uploaded in edmodo.com. Students also took Chinese video-question tests in edmodo.com. They expressed how helpful they found learning new vocabulary and sentence patterns with the assistance of games and quizzes in Edmodo, pronunciation bubbles in Lingtlangauge and the self-assessment values in Lingtlanguage. Huang& Lin (2011) agreed that the online
recordings enabled them to rehearse and self-monitor the tone and pronunciation of their own speech, they also commented favorably on the ability to wait to submit their recording until they felt satisfied with it.

During the study, my students reacted similarly to Hang\& Lin’s. They stated that having online recordings enabled them to rehearse and self-monitor the tone and pronunciation of their own speech, and allowed them to wait to submit their recordings only when they felt satisfied with it. They also liked to post Chinese sentences in edmodo.com, which was like Facebook and the websites permitted them to check the accuracy even after they submitted the assignments.

After taking into consideration students’ perspectives, CALL clearly offers a variety of benefits to the language-learning classroom. These benefits include: allowing the student to set their own pace, offering consistency, reliable assessment, and addresses some of the concerns about the difficulty of typing Chinese characters while offering the students a fun interactive way to practice Chinese verbally and in writing. CALL’s benefits clearly outweighs the concerns that have been raised about technology in the classroom.

**Chapter 6 Limitations of the Study**

The primary limitation of this study was its limited generalizability. This study was conducted in a rural school district in Nebraska. The participants in this study including myself were from three different language backgrounds. I was fortunate to have both Chinese and technology programs as well as the multiple cultures together in this school. As Gabriel E. Parra Cote (2009) states in the LinguoFolio study, “The limitations
of this study are inherent in qualitative research… The findings of this multiple case study may not be generalizable” (p 8). As Patton (2002) explained, “[t]he purpose of a case report is not to represent the world, but to represent the case” (p.46). In other words, this study will help to understand how these students changed their interests and practices as a result of implementing CALL. And it may indicate the ways other students will respond to CALL, however, it is not a definitive study of CALL.

That statement applies to this study, as well. This is the first research study that the researcher has conducted. The class size was small and there was no opportunity for a control group. Furthermore, the results of this study offer only one year’s study. The results reflected realities for this group but as Cote suggests, “[these] may not be generalizable.” Nevertheless, there are several observations that have grown out of the research. There must be more details regarding technology integration in foreign language classrooms that are worth deep studying. With the rapid development of technology today, the combination of education with technology is an inevitable trend. How to effectively integrate technology into foreign language classrooms in a rural secondary school for well-prepared students for the world is a valuable research topic.

**Chapter 7 Conclusion**

The design principle of the technology-based Chinese class is to assist students to become self-directed learners in foreign language learning. This study shows that students are open and interested in technology in the classroom, and it also shows that technology can improve a student’s experience in the Chinese language-learning classroom. However, technology is not as widely used or researched as much as it should
be. In O’Neill Public Schools, there was no systematic effort to understand how technology could assist with foreign language learning in the district until this study.

There is a continuing strong need for deep research into technology-based pedagogical strategies at all education levels. Teachers who develop the most effective pedagogical strategies employing technology will offer students more and more potential opportunities to succeed in the future. Technology creates the possibility of offering individualized experiences to students with different learning styles. In addition, it offers students in rural areas more opportunities for learning foreign languages. In O’Neill, we have seen great benefits from the addition of technology to the Chinese learning classroom. However, this study is only a small sample of the vast possibilities technology can bring to the classroom. Therefore, this study stands as a call to action to other educators to continue researching technology in the classrooms. In a learner-centered CALL class, students were offered multiple methods to practice the foreign language they were learning. The teacher and students all cared about the goals students were trying to meet. As a teacher, I am proud of their joy and progress in even their smallest success.

“Thoughtfulness is time-consuming. Collaboration is time-consuming.”

----- Deborah Meier


References


Xu, H. (2012). Challenges Native Chinese Teachers Face in Teaching Chinese as a Foreign Language to Nonnative Chinese Students in U.S. Classrooms. (Thesis). Available from DigitalCommons @ University of Nebraska - Lincoln
Dear parent,

Your Child is invited to participate in a research project entitled Technology Use in Chinese Class in O’Neill High School. The project director is Ms. Wang from the University of Nebraska at Lincoln’s Department of Teaching, Learning, and Teacher Education. The purpose of the project is to 1) increasing knowledge of the learning of Chinese language; 2) do a best practice for utilizing authentic material to improve learning; 3) increase confidence regarding the effective incorporation of technology into the classroom; 4) deeper understanding of how both technology and Chinese language affect learning in the classroom; 5) knowledge of the general beliefs about the Chinese language and technology installation to reach success.

Your child’s participation in this research study would last one year, from November 2011 through May 2012. Although the study will run for one year, your child may withdraw from the study at any time. The research will be conducted in the normal classes. The participants only need to take an extra paper-based survey after each new technological strategy installed. In addition, the participants may be interviewed in a
rotation in another classroom during school time. During the participation in the study, your child will take an online survey, in which your child uses his/her own login and password. In addition, the researcher will interview your child twice each semester; once at the beginning and once at the end of the both fall 2011 and spring 2012 semester. Interviews will last 10-15 minutes and take place in the Chinese classroom in O’Neill High School. The interviews will be audiotaped and later transcribed by the researcher as a way for the researcher to gather accurate information. In addition to these interviews, there will be a paper-based survey for the participants to fill out (up to 5) regarding the research, which will last 3-5 minutes. Audiotapes may also be made of class sessions in a rotation (with your permission) in order to make an accurate record.

The details of the procedure are as below:

1. All students need to finish a web-based survey before and after the research as an essential part of the normal classes, and only the data of the participants will be used as part of the research result and analyzed with. The filter system in school does the supervision of browsing websites automatically; therefore this research does not bring any additional risks to students when using the World Wide Web. Again, the use of the web is already part of the curriculum and no additional Internet usage is asked of students as a result of participation in this study. We will follow the law of copyright and all other expectation already in place for secondary students.

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2. Students who participate the research will complete a paper-based survey up to five times, one time after each technology session. Each survey will take no more than ten
3. Participants will finish the paper-based survey either in another classroom if time allows, or free study time at the end of Chinese class and will not miss any instruction time.

4. Students will participate in a pre and post audiotape interview. The questions for both interviews are uploaded to the attachment.

5. The pre-interview will be conducted before the research starts, and the participants will be interviewed one by one in another classroom during free study time in the Chinese class or before or after school at the student's convenience. Students will not miss instructional time in order to be interviewed.

6. Other than participating in pre- and post interview, the content of the research is the same as normal designed class. Students who don't participate the research will use the free study time to finish the normal class assignment and will not be treated differently from the participants in the class.

7. The post-interview will be conducted after finishing the technological content of the class. Participants will be interviewed one by one during Chinese class in another classroom or before or after school at the student's convenience. Student will not miss instructional time in order to be interviewed.

The findings from the study may be presented at professional educational conferences or published in professional journals. Your child’s identity will be kept confidential; your child will be identified only through pseudonym. In other words, any information that could identify him/her will be excluded from the study or altered (as with pseudonyms). All of these precautions are taken to limit, as much as possible, the risk that your child’s
identity or the identity of the school site be revealed. Although your child will receive no compensation, your student’s participation may have the benefit of aiding foreign language teachers in developing and / or rethinking program to more effectively meet the needs of future foreign language learners.

___________________ Initial

COLLEGE OF EDUCATION AND HUMAN SCIENCES Department of Teaching, Learning and Teacher Education

Your child’s participation in this study is voluntary, and I thank you for considering taking part. You have the right to ask questions and receive an answer at any time during the course of the study. You can contact the researcher, Ms. Wang, at nwang@esu8.org or by phone at (402) 689-8725 or by post at 540 East Hynes, O’Neill, NE 68763 as well as Dr. Jenelle Reeves, at jreeves2@unlnotes.unl.edu or by phone (402) 472-2610 or by post at 44C Henzlik Hall Lincoln, NE 68588-0355. If you have any questions about your child’s rights as a research participant that have not been answered by the investigator or to report any concerns about the study, you may contact the University of Nebraska-Lincoln Institutional Review Board, telephone (402) 472-6965. Again, you are free to decide not to participate in this study or to withdraw at any time without adversely affecting your relationship with the investigators or the University of Nebraska-Lincoln, or your school. Your decision will not result in any loss of benefits to which you are otherwise entitled.

By signing and returning the form, you are providing your consent to participate in the research.

Sincerely, Nan Wang
If you agree your child to be audio taped during the interview, please put a check in the box.

________________________________________ Name of the Child given consent form

________________________________________ ________________
Parent Signature & Date Researcher Signature & Date
COLLEGE OF EDUCATION AND HUMAN SCIENCES

Department of Teaching, Learning and Teacher Education

Nov 10th, 2011

Dear student,

You are invited to participate in a research project entitled Technology Use in Chinese Class in O’Neill High School. The project director is Ms. Wang from the University of Nebraska at Lincoln’s Department of Teaching, Learning, and Teacher Education. The purpose of the project is to 1) increase knowledge of the learning of Chinese language; 2) do a best practice for utilizing authentic material to improve learning; 3) increase confidence regarding the effective incorporation of technology into the classroom; 4) get a deeper understanding of how both technology and Chinese language affect learning in the classroom; 5) help foreign language teachers and learners to gain the knowledge of the general beliefs about the Chinese language and technology installation to reach success.

The research will be conducted in the normal class schedule, in which all students will take an online survey with their own login and password, only the teacher can see the final analysis graph by her own login and password. The researcher will only use the data from the participants.

Your participation in this research study would last one year, from November 2011 through May 2012. Although the study will run for one year, you may withdraw from the
study at any time. The research will be conducted in the normal classes. The participants only need to take an extra paper-based survey after each new technological strategy installed. In addition, the participants may be interviewed in a rotation in another classroom during school time. During your participation in the study, you will take an online survey, in which you use your own login and password. In addition, the researcher will interview you twice each semester; once at the beginning and once at the end of the both fall 2011 and spring 2012 semester. Interviews will last 10-15 minutes and take place in the Chinese classroom in O’Neill High School. The interviews will be audiotaped and later transcribed by the researcher as a way for the researcher to gather accurate information. In addition to these interviews, there will be a paper-based survey for the participants to fill out (up to 5) regarding the research, which will last 3-5 minutes. Audiotapes may also be made of class sessions in a rotation (with your permission) in order to, make an accurate record.

The details of the procedure are as below:

1. All students need to finish a web-based survey before and after the research as an essential part of the normal classes, and only the data of the participants will be used as part of the research result and analyzed with. The filter system in school COLLEGE OF EDUCATION AND HUMAN SCIENCES Department of Teaching, Learning and Teacher Education does the supervision of browsing websites automatically; therefore this research does not bring any additional risks to students when using the World Wide Web. Again, the use of the web is already part of the curriculum and no additional Internet usage is asked of
students are as a result of participation in this study. We will follow the law of copyright and all other expectation already in place for secondary students.

2. Students who participate the research will complete a paper-based survey up to five times, one time after each technology session. Each survey will take no more than ten minutes.

3. Participants will finish the paper-based survey either in another classroom if time allows, or free study time at the end of Chinese class and will not miss any instruction time.

4. Students will participate in a pre and post audiotape interview. The questions for both interviews are uploaded to the attachment.

5. The pre-interview will be conducted before the research starts, and the participants will be interviewed one by one in another classroom during free study time in the Chinese class or before or after school at the student's convenience. Students will not miss instructional time in order to be interviewed.

6. Other than participating in pre- and post interview, the content of the research is the same as normal designed class. Students who don't participate the research will use the free study time to finish the normal class assignment and will not be treated differently from the participants in the class.

7. The post-interview will be conducted after finishing the technological content of the class. Participants will be interviewed one by one during Chinese class in another classroom or before or after school at the student's convenience. Student will not miss instructional time in order to be interviewed.

The findings from the study may be presented at professional educational conferences or
published in professional journals. Your identity will be kept confidential; you will be identified only through pseudonym. In other words, any information that could identify you will be excluded from the study or altered (as with pseudonyms). All of these precautions are taken to limit, as much as possible, the risk that your identity or the identity of the school site be revealed. Although you will receive no compensation, your participation may have the benefit of aiding foreign language teachers in developing and/or rethinking program to more effectively meet the needs of future foreign language teachers and learners.

___________________ Initial

COLLEGE OF EDUCATION AND HUMAN SCIENCES Department of Teaching, Learning and Teacher Education

Your participation in this study is voluntary, and I thank you for considering taking part. You have the right to ask questions and receive an answer at any time during the course of the study. You can contact the researcher, Ms. Wang, at nwang@esu8.org or by phone at (402) 689-8725 or by post at 540 East Hynes, O’Neill, NE 68763 as well as Dr. Jenelle Reeves, at jreeves2@unlnotes.unl.edu or by phone (402) 472-2610 or by post at 44C Henzlik Hall Lincoln, NE 68588-0355. If you have any questions about your rights as a research participant that have not been answered by the investigator or to report any concerns about the study, you may contact the University of Nebraska-Lincoln Institutional Review Board, telephone (402) 472-6965. Again, you are free to decide not to participate in this study or to withdraw at any time without adversely affecting your relationship with the investigators or the University of Nebraska-Lincoln, or your school. Your decision will not result in any loss of benefits to which you are otherwise entitled.
By signing and returning the form, you are agreeing to participate in the research.

Sincerely, Nan Wang If you agree to be audio taped during the interview, please put a check in the box.

____________________________
____________________________
____________________________

Participant Signature & Date Researcher Signature & Date
Appendix B Graphs of Self-assessments

Oral Input and Outcome

OC1

Listening

Speaking

OC2

Listening
Speaking

Listening

OC3
Speaking

Listening

OC4
Speaking

Written Input and Outcome

OC1

Reading:
OC2

Writing

Reading
Writing

OC3

Reading
Writing

OC4

Reading
Writing
Appendix C Interviews and Survey Questionnaires

First Session:

Audio interviews

Today is 12-7th-2011. I am interviewing OC3

R-Hi!

OC 3- Hi!

R- Okay. These two days we kind used several computer-based things, websites. So do you think that’s helpful for your learning Chinese?

OC3- yes.

R- Where like how it is helpful?

OC3- it helps me when I need to review something I can sit in my house. When I…

R: So you think it is convenient, just like wherever you are you can go to and review it?

OC3: yea.

R: so this lesson, what did you learn? Like what part enlarge your vocabulary?

OC3: the Fruits, different meats, chicken, beef, and different types of drinks?

R: do you think it’s practical for daily conversation?

OC3: yeah. When you go to store, when you ask someone for something.

R: It is like daily life we need it. Is it the part?

OC3: Yea.

R: Is there any parts that you like? Do you think it is very complex to input your email address every time?

OC3: No.
**R:** you don’t think that wastes your time?

**OC3:** No.

**R:** Do you think if the teacher let you create your e-mail account yourself. Do you think that’s waste time, too?

**OC3:** like every time?

**R:** NO. you create once. And you input it in different websites. You will get different experience of different things. Do you think that wastes your time?

**OC3:** No.

**R:** So you think that’s okay.

**OC3:** Yea.

**R:** DO you have any least favorites of this kind technology use in the language classroom?

**OC3:** ah… no.

**R:** recently we have used e-portfolio and lingtlanguage. What is your favorite part of the e-portfolio?

**OC3:** like we could edit every page. With something wrong we can change it. We can see it every time we want. We can come back to any lesson we want, like last years.

**R:** DO you want lingtlanguage with e-portfolio together in one website? Do you think that’s more convenient?

**OC3:** Yea. Because we don’t have to write to two different websites to do the homework.

**R:** What is your favorite of Lingtlanguage?

**OC3:** we can talk instead of write.
R: So you don’t like to type Chinese.

OC3: it’s harder.

R: What’s the hard part of typing Chinese?

OC3: when you type, there are a lot of different words and you don’t get the one you want. Like the pronunciation is like the same you get different words when you type it.

R: Do you have any ideas of picking the correct characters?

OC3: Like if I know some characters.

R: so you think students know more about the characters, you will pick it easily?

OC3: yea.

R: Do you have any suggestion to the teacher to improve the class?

OC3: like do more typing things.

R: beside that?

OC3: write the characters so we know how to write characters? Set the Grid book on the e-portfolio, student can type characters.

R: Anything we can change? Do you like the technology based studying in the classroom?

OC3: yeah. it’s cool.

R: Do you think it’s efficient? You can learn something in the classroom or we could learn more but we just learn some in this classroom?

OC3: We learned more (than we expected), but if I learn something, I forgot after I learned that

R: how about the review part? I think it’s easy to forget
OC3: we can do it one day, review it in the class.

R: you mean we can use several minutes on second day to review it?

OC3: Yeah.

R: Is there any suggestion about the first 15 minutes?

OC3: Review what we have learned first day in the 15 minutes.

Dec 9th, 2011

After four-day of the research of the technology-based classroom, the second interviewee is here, OC2.

R: I have some questions for OC2. Do you think you have learned any new vocabulary during these four-day technology based classroom?

OC2: yes.

R: What kind words have you learned?

OC2: like fruits, animals and drinks, foods

R: What kind of dialogue you can understand, like talking or asking questions?

OC2: how do I ask for something; how to ask the salesman? I want to buy?

R: How to say “I want to buy one pound apple?”

OC2: in Chinese? Wo yao mai yi jin ping guo?

R: awesome! so recently we have used lingtlanguage.com and e-portfolio, do you think help you to learn the vocabulary and the sentence patterns?

OC2: Yes. Because the lingtlanguage makes you pronounce what it asks you and e-portfolio makes you type it and remember what you type in?
R: when you type characters, so you think you can remember some of them or most of them?

OC2: some of them.

R: fifty percent or thirty percent?

OC2: like forty percent.

R: you think typing helps you remember forty percent of the characters.

R: There is a feedback part of the lingtlanguage, after you record your voices and the teacher will send it to you, do you think that’s help?

OC2: yeah. Because you know how to say it and then you know if you go right or wrong then you can correct it

R: Any inconvenient of the websites?

OC2: no

R: so you thin these two websites help you.

OC2: Yeah. They helped me learn more and pronounce more.

R: how to use the technology methods help you talk with your classmates talk in Chinese?

OC2: Well it depends how to use it but yes.

R: you think you do the literature. Do you like to post your image and video in Chinese to the website that the students can watch?

OC2: it depends on what they say.
OC1: The strangest probably we don’t get to hear what you say the words and stuff and if we want to hear we can ask you but it is still be better if you can teach us some, you can hear other people ask questions

R: Like a communication.
OC1: Yeah.

R: How to change it?

Dec 19th, 2011

OC4

OC4: none vocabulary we have learned from the websites, because the vocabulary are from the workbook, not the computer.

Yes it helped when have to say them and I have to say them and figure out what they mean

Do you think you lost some opportunity to talk to others?

That’s for using e-portfolio, if you using e-portfolio not lingtlanguage ones. Because you are saying and you are translating that.

What is your favorite aspect of using the lingtlanguage?

It’s a different way of learning. And it offers the different way for different kids of different learning styles.

What kind different you think?

It’s maybe kids aren’t not able to talk to other kids, it’s easy for them to do it on the computer or that way what they need talking to other kids but they don’t need to worry about being embarrassing.
Do you think that phenomena fit every kid or most kids?

Not every kid, because every kid has different learning style. Not also for most kids but for kids who do have a different learning style. It’s their learning style that help they have a chance to learn.

In the lingtlanguage, they show the talking bubble, we can talk to the computer and record and play it. So there is no embarrassing time, but I still concern is that way prevent kids from communicating or social skills?

Yeah. Definitely preventing them from social skills because they are not socializing with kids at all but I guess if you trying to go for social skill learning then don’t do it but if you go for just learning particular and some kids aren’t good at social skills, you just let them read it.

What is your favorite aspect of using e-portfolio?

I don’t really like e-portfolio, because you don’t really learn how to type characters, because the computer change the new character for you and you don’t really learn anything. Typing it.

Do you have any opinion on how to improve this what happened?

Not e-portfolio, I think, that’s not a good idea. But

Dec 13th, 2011

Survey Questionnaire:

1. What new vocabulary have you learned from the computer-based learning strategy?
OC1: Chinese Money and how to count it. Lesson 7+8 [are] out of our student book.

OC4: None. Our vocabulary is from a book.

2. Did this website help you review the vocabulary/sentence patterns that you have learned before? How did it help?

OC1: Yes. Using those certain words/vocabulary.

OC4: Yes[,] it helped sentence patterns.

3. What is your most favorite aspect of using this website/software?

OC1: Getting to work on our own and at our own pace.

OC4: It[‘]s a different way of learning.

4. What is your least favorite aspect of using this website/software?

OC1: Don’t get it explained to us, unless we ask.

OC4: It seems so repetitious.

5. What is your opinion of using this website/software in a foreign language learning class?

OC1: I like to use it because we get to learn how to read Chinese characters, but also along with Chinese pinyin.

OC4: I think it [‘]s good if it is applied right.

Second Session:

Feb 7th, 2012

Survey Questionnaire:

1. What new vocabulary have you learned from using Edmodo?

OC1: Lots! I’ve [learned] some new things and comprehend it better.
OC2: we learn about fruits.

OC3: The things about school.

OC4: None. Very little.

2. Did this website help you review the vocabulary/sentence patterns that you have learned before? How did it help?

OC1: Yes. By letting review even after I’ve submitted it.

OC2: Yes [,] because we had assignments and we had games. The[y] helped us remember the vocab[ulary].

OC3: Because we need to practice with different sentences.

OC4: No[,] because it would be just as easy to just give us a sheet of papers.

3. What is your most favorite aspect of using this website/software?

OC1: Lets me learn better and helps me see my grade.

OC2: That we learn new words and I think it is easy.

OC3: That you can post like facebook.

OC4: None.

4. What is your least favorite aspect of using this website/software?

OC1: Not being to do the assignment right there, inste[a]d we have to download it.

OC2: That we can post things like facebook.

OC3: t[T]hat sometime I forget my user name and password.

OC4: relevant.

5. What is your opinion of using this website/software in a foreign language learning class?
OC1: It’s good, helps comprehend it.
OC2: I think it helps students and I like it.
OC3: It’s really helpful.
OC4: Not good.

6. **Please write down your suggestion on using this website in language classes.**

Thank you.

OC1: There is no suggestion! 😊
OC2: None.
OC3: If you could record your voice.
OC4: Don’t have any.

Feb 14th, 2012

**Survey Questionnaire:**

1. **What new vocabulary have you learned from the computer-based learning strategy?**

OC1: Lots!!! School life!
OC2: I learn fruits, family members and school classes.
OC3: The fruits and somethings [something] about school.
OC4: None. We get vocabulary from the book.

2. **Did this website help you review the vocabulary/sentence patterns that you have learned before? How did it help?**

OC1: Yes. By giving me different ways to review them.
OC2: Yes [,] because I had to say them and read them.
OC3: It did help[,] because we wrote them in Chinese [other] than in English.

OC4: Yes[,] we could here [hear] them being said and reply back.

3. **What is your most favorite aspect of using this website/software?**

OC1: by giving me different ways to learn the curriculum.

OC2: I like that we say words in lingtlanguage and it correct[s] it.

OC3: That we don’t have to write all the Chinese characters.

OC4: The games.

4. **What is your least favorite aspect of using this website/software?**

OC1: there is no non-favorite aspect.

OC2: Nope.

OC3: That sometime[s] [the] sit[e]s [are] hard to get in when the [ speed of

OC4: The sime [same] unesseddar [unnecessary] in some cases.

5. **What is your opinion of using this website/software in a foreign language learning class?**

OC1: Good, helpful way of learning the language.

OC2: I think it helps us more.

OC3: That is really helpful.

OC4: OK as long as not over used.

Third Session

Feb 23rd, 2012

Survey Questionnaire:
1. **What new vocabulary have the websites helped you review in the computer-based learning class?**

   OC1: The new vocabulary I have learned Unit 4, Lesson 11 and 12. I learned how to say pingpong soccer, etc. and homework, difficult, etc.

   OC2: We learn[ed] how to say sports.

   OC3: The sports.

   OC4: I think that the best one is Lingtlanguage.

2. **How did they help?**

   OC1: I can say my favorite hobby and how to explain my homework- if it’s difficult or easy.

   OC2: I don’t know.

   OC3: It help when we play games or do the quizzes.

   OC4: you can wright[write], hear and say the words.

3. **Do you like the routine of using Lingtlanguage.com, edmodo.com and e-portfolio? On which aspect of learning Chinese have they helped you?**

   OC1: I like using the routine of edmodo.com and Lingtlanguage. I don’t like using e-portfolio though. The other ones have helped me by explaining things better.

   OC2: I think it [is] the same with [no websites] because we still have the book.

   OC3: [They help me] reviewing [review what I have learned] so I don’t forget [them].

   OC4: Lingtlanguage, the best[,] because I think all the rest don’t have you do every aspect of the language like Lingtlanguage.
4. What is your least favorite aspect of using Lingtlanguage?

OC1: I don’t like using Lingtlanguage because it has no aspect or something. It sometimes doesn’t work either.

OC2: I don’t care if we use it or not. It helps if we use it or not [helpful, if we don’t use it].

OC3: There is [are] a lot of questions that [I have to record my voice] repeat[edly].

OC4: Sometimes the assignments seem really long but other than that not a whole not.

5. What is your least favorite aspect of using edmodo?

OC1: I like edmodo, [.] There’s nothing I really don’t like about it.

OC2: for me that I don’t find things sometimes.

OC3: I like edmodo better than the other sites. So, I don’t have any proble[m] with it.

OC4: It seems sometimes to be not needed but we use it anyway. It [‘]s better than E-portfolio.

6. What is your least favorite aspect of using e-portfolio?

OC1: E-portfolio isn’t good because you don’t get to hear somebody saying the words.

OC2: I don’t like typing.

OC3: That sometimes I forgot my password. It’s hard to get in.

OC4: Everything can done on Edomodo. We don’t need E-portfolio.

7. Your suggestions:
OC1: Have no suggestions.

OC2: none.

OC3: none.

OC4: Get rid of E-portfolio.

Mar 8th, 2012

Survey Questionnaire:

1. Do you like the routine of using LinguaFolio.unl.edu? On which aspects of learning Chinese have they help you?

   OC1: No, it doesn’t help me at all with learning Chinese.

   OC2: I think it’s the same if we use it or not.

   OC3: They just ask you questions. They don’t teach you [Chinese].

   OC4: I don’t thing LinguaFolio has helped me learn Chinese but it has helped me measure what I have learned, which is good to know.

2. What is your least favorite aspect of using LinguaFolio?

   OC1: [It] doesn’t teach me anything about the Chinese language. [I don’t like] taking the surveys.

   OC2: I don’t like that we do it every week.

   OC3: That the question[s] repeat a lot.

   OC4: Sometimes the quizzes seem long.

3. On what aspect do you think that LinguaFolio surveys gave you encouragement to learn Chinese?
OC1: I didn’t get any encouragement to learn Chinese from LinguaFolio.

OC2: It tells you how well your learning [is].

OC3: No

OC4: It helps you see your growth.

4. Your suggestions:

OC1: Stop using it.

OC2: None

OC3: 

OC4: I like it [be]cause it helps see your increase in ability.

Appendix C Post-research Investigation Questionnaires

April 10th, 2012

1. Recently, the Chinese class has installed education websites. Have you been familiar with the basic routine of the learning of each lesson? Please list the routine that you are familiar with:
OC1: Yes. I have been familiar with Lingtltlanguage, Eportfolio and Edmodo.

OC2: do our listen and practice words, type sentences patterns in the i[e]-portfolio and have a test every Monday.

OC3: yes. First we go over a lesson than then we have to play games about the words and the sentences in edmodo than then we put in e-portfolio the read aloud [,] at the end we do a test.

OC4: Study the lesson Tues[day] –[through] Thursday. Fri[day] [we] do workbook and Mon[day] [we take a] test.

2. Is it easier to learn Chinese with the familiar routine? What Chinese skills have you got improved?

OC1: Yes. Speaking.

OC2: Yes. [It] is easier to write characters.

OC3: Yes. The characters [,] because they are harder to learn.

OC4: Sure. I guess it’s not any fun though.

3. What is the hardest part of learning Chinese?

OC1: Writing and the tones.

OC2: how to pronounce and the towns[tones].

OC3: reading the characters.

OC4: The characters and the sounds.

4. In which way do you think of using technology could help you learning Chinese better?
OC1: How to say it.

OC2: We play games, hear[ing] [someone] ask for the words and we could know how you pronounce it.

OC3: That I can just look in a website when I want to come back to review something instead of going through papers. [he underlined the word “website” and told me that this is his preference]

OC4: Listening to your test is good and the fact that it also has the characters in the test video.

5. Which website helps you connect the knowledge learned before with new knowledge? Please list the reason.

OC1: Edmodo, because we can learn how to say new things.

OC2: Lingtlanguage helps me know if I pronounce the words correctly. Edmodo helps me learn the words. i[e]-portfolio helps me learn the character[s].

OC3: edmodo [. Because I think it is better than the other websites that we have used.

OC4: Edmodo do[es] [ help me], [be]cause it has numerous techniques.