# VOICES OF FOUR TAIWANESE COLLEGE STUDENTS' EXPERIENCES WITH THE TEST OF ENGLISH FOR INTERNATIONAL COMMUNICATION (TOEIC) PREPARATION (PREP) COMPUTER ASSISTED LANGUAGE LEARNING (CALL)

A Dissertation

by

## TO-YU CHEN

Submitted to the Office of Graduate and Professional Studies of Texas A&M University in partial fulfillment of the requirements for the degree of

## DOCTOR OF PHILOSOPHY

Chair of Committee, Patricia Lark
Committee Members, Bugrahan Yalvac

Janet Hammer

Jeffrey Liew

Head of Department, Yeping Li

May 2014

Major Subject: Curriculum and Instruction

Copyright 2014 To-yu Chen

#### **ABSTRACT**

The primary purpose of this study was to identify Taiwanese college students' experiences regarding the use of TOEIC PREPARATION (TOEIC PREP) software. In this qualitative study design, the researcher explored the college students' feelings and attitudes as they prepared for the TOEIC test through the TOEIC PREP software provided by the school's online platform. The research question guiding the study was: "What are the experiences of four college Taiwanese students about the TOEIC PREP software?"

The four participating students were selected from 50 college juniors who used the TOEIC PREP software for two semesters in order to prepare for the TOIEC test. All of the students majored in Applied Foreign Languages and were enrolled in a required TOIEC preparation course at the university in Taiwan. In the middle and again at the end of students' test preparation process, the researcher conducted and audio-recorded an approximately 30-minute interview with each of the four participants via Skype. Four themes emerged from the study: (a) students' motivations derived from their English learning backgrounds, (b) online learning and flexible scheduling, (c) language test preparation through online learning, and (d) improving performance on the TOEIC test. The themes conceptualized from the research questions were mentioned and inter-related by each of the four participating students. The results of this study were as follows:

1.) In the school-required TOEIC test preparation course, the four participating students tended to indicate that the TOEIC PREP software did help them through the TOEIC

- test, but not all of them agreed that the online learning could replace the traditional face-to-face-class.
- 2.) Students having similar English learning backgrounds and learning English in a non-grammar-based classroom setting might have more interest in continuing their language learning.
- 3.) Free software, like TOEIC PREP, provided by the school could be a big motive for students in their TOEIC test preparation.
- 4.) As daily computer users, students are unlikely to need to spend extra time learning how to use the online learning software.
- 5.) Besides using the TOEIC PREP software for test preparation, students also were striving to improve their reading and listening competence from the process of practice.
- 6.) The TOEIC PREP software absolutely could help the students prepare for the test because of its flexibility of practice and immediate feedback.

#### **DEDICATION**

This dissertation is dedicated to my loving parents, Pao-ming Chen and Hsiu-lan Fan. I appreciate their encouragement, love and support throughout the past nine years since I decided to devote myself to the academic field of Teaching English as a Second Language. They provide me weekly family updates by Skype allowing me to focus on my research. They are dearly loved and missed.

I also dedicate this dissertation to my brother and sister, Wayne Chen and Sherry Sue, for their unconditional love and support throughout my graduate school days in the USA. They were the most incredible brother and sister I could ever imagine. I missed my sister's wedding and the birth of my brother's three sons. My only access to such wonderful occasions was through talking to them on the Skype calls. I am very grateful.

In addition, I dedicate this dissertation to my mother, Chiu-fang Yang, who always supports me with my decisions. I appreciate her thoughtfulness and forgiveness for my absence during times of illness. I love her.

Lastly, I dedicate this dissertation to my aunt, Yi-jing Chen, who always cares about my academic progress. I appreciate her commitment to encourage me on my research despite surgery for breast cancer. I am extremely grateful for her unwavering support.

#### **ACKNOWLEDGEMENTS**

I truly appreciate so many people who have directed and assisted my research study. I am grateful to the four participants in this study who shared their experiences with me in the hope that future TOEIC exam takers might benefit from their learning stories. I learned a great deal about the research topic from the four participants and have been motivated by their testimonies on the TOEIC preparation.

Dr. Patricia Larke, chairperson of my dissertation committee, has been a source of encouragement and assistance throughout my student life at Texas A&M University. During my study with Dr. Larke, she was always patient with my mistakes and continued to support me and provide insight throughout my research. I am sincerely thankful for her kindness and love, and appreciate her professional guidance that spiritually helped maintain my motivation and courage to meet the requirements for graduation. Dr. Larke is an unprecedented role model in my life. I am determined to use Dr. Larke as an exemplar in my own future teaching career in Taiwan.

My thankfulness is extended to my committee members. I am grateful to Dr. Bugrahan Yalvac for his professional advice and assistance in the fields of qualitative research. Dr. Janet Hammer and Dr. Jeffrey Liew suggested that I conduct two interview sessions to collect more in-depth data from the four participants. I am so thankful for all the kindness, generosity and support for my research from all the members of my committee.

I would especially like to thank Mr. Kevin Sullivan for his aid on my dissertation edits and hospitality. Mr. Sullivan spent his leisure time on my dissertation edits with me and shared with me his delicious American-style lunch. I would not have been able to complete this dissertation correctly without Mr. Sullivan's help and kindness.

# TABLE OF CONTENTS

	Page
ABSTRACT	ii
DEDICATION	iv
ACKNOWLEDGEMENTS	v
TABLE OF CONTENTS	vii
LIST OF FIGURES	X
LIST OF TABLES	xi
CHAPTER I INTRODUCTION	1
Overview of People and Spoken Languages in Taiwan Statement of the Problem Significance of the Study Purpose of the Study Research Question Definition of Key Terms Assumptions Limitations Organization of the Study	
CHAPTER II LITERATURE REVIEW  The Development of English Education in Taiwan  Defining CALL  Technology and Language Learning  Cognitive Approaches  Socio-cognitive Approaches  The Role of the Computer  The Development of CALL  The TOEIC Test  TOEIC PREP Software  Conceptional Framework	
CHAPTER III RESEARCH METHODOLOGY	23

Rationale for the Study	23
Design of the Study	
Role of the Researcher	26
Informed Consent	27
Participant Selection	28
Participants	
Instrument – Interview Protocol.	
Instrument of Interviews	30
Data Collection.	33
First Contact	33
Data Analysis	34
Credibility	36
Transformability	37
Limitation of the Study	38
Conclusion	38
CHAPTER IV THE PARTICIPANTS	39
Participant One: Chan	
First Skype Interview	
Second Skype Interview	
Participant Two: Ueng	
First Skype Interview	
Second Skype Interview	
Participant Three: Wang	
First Skype Interview	
Second Skype Interview	
Participant Four: Chou	
First Skype Interview	
Second Skype Interview	51
CHAPTER V THEMES	52
CHAPTER V THEMES	33
Discussions of English Learning Motives	53
Themes Pertaining to Students' Motivations from English Learning	55
e e	54
Themes Pertaining to Students' Motivations for Online Learning and Flexible	
Scheduling	56
Themes Pertaining to Students' Motivations about Language Test Preparation	0
through Online Learning	59
Themes Pertaining to Students' Motivations about Improving Performance on	
TOEIC	60
Conclusions	62

CHAPTER VI DISCUSSIONS, SUMMARY, AND CONCLUSION	64
Discussions	65
Learning Motives	68
Language Learning Background	70
Online Learning	
Summary	
Conclusion	
Recommendations for Further Research Topics	74
REFERENCES	76
APPENDIX A EMAIL TO INSTRUCTOR OF APPLIED FOREIGN LANG	
DEPARTMENT	85
APPENDIX B INVITATION EMAIL	87
APPENDIX C INFORMED CONSENT FORM	89
APPENDIX D WRITTEN NARRATIVE PROTOCOL	94
APPENDIX E INTERVIEW PROTOCOL	95
APPENDIX F CULTURAL REVIEW LETTER	97

# LIST OF FIGURES

	Page
Figure 1 Themes about English Learning Background	56
Figure 2 Themes about Online Learning	58
Figure 3 Themes about Test-Preparation Software	60
Figure 4 Themes about Better TOEIC Grades	62

# LIST OF TABLES

	Page
Table 1 Different Aspects of CALL in Structural, Cognitive, and Sociocognitive Framework	21
Table 2 Profile of the Four Study Participants	40

#### CHAPTER I

#### INTRODUCTION

The focus on English as a Foreign Language (EFL) education in Taiwan was not a new issue; however, it had recently gained considerable momentum. The Taiwanese government had started to support Taiwanese students by providing scholarships to study abroad and had added the teaching of content courses in English into the school curriculum. For example, a science course was able to be taught in English. The steadily increasing emphasis on English reached its peak in the 1990s, when the government decided to build Taiwan as the Asian-Pacific economic and trading center. The government invested massive resources into promoting internationalization (Kubota, 2002). The first step in internationalization in Taiwan was to increase its citizens' English proficiency. This was done through English education courses and programs designed to revise English curricula from the primary to college level.

The emphasis on English learning was not accepted by all Taiwanese. In the rural area, parents didn't see the benefits as do those in the urban areas. Some may think English learning was unnecessary for their children to study outside school. The linguistic undertakings do, however, demonstrate an official effort to insert English education into the school curriculum which previously had belonged only to Mandarin. The Taiwanese government had revised the curriculum at all levels to include English courses and had stated that English played a crucial role in increasing the country's competitive edge and its "internationalization." Kubota (2002) defined

"internationalization" as that which "aims to transform social and institutional conventions to adapt to the international demands" (p. 16).

Students in Taiwan usually learned English for course requirements from primary school to college or for passing examinations, for example, TOEFL (Test of English as a Foreign Language) or TOEIC (Test of English for International Communication, USA), to advance to higher education levels or to enhance employment opportunities after graduation. The students regarded passing examinations as their short-term objective of learning English, ranging from school tests or college entrance exams to standardized instruments such as the General English Proficiency Test (GEPT), which was developed under the supervision of the Taiwan Ministry of Education, or TOEIC. Passing examinations is the real-life objective of English education for most Taiwanese people. Hsieh (2010), through analysis of interviews with the human resource personnel managers of the top 50 Taiwanese industries, confirmed this exam-oriented culture and the significant role that English ability played in the professional world. The managers maintained that personality was more important than English ability but admitted to favoring applicants with advanced degrees. In Taiwan, having the degree meant having passed competitive entrance examinations, most of which required high English test scores. In other words, English ability directly or indirectly decided one's qualification for an advanced education and a high-status job. Consequently, the government in Taiwan was motivated to integrate Computer-Assisted Language Learning (CALL) into the school English curriculum so that students were able to have the best opportunity to be competitive upon graduation.

# Overview of People and Spoken Languages in Taiwan

Taiwan was a multilingual society consisting of four ethnic groups: the Southern Min people, the Hakka, the Mainlanders, and the indigenous Austronesians (Tsao, 2004). The first three groups of people represented about 98% of the population in Taiwan (Government Information Office, 2004), the Southern Mins being the majority ethnic group. Languages in Taiwan could be divided into three categories: (a) the "mother tongue" or Taiwanese, the official language and language for popular communication, (b) Mandarin, the designated official language of Taiwan, and (c) English, the major language of more widespread communication (Tsao, 1999).

The four distinct ethnic groups in Taiwan had their own languages. The Southern Min people (70% of the total population), who migrated from the coastal Southern Fujian region in the southeast of mainland China several centuries ago, speak Southern Min dialect (i.e. Taiwanese); the Hakka (15% of the total population), who migrated from Guangdong province at about the same time as the Southern Min people, speak Hakka; the Taiwanese aborigines (2% of the population), the original inhabitants in Taiwan for several thousand years, speak their own language that does not belong to the Chinese language family, but to the Austronesian language family; and the Mainlanders (12% of the total population), who fled to Taiwan from various provinces in China after the Communist Party's victory in 1949 over the KMT, speak mostly Mandarin (Hsiau 2000). Among the four groups, those who originated from China (Southern Min, Hakka, and Mainlander) were divided into two subgroups: native Taiwanese (ben-sheng ren or native-province people) and Mainlanders (wai-sheng ren or external-province people).

The local people in Taiwan have not reached a consensus on the definition of 'ben-sheng ren.' Some suggested that only the Southern Min people were native-province-people. Others contend that native-province-people should include every ethnic group in Taiwan except Mainlanders. Additionally, there were some who believed that all who were born in Taiwan were 'native-province people.' What was clear was that the wai-sheng ren, 'external province people,' ruled Taiwan for 50 years after 1945, following the 50-year colonization of Taiwan by the Japanese government (Hsiau 2000).

Chen (2003) stated that "the success of the British empire and the subsequent rise of American economic and technological hegemony" (p.65) contributed to the dominance of English in the world. The primacy of English has impacted English-language policies in Taiwan, and the promotion of English in Taiwan has been driven enormously by economic needs (Tsao, 2001). Learning English was explicitly stated by the government as one of the major ways to improve the efficiency of the workforce, and also a major avenue toward increasing the competitiveness of the country in terms of both commerce and technology (Yuan, 2003). For some reason, the status of English as a global language unintentionally has contributed to the increasing prominence of learning (and therefore of teaching) English in Taiwan.

#### **Statement of the Problem**

The option to incorporate technology into second language learning and teaching has fostered a debate regarding the extent to which such technology may play an increasingly important role, to the point even of replacing language instructors in physical classrooms. The debate can advocate both the many positive and negative

aspects of Computer Assisted Language Learning (CALL). Kern (1995) best summed up the implicit goal of CALL by stating that second language (L2) CALL programs supported individualized instructions by "offering the student the freedom to choose topics, to repeat input, to increase or decrease task difficulty, and to get help whenever it is needed" (p. 457).

Previous studies (Kern, 1995) indicated that CALL may encourage students in authentic learning activities that apply established instructional practice as the starting point, stimulus, and focus for learning, and revealed that students through CALL tend to demonstrate greater growth in school assessment. It also is shown that CALL can foster problem-solving behaviors in language learners, and help students to become engaged in the process of language learning.

Moreover, Kern (1995) investigated the overall advantages of CALL and only some of them discussed the effect of CALL on students' test results. Testing results directly reveal students' learning outcomes and provide a concentrated reflection of the pros or cons of CALL.

My study on the experiences of college students' perceptions on the TOEIC PREP software employed a study approach based on interviews with open-ended questions. Prior research has yet to draw a correlation between ideal CALL instructions and objectives, and increased language learning achievement as measured by test scores. The present study sought to use a qualitative research methodology in order to elicit the participants' perceptions and to describe and interpret their learning experiences on CALL from their viewpoint.

# Significance of the Study

Educators of language have advocated different approaches for the instruction of language skills. Among these various methods, the traditional approach and the integrated approach have been quite popular in the past. In the traditional approach, language skills were isolated and taught individually. The integrated approach acknowledges the importance of interrelationships among language skills such as listening, speaking, reading, and writing (Cunningham, 2000; Eskenazi, 1999; Hismanoglu, 2000; Huang & Liu, 2000; Johnson, 1999; Koebke, 1998; Liao, 1999; Moote, 2002).

The applications and effectiveness of new technologies, especially the use of computers in language teaching, have been an ongoing focus of researchers in the field. Prior research (Cunningham, 2000; Eskenazi, 1999; Hismanoglu, 2000; Huang & Liu, 2000) reported on the importance of CALL for EFL and ESL learning. Thaipakdee (1992) noted "Students' attitudes toward learning are a primary factor in their learning environment" (p. 54). Min (1998) stated "Attitudes are an evaluative response to the environment, ideas, objects, and other people" (p. 15). Besides, Tang (1995) stated that learners' attitudes are important data to be collected for sound instructional design. Thaipakdee, Min, and Tang indicated that attitudes are inferred from an individual's viewpoint, idea, and feelings toward CALL. A positive or negative attitude toward CALL can have a great influence on one's continued usage of it, with negative attitudes toward CALL tending to hinder computer competency (Wu, 1997). Therefore, this study on the experiences of how students prepared the TOEIC test through the TOEIC PREP

software, separated from the test outcome, could be useful in understanding the relationship and effectiveness between CALL and student proficiency in language learning in Taiwan.

# **Purpose of the Study**

The purpose of this study was to explore the four Taiwanese college students' perceptions on preparing for the TOEIC exam with TOEIC PREP software in Taiwan. The investigator was attempting to determine if the use of TOEIC PREP software, made available by the school, had influenced the students' attitudes in the course of their exam preparation. As a result, a qualitative phenomenological research method was used in the study to explore the students' learning experiences through CALL on the language proficiency test, TOEIC.

# **Research Question**

The guiding research question for the study was "What are the experiences of the Taiwanese college students on using TOEIC PREP to prepare TOEIC exam?" Specifically, the question guiding this study was:

➤ What are the experiences of the four college Taiwanese students with the TOEIC PREP software?

## **Definition of Key Terms**

- Case. A system bounded by time or place. It can be a person, an event, an activity or a program (Creswell, 1998).
- 2. Phenomenology. Researchers search for essentials, invariant structure (or essence) or the central underlying meaning of the experience and emphasize the intentionality of

- consciousness where experiences contain both the outward appearance and inward consciousness based on memory, image and meaning (Creswell, 1998).
- 3. CALL (Computer Assisted Language Learning). Computer Assisted Language

  Learning (CALL) is defined as the use of a computer to provide instructional

  contents (Seo & Bryant, 2009) and allows for interaction between user and computer

  with immediate feedback. CALL is a means to mesh technology and learning.
- 4. Experience. Refers to actual observation of or practical acquaintance with facts or events. Experience also refers to knowledge or skill resulting from observation or acquaintance with facts or events (Fischer, 2007).
- 5. Taiwanese students. Students born in Taiwan and who speak one or more of the four mentioned languages in Taiwan (Hsiau, 2000).

# **Assumptions**

The present study assumed that:

- 1. The participants stated their narrative as truth with full integrity.
- Participants used in the study gave honest answers to the questions asked in the interview with full integrity.
- 3. Participants drew from their experiences in the TOEIC preparation course to answer the interview questions.
- 4. Participants from the study were the students without any TOEIC PREP software experience prior to the course.
- 5. The data collected accurately reflect the participants' viewpoints.

#### Limitations

- 1. Some limitations may affect the study. First, the validity of the study relied on participants' free-will responses in reference to their personal experiences.
- 2. It should be noted that contents translated from Chinese may not perfectly represent the meanings and feelings of the participants.
- 3. The interviews were conducted through Skype voice calls without video recording; consequently, the investigator was not privy to the participants' facial expressions or level of attentiveness during the interview.
- 4. The extent of the study involved only four college students so cannot be expected to represent the views of all Taiwanese college students on the TOEIC PREP software.

## **Organization of the Study**

This study was divided into six chapters. Chapter one has provided the background, a statement of the problem, research questions, an operational definition of terms, significance of the study, and a brief summary of research methods. Chapter 2 includes the literature review and theoretical framework. Chapter 3 discusses the design of the study, sampling procedures, data collection and analysis. Chapter 4 presents the interpretation of data and summarizes the findings of the study. Chapter 5 talks about the themes which emerge from the study. Chapter 6 includes a discussion of the results, recommendations for future Taiwanese English instructors and students, the limitations of the study, and the conclusion.

#### CHAPTER II

#### LITERATURE REVIEW

# The Development of English Education in Taiwan

Since 1949, the curriculum in Taiwanese secondary schools has included English instruction, with students attending six hours of classes (one 300-min lesson) per week during two 20-week semesters in each academic year (Zhang, 1992). Freshmen were required to complete a three-credit-hour English language course (one 150-min lesson) per week during two 18-week semesters in the first academic school year.

Secondary school curricula focused on the development of reading and writing, while college curricula emphasized that of reading and listening. Each language skill was taught separately in different course settings.

According to Chen (1999), English instruction at college and secondary school levels usually emphasized the grammar and translation method in the teacher-centered classroom where the teachers' instructions focused on linguistic over communicative competence.

In the 1990s, a growing number of parents and educators (e.g., Chen, 1999, 2003; Zhang, 2004) promoted the introduction of English learning at the elementary level in order to prepare students better for economic globalization. Proponents of elementary English instruction have believed that the earlier children started to learn English, the higher the level of proficiency they would achieve. Wang (2002) indicated that widespread English education in elementary school was inevitable because a growing number

of parents were already sending their children to private language institutes after school in order to give them an early start that enabled them to compete better with peers and achieve better proficiency. China Central News, on 6 April 1999, reported that more than one quarter of elementary children in Taiwan were learning English in private language institutions.

In 2001, English was introduced in grade five (in which learners are 10-11 years of age), but this was then lowered to grade three in 2002. Classes were taught 90 minutes per week during the two 20-week semesters in each academic year. Although the Ministry of Education in Taiwan claimed that the English curriculum would be started at grade three, local educational bureaus and schools could designate a lower starting grade level. For example, in 2001, Tainan City and its suburban areas started English instruction in the second grade and moved to the first grade in 2002.

# **Defining CALL**

Computer Assisted Language Learning (CALL) was the expression agreed upon at the 1983 Teaching English for Speakers of Other Languages (TESOL) convention in a meeting of all interested participants. This term was used widely to refer to the general area of technology and second language teaching and learning, though revisions for the term have been suggested regularly (Chapelle, 2001). CALL can be defined as the exploration for and study of applications of the computer in language teaching and learning (Levy, 1997). Given the breadth of what may happen in computer-assisted language learning (CALL) as well as its evolving nature, a definition of CALL soon grew to refer to any process in which a learner used a computer and then improved his or

her language (Beatty, 2003). Additionally, CALL had come to encompass issues of materials design, technologies, pedagogical theories and instructional modes.

Materials for CALL can include those which were purpose-made for language learning and those which adapted existing computer-based materials, video and other materials (Beatty, 2003).

CALL involved the application of computers in the language learning process.

CALL programs were designed to teach aspects of the language learning process through the role of the computer. Some criticized that CALL programs generally were driven by the technology or by those who put the technology in practice (the designers). They argued that in the rush to use the latest "great feature," pedagogical considerations often were ignored. Even if a computer could offer an array of attractive and interesting images or videos on the screen, there was no guarantee that it indeed enhanced the learning process.

## Technology and Language Learning

Virtually every type of language teaching has its own technologies to support it.

Language teachers who followed the grammar-translation method in which the teacher explained grammatical rules and students performed translations counted on one of the most ubiquitous technologies in Taiwan education, the blackboard, a perfect vehicle for the one-way transmission of information usually associated with that method. The blackboard later was supplemented by the overhead projector, another great medium for the teacher-dominated classroom, as well as by early computer software programs which provided what were known as "drill-and-practice" grammatical exercises. In contrast, the

audio-tape was the perfect medium for the audio-lingual method which emphasized learning through oral repetition. University language classes in the 1970s and '80s usually included obligatory sessions at the audio lab where students would perform the dreaded repetition drills.

By the late 1970s, the audio-lingual method fell into disrepute, at least in part due to poor results achieved from expensive language laboratories. Whether in the lab or in the classroom, repetitive drills, which focused only on language form but ignored communicative meaning, achieved poor results.

The 1980s and 1990s brought a shift toward communicative language teaching, which emphasized student engagement in meaningful interaction. Within this general communicative trend, people could note two distinct perspectives, both of which had their implications in terms of how best to integrate technology into the classroom. These roughly could be divided into cognitive approaches and socio-cognitive approaches.

# **Cognitive Approaches**

Cognitive approaches to communicative language teaching were based on the point that learning a language was an individual psycholinguistic act. From this perspective, language learners constructed a mental model of a language system, based not on habit formation but rather on innate cognitive knowledge in interaction with comprehensible, meaningful language (Chomsky, 1986). Errors were seen in a new light not as bad habits to be avoided but as natural by-products of a creative learning process that involved rule simplification, generalization, transfer, and other cognitive strategies (Chaudron, 1987). Learners' output (what they say or write), if relevant at all, was

beneficial principally to the extent that it helped make input (what they hear or read) more comprehensible or salient so that the learners could construct their own cognitive models of the language.

Technologies which supported a cognitive approach to language learning were those which allowed learners maximum opportunity to be exposed to language in meaningful context and to construct their own individual knowledge. Examples of these types of technologies included text-reconstruction software, concordance software, and multimedia simulation software.

Text-reconstruction software allowed teachers to provide students various texts where letters or words either were missing or scrambled. Students worked alone or in groups to complete or re-arrange the texts, thus supporting a process of mental construction of the linguistic system. While such activity could, in theory, be carried out with paper and pencil, the computer facilitated the process for both teachers and students. Teachers quickly and easily could create re-arranged texts or cloze activities from any original word-processed passage. Students were able to use hints provided by the computer to assist their learning process.

## **Socio-cognitive Approaches**

Socio-cognitive approaches, in contrast to cognitive approaches, emphasized the social aspect of language acquisition; learning a language was considered a process of apprenticeship or socialization into particular discourse communities (Gee, 1996; Schieffelin & Ochs, 1986;). From this perspective, students needed to be given maximum opportunity for authentic social interaction, not only to provide

comprehensible input but also to give students practice in the kinds of communication encountered outside the classroom. This could be achieved through student collaboration on authentic tasks and projects (Breen, 1987; Candlin & Murphy, 1987; Long & Crookes, 1992; Prabhu, 1987) while simultaneously learning both content and language (Flowerdew, 1993; Meskill, 2009; Snow, 1991).

The Internet was a powerful tool for assisting a socio-cognitive approach to language teaching. Indeed it was this fit of the Internet with a socio-cognitive approach which largely accounted for the new-found enthusiasm for using computers in the language classroom. The Internet was a large, socially interactive medium which could be used in many ways.

## The Role of the Computer

The increasing use of computers and the Internet in college English language classrooms had widespread repercussions for English language programs (Coryell & Chlup, 2007). The ability to offer students the option of self-directed learning and to connect learning to valuable work skills and personal use had led many college education programs to incorporate computers in their curriculum (Dillon-Marable & Valentine, 2006). Nunan (1988) stated the opinion that, "no curriculum can claim to be truly learner-centered unless the learner's subjective needs and perceptions relating to the process of learning are taken into account" (p. 177).

The use of computers in language learning could be classified into two different categories: tutor and tool. Creating a division in the world of computer applications for language learning became popularized by Levy (1997). This division was based on the

specific functioning role of the computer. Using computers as a tutor allowed the students to complete language learning exercises. These teaching exercises typically were found in multimedia programs that included grammar, reading, listening, and speaking activities. On the other hand, using computers as a tool meant that students were using them for communication in the second language, such as discussion boards or emails. These tool-based activities were related more closely to the socio-cultural aspects of language learning (Fischer, R., 2007).

The Development of CALL

The pedagogy associated with CALL has undergone several key phases throughout the years (Warschauer, 1996). Most of the changes had a direct correlation to popular educational theories and pedagogical approaches that defined each era. The three phases of CALL were Behavioristic/Structural, Communicative/Cognitive, and Integrative/Sociocognitive/Socioconstructive.

The first pedagogical phase of CALL was Behavioristic/Structural. This phase of CALL began in the 1950s, but primarily was incorporated in the 1960s and 1970s. A key feature of CALL during this time was repetitive language drills, which used the computer as a tutor.

View of Language: **Structural** (a formal structural system)

English Teaching Paradigm: Grammar-Translation & Audio-lingual

Principal Use of Computers: Drill and Practice

Principal Objective: Accuracy

16

Characteristics:

1. Repeated exposure to the same material was believed to be beneficial or even

essential to learning.

2. A computer was ideal for carrying out repeated drills, since the machine (a) did not

get bored with presenting the same material and (b) it could provide immediate non-

judgmental feedback.

3. A computer was used as a tutor, presenting material and feedback on an

individualized basis, allowing students to proceed at their own pace and freeing up

class time for other activities.

The second pedagogical phase of CALL was Communicative/Cognitive (1980s –

1990s). In conjunction with advancements in technology and an overall rejection of

behaviorist approaches in education, the 1970s and 1980s began an era of

communicative learning. Advocates of this learning approach felt that language drills did

not provide an authentic form of language learning. Drills were replaced by paced

readings, text reconstruction, and language games.

View of Language: **Cognitive** (a mentally constructed system through interaction)

English Teaching Paradigm: Communicative Language Teaching

Principal Use of Computers: Communicative Exercises (to practice language use; non-

drill format)

Principal Objective: Fluency

Characteristics:

1. Grammar was taught implicitly rather than explicitly.

17

- Computers were used to stimulate discussion, writing or critical thinking. Students
  were encouraged to generate original utterances rather than just manipulated
  prefabricated language.
- 3. The programs avoided telling students that they were wrong and were flexible to a variety of student responses.
- 4. Computers were used as a tool (e.g., word processors, spelling and grammar checkers) and the target language was used exclusively.

The final pedagogical phase of CALL was

Integrative/Sociocognitive/Socioconstructive (1990 - present). Integrative CALL began in the late 1980s and continues through today. A key feature of integrative CALL was the combination of computers and the Internet to assist in language learning. Software programs, websites, email, and chatting all were included in the Integrative CALL.

English Teaching Paradigm: Content-based & ESP (English for Specific

Purposes)/EAP (English for Academic Purposes)

Principal Use of Computers: **Authentic Discourse** (to perform real-life tasks)

Principal Objective: **Agency** ("the satisfying power to take meaningful action and see the results of the decisions and choices" Murray, 1997)

#### The TOEIC Test

"TOEIC" stands for the Test of English for International Communication. The TOEIC exam is an English language proficiency test for people whose native language is not English. TOEIC test scores indicate how well people can communicate in English with others in the global workplace or company. The test does not require specialized

knowledge or vocabulary; it measures only the kind of English used in everyday activities. The TOEIC exam is the world's leading test of English language proficiency in a workplace context. The TOEIC test is one of the most accepted and most accessible English-language assessment worldwide with testing locations in more than 165 countries according to ETS (Educational Testing Service).

#### **TOEIC PREP Software**

Since 2007, the university has established as the standard for graduation for the students enrolled in the Department of Applied Foreign Language a score of 650 (out of 990) in the listening and reading sections of the TOEIC exam. In order to help students achieve the standard and graduate from school, the Department of Applied Foreign Language purchased the TOIEC PREP software and granted all students free access to the TOEIC PREP software on the school's E-Learn platform.

The TOEIC PREP software allowed students to log onto the university's E-Learn platform with their school ID number and password from any computer with Internet access. The software was able to be used for a student to do self-practice not only in the school computer lab but at home as well. The TOEIC has been administered as a Computer-Based Test (CBT) since the year 2005. Because of its availability, many of the test centers throughout the world have adapted to it. Consequently, the majority of the test takers now attempt the TOEIC online. To provide preparation and support for the students who were going to take the TOEIC CBT, the university introduced the TOEIC PREP software which the Applied Foreign Language Department purchased for TOEIC test takers. Different sections (listening, speaking, reading, and composition) were

included in the software, presented in a form that matched the actual test. The students essentially had unlimited practice time with the TOEIC PREP software.

The TOEIC PREP software prepared students to be familiar with the TOEIC exam and comfortable with taking the TOEIC test on the computer. The test preparation software allowed non-native speakers of English to practice their English language skills, and become familiar with TOEIC computer based test directions, timing, and question types. Further, the software gave the language learners the opportunity to learn by interaction with the program so that they were able to self-learn English even when not required to take the TOEIC exam.

# **Conceptional Framework**

In the past 40 years, language educators and researchers had built comprehensive conceptual rationales for language learning and teaching. Was network-based language teaching also based on a solid theoretical framework that corresponds to the development of language acquisition theory? Charles Crook (Kern & Warschauer, 2000) studied computer-based educational activities and brought forward three metaphors for the computer's function in language learning. These metaphors of computer-based educational activities coincidentally had paralleled the development of computer technology and language teaching respectively. Table 2.1 summarizes the trend of language teaching theory and the progress of CALL (Computer Assisted Language Learning).

A great deal of educational research was inspired by the No Child Left Behind (NBLT) initiative in the 1990s. For example, teachers around the world submitted their

CALL activities compiled by Warschauer (1995) for Virtual Connections, a volume dedicated to online activities and projects for networking language learners. From a learning and pedagogical perspective, many teachers shared with others their use of email, the World Wide Web, computer conferencing, and other forms of computer-mediated communication for the foreign and second language classroom.

Table 1 Different Aspects of CALL in Structural, Cognitive, and Sociocognitive Framework

	Structural	Cognitive	Sociocognitive
History of	Mainframes	Personal computers	Networked computers
computer			
development			
How is language	Through	Through the	Through social
understood to	transmission from	operation of innate	interaction and
develop?	computer users.	cognitive heuristics	assimilation of
	Internationalization	on language input.	others' speech.
	of structures and		
	habits through		
	repetition and		
	corrective feedback		

**Table 1 Continued** 

	Structural	Cognitive	Sociocognitive
What is the role	To provide grammar	To provide language	To provide
of computers?	and vocabulary	input and analytic	alternative contexts
	tutorials, drills,	and inferential tasks;	for social
	practices, and	learners use their	interaction; to
	immediate feedback	existing knowledge	facilitate access to
		to develop new	existing discourse
		understanding	communities and the
			creation of new ones
Crook's	Tutorial metaphor	Construction	Toolbox metaphor
metaphor of	(computer-as-tutor)	metaphor	(computer-as-tool)
CALL		(computer-as-pupil)	

(adapted from Kern & Warschauer, 2000)

#### **CHAPTER III**

#### RESEARCH METHODOLOGY

The purpose of this study was to explore four Taiwanese college students' experiences on preparing for the TOEIC exam with TOEIC PREP software in Taiwan. The guiding research question for the study was "What are the experiences of the Taiwanese college students on using TOEIC PREP to prepare for the TOEIC exam?" Specifically, the question guiding this study was:

➤ What are the perceptions of the four college Taiwanese students about using the TOEIC PREP software for their TOEIC test preparation?

Therefore, the study focused on students' perceptions of using the software.

The qualitative method was applied for this study. Moreover, this chapter addresses why this case study design was utilized. It also discusses how the participants became affiliated with this study. Lastly, this chapter describes the procedures used to get access to participants and outlines the data collection and analysis methods.

## **Rationale for the Study**

A qualitative approach was used for this study on the learning process of using the TOEIC PREP software to prepare students for the TOEIC test. The qualitative paradigm focused on four individuals' experiences and descriptions regarding their online software usage. A case study of students' perceptions on TOEIC PREP software was conducted using in-depth Skype interviews to explore their personal experiences as an online English learner.

According to Creswell (1998), a case study is a holistic inquiry that investigates a contemporary phenomenon within its natural setting. It involves "situating the case within its setting, which may be a physical setting or the social, historical, and/or economic setting." That is, there are limits on what is considered relevant or workable. The boundaries are set in terms of time, place, events, and the process (Creswell, 1998). Further, Creswell (1998) also claimed that "The focus may be on the case that, because of its uniqueness, requires study (intrinsic case study), or it may be on an issue or issues, with the case used instrumentally to illustrate the issue (an instrumental case study)" (Creswell, p. 61-62). This study, therefore, is an instrumental case which considered the complexity of qualitative data and the diversity of individual experiences. For my study, I analyzed the individual cases of college students' perceptions on the TOEIC PREP software and evaluated how much the software influenced students' learning experiences for their TOEIC test preparation. The characteristics of case studies helped to select this design.

## **Design of the Study**

The qualitative method was chosen because the strength of qualitative research was its ability to provide complex textual descriptions of how people experienced a given research issue which conveyed information about the "human" related issues, such as behaviors, beliefs, emotions, and relationships of individuals (Creswell, 1998).

Qualitative research can help the researcher to interpret and better understand the complex reality of a given situation.

Qualitative research "is an inquiry process of understanding a social or human problem, based on building a complex, holistic picture, formed with words, reporting detailed views of informants, and conducted in a natural setting" (Creswell, p. 1-2). The majority of past educational research has been based upon the quantitative approach to research design (Borg & Gall, 1989). As helpful as this has been, the very nature of quantitative research limits its use to finding new knowledge about problems and issues that can be evaluated quantitatively or objectively. Not all educational concerns are composed of variables that can be measured with numbers and analyzed through statistical procedures in order to formulate generalizations about a theory. Some problems may be evaluated only subjectively, for instance, appraising the merit, value, or worth of a theme. At the same time, the concern of educators may not be only the why of a theme, but also the how and what. Such subjective research is the purpose of the qualitative research design.

The three most common qualitative methods of data collection are participant observation, in-depth interviews, and focus groups (Creswell, 1998). For this study, indepth interviews were done. Each method is suited particularly for collecting a specific type of data. However, in my study, the in-depth interviews were optimal for collecting data on the four college students' personal backgrounds, perspectives, and experiences about their perceptions in the TOEIC test preparation.

Furthermore, qualitative methods used open-ended questions and probing to give participants the opportunity to respond in their own works, rather than forcing them to choose from constrained responses. Open-ended questions have the ability to evoke

responses that are meaningful and culturally salient to the participant (Bogdan & Taylor, 1975). The interview contents are unanticipated by the researcher and rich and explanatory in nature. Additionally, qualitative methods allow the researcher the flexibility to probe initial participant responses by asking why or how questions (Bogdan & Taylor, 1975). The researcher must listen carefully to what the participants say, engage with them according to their individual personalities and styles, and use "probes" to encourage them to elaborate on their answers (Bogdan & Taylor, 1975).

The research question framing this study was designed to provide an opportunity for participants to express their personal perceptions about how the TOEIC software prepared them for the TOEIC test.

### Role of the Researcher

In qualitative studies, the research is considered an instrument of data collection (Denzin & Lincoln, 2003). To fulfill this role, consumers of the research need to know about the human instrument. The qualitative researcher needs to describe relevant aspects of self, including any biases, assumptions, expectations or experiences that might influence his or her ability to conduct the research (Greenbank, 2003).

The researcher's role in this study was as a participant, observer, interviewer, and analyst. The four individuals invited to participate in this study were in the process of TOEIC test preparation, including taking the school course and using the TOEIC PREP software.

#### **Informed Consent**

Formal informed consent is necessary for all qualitative research methods except participant observation, regardless of the sampling method used to identify potential participants and the strategies used to recruit them (Creswell, 1998). For the issue of collected data and document confidentiality, this study was conducted under the Texas A&M University's research procedures by Institutional Review Board (IRB). The researcher attended a series of training sessions under IRB prior to the start of the research. All of the related forms were approved by the IRB and translated into Mandarin. Both English and Mandarin forms were provided to the students and teachers so that they fully could understand the contents without any misunderstanding about the research. In addition, the consent form clearly identified where, when, by whom and how the audio-recording data would be filed in the researcher's computer, which was password encrypted and subsequently deleted by the researcher.

I reviewed the informed consent form with each participant before requesting his or her signature on the document. A copy of the consent form was returned by email to each participant for his/her record. In compliance with Institutional Review Board protocol, a copy of the informed consent form is attached as Appendix C of this study.

The four participants were invited to be Skype interviewed in Mandarin, which was their native language. During the interview, they all were allowed to speak English if they felt they could express their perceptions by doing so. In both Skype interviews for the study, the students were encouraged to speak in Mandarin so that they confidently and precisely could express their learning perceptions on their experiences. The four

participants stated their perceptions comfortably. The confidentiality given to the interviewees could assist the researcher in eliciting more feedback from them.

### **Participant Selection**

Criterion sampling was used in determining the population of this study. Every participant must have met the criteria of the study in order to be selected. Purposive sampling is indicative of choosing "particular subjects to include because they are believed to facilitate the expansion of the developing theory" (Bogdan & Biklen, 2003). The criteria for being chosen in this study included: (a) Participants had no prior experiences of any online learning and TOEIC PREP software before registering in the TOEIC test preparation class; (b) Participants must also have used the TOEIC PREP software three times a week throughout a full semester and (c) Participants must be Taiwanese with no experience of studying abroad.

# **Participants**

This study involved four twenty-one-year-old college juniors. The school where the participants were studying was a university which was established in 1997 in Hsinchu, Taiwan. The four participants were preparing to take the TOEIC exam in the second semester of the senior year to meet the graduation qualification. The participant selection process included several steps. Miss Lin, the TOEIC test preparation course lecturer, selected four participants who met the criteria. Miss Lin was my college instructor who taught English grammar and English test preparation. I called her and let her know the subject matter of my study. Miss Lin made an announcement in her class of the juniors who used the TOEIC PREP software to prepare themselves for the TOEIC test. She also

shared the purpose of the study with the students. Students who were willing to participate in the study contacted Miss Lin and she selected four students who were most qualified in the criteria for my study. The four students were selected because they academically performed well in the class and did consistent practice on the TOIEC PREP system. A telephone contact confirmed participation and scheduled the initial Skype interview. A formal letter of consent and confirmation also was sent to each student.

All students in this TOEIC test preparation course would fulfill the graduation requirement if they scored at least 650 in the TOEIC exam. The criteria for participation in the study were:

- Participants were required to use the TOEIC PREP software at least three times a week for one full academic semester.
- 2. Participants had to be enrolled in the TOEIC test preparation class that met twice a week in a one-hour session.
- 3. Participants must be Taiwanese with no experience studying abroad.

Miss Lin's TOEIC exam preparation course was set up to be a required two-semester course. The purpose of the course was to help students prepare for the TOEIC exam with the TOEIC PREP software. The TOEIC exam preparation course utilized an audio-visual lab equipped with 20 Windows personal computers with access to the TOEIC preparation software. The instructor station included a Windows computer, a projector and a control panel in order to manage the technology located at each of the student computers. The instructor easily could engage with students during the TOEIC

preparation class activities such as reading practice and listening comprehension. The TOEIC software allowed the students to read the corrections at the end of the test and repeat any section they didn't understand until mastery. In the audio-visual lab, instructors and students could experience a flexible and student-centered learning environment, and through logging onto the school E-Learn platform, students could choose their own time to practice at any place as long as they had Internet access.

### **Instrument – Interview Protocol**

## Instrument of Interviews

The interview protocol was designed to provide each participant the opportunity to share his or her experiences and identify the support software motivating them to prepare for the TOEIC test. I used open-ended questions throughout all discussions. The participants shared their experiences in relation to their individual English learning backgrounds. It was very important to preserve the voices and the unique English learning backgrounds of each participant.

The interview protocol used for this study consisted of ten open-ended questions. The interview protocol specifically designed by the researcher for this study was divided into two sections. The first section included three general questions about their personal background regarding learning English, feelings about the TOEIC course and the TOEIC PREP software. The second section included seven questions about participants' feelings toward the TOEIC software.

### **Questions in the first section were:**

1. Tell me a little about yourself.

- a. How long have you been studying English?
- b. Tell me about your background in English learning.
- c. How long have you been using the TOEIC PREP software to prepare for the TOEIC exam?
- 2. Why did you take the course?
  - a. Did you meet the requirements of the course?
  - b. Did you use TOEIC PREP to prepare for the TOEIC exam? Why?
  - c. How long did it take you to learn to use TOEIC PREP?
  - d. What were your expectations using the TOEIC PREP software for the TOEIC exam preparation?

# Questions in the second section were:

- 1. What were your main concerns about using the TOEIC PREP software?
- 2. What would you say are the advantages and/or disadvantages for the TOEIC PREP software?
- 3. What beliefs and attitudes did you have towards online learning prior to the TOEIC PREP software and how did they change?
- 4. Did this particular TOEIC PREP software provide you with any formal training opportunities or assistance in developing your English competence? If so, describe the practice and assistance.
  - a. What were the topics? Were they helpful or useless?
- 5. While using the TOEIC PREP software to prepare the exam, did you encounter any barriers or challenges? If so, how did you overcome them?

- 6. How was the TOEIC PREP software similar to or different from a face-to-face course?
- 7. Describe for me your overall experiences with the TOEIC PREP software.

The Skype interviews were conducted before the students took the TOEIC exam. The questions relating to personal experiences required the participants to describe their English learning history. The participants were asked to share how long it took them to determine how to use the TOEIC PREP software. The second part of the protocol emphasized experiences while using the TOEIC PREP software. They were asked to share their level of satisfaction with their TOEIC PREP software experiences. The protocol was designed to provide the participants the opportunity to express how they felt while being assisted by the TOEIC PREP software during the test preparation.

Skype interviews were recorded digitally, transferred to the computer, transcribed verbatim and released to the participants for verification and review purposes. Each participant could choose his or her preferred time to be interviewed. We chatted casually before initiating the audio recording. With the participants' consent, interviews were audio-recorded and digitally saved in mp3 format on my personal computer. This could help me later review the entire conversation without missing or misunderstanding any statement. Each interview recording was transcribed into a written WORD document to serve as a record of the discussion.

After every Skype interview, I immediately recorded my impressions. I coded each participant's interview statement with a Chinese last name so that every person was assigned a unique name. Two sections of questions were colored differently to assist in

finding answers among participant's responses to certain questions. I offered every participant a copy of his or her interview transcription, but all declined.

### **Data Collection**

#### First Contact

During their first phone contact, the researcher explained to the lecturer, Miss Lin, that the study of students' online learning perceptions might give her students the following advantages:

- 1. The TOEIC PREP online learning might help the students arrive at a better understanding of their own level of learning.
- The study would challenge them to think how they could use such software more efficiently in the future.

The topics available for practice and the students' perceptions on TOEIC PREP usage should be motivational and interesting for English learning and TOEIC preparation.

The questions were asked electronically through Skype. A set of ten open-ended questions focusing on the Taiwanese college students' perceptions of using the TOEIC PREP software was used in the audio-recorded Skype interviews.

The participants were interviewed twice. The first interview focused on section one of the interview protocol pertaining to the student's language background. The second interview focused on section two about their feelings regarding the TOEIC PREP software. Both interviews were conducted before they took the TOEIC exam.

With participants' permission, every interview was audio-recorded by iFree plugin Skype recorder which was an easy-to-use tool for recording Skype voice
conversations. It had the following advantages: (a) free with no limits attached, and (b)
automatic or manual recording capabilities. The Skype audio-recording was adopted to
make the collected data reliable. "As a good hammer is essential to fine carpentry, a
good tape recorder is indispensable to fine fieldwork" (Patton, 2002). This method
would prevent the loss of any detail if the whole interview process were audio recorded.
The interviews were conducted in Mandarin because, as Bogdan and Taylor (1975)
suggested, "in order to communicate in an effective manner, the interview should be
conducted at the participants' level of language."

The recorded interview contents later were transcribed, translated, and analyzed. The consent forms, recorded data and transcripts were filed in the researcher's password encrypted computer. The recorded documents investigated were of two categories: written interview transcriptions and recorded interview mp3 files of participants. These recorded files and documents were revised as needed with new information and data analysis. All collected data were filed for one year. In addition, the audio-recorded data were trustworthy as the researchers could have easy access to the data and confirm the conformability between the written findings and the qualitative data which were collected in the study if such need should arise.

## **Data Analysis**

"The idea of qualitative research is to purposefully select informants (or documents or visual material) that will best answer the research questions. No attempt is

made to randomly select informants" (Creswell, 1994, p. 148). The data collection for the present study came strictly from the interview protocols of those students involved in the university in Hsin-chu, Taiwan. In this qualitative study, the collected audio-recorded data from the interview protocols were transcribed word by word, interpreted through theoretical triangulations, and conceptualized using the qualitative analysis methods.

As previously mentioned, data retrieved from participant interviews were transcribed. Audio files were transcribed with line numbers embedded. File folders were created for every question of the interview protocols. Participant responses were divided from the audio file copies of the transcriptions and saved in the file folder labeled with the appropriate question. A folder, therefore, was created for each question and contained all the participants' responses to the specific question. Color coding was applied to facilitate the ease of locating every participant's statement. The constant comparative method involved breaking down the data into discrete 'incidents' (Glaser and Strauss, 1967) or 'units' (Lincoln and Guba, 1985) and coding them to categories. The file folders were divided subsequently into categories, providing a framework of commonalities within the data. As Taylor and Bogdan (1984) summarize: "in the constant comparative method the researcher simultaneously codes and analyzes data in order to develop concepts; by continually comparing specific incidents in the data, the researcher refines these concepts, identifies their properties, explores their relationships to one another, and integrates them into a coherent explanatory model" (p126).

The coding methods were applied to the data as a form of data organization. By making and coding numerous comparisons, the analytic grasp of the data began to take form. "Coding helps us to gain a new perspective on our materials and to focus further data collection, and may lead us in unforeseen directions" (Gharmaz, 2000)

Specific themes emerged from the statements of the participants. Some themes were expected, such as language learning backgrounds; however, themes like motives also emerged from participant statements. I expected to find information about language learning facilities and environment that enable the participants to follow their own learning interests instead of simply learning English for test-oriented purposes.

Therefore, I was not surprised when motives emerged as a primary theme in this study. The participants' perceptions of their experiences and indicators of motives emerged as the main themes in this study.

# Credibility

To address credibility, open-ended questions and case study were employed in the study. Lincoln and Guba (1985) identified credibility as an important way of ensuring quality of data in qualitative evaluations. In addition, future studies could supplement the grounded theory developed here by analyzing this inquiry's data solely by participants in the study.

Agar (1986) suggested that a different language is needed to fit the qualitative view, one that would replace reliability and validity with such terms as credibility, accuracy of representation, and authorization of the writer. Therefore, a Mandarin

transcription was applied to the interviews and a cultural review letter was reviewed by the lecturer, Miss Lin.

Similarly, Leininger (1985) claimed that the issue is not whether the data are reliable or valid but how the terms reliability and validity are defined. She recast the term validity in a qualitative sense to mean gaining knowledge and understanding of the nature (i.e., the meaning, attributes, and characteristics) of the phenomenon under study. She contrasted this to the common usage of validity in a quantitative sense, in which it refers to the degree to which an instrument measures what it is designed to measure. In this study, the participants all were in the TOEIC preparation class and used the TOEIC PREP software for a semester, so they understood what they were involved in and what the interview protocol was about.

In summary, the credibility was based on the concept of the researcher gathering data about and interpreting the multiple realities of informants. They were used to establish the truth value or credibility of the research and were essential to the accurate representation of the four students' experiences.

## **Transformability**

To address transformability, I include in Appendix E interview protocol documents used to generate the answer to the research question. The complete set of data analysis documents are on file and available upon request. This access to the inquiry's "paper trail" gives other researchers the ability to transfer the conclusions of this inquiry to other cases, or to repeat as closely as possible the procedures of this project.

### **Limitation of the Study**

- 1. The validity of the study relied on participants' free-will responses in reference to their personal experiences.
- Additionally, contents translated from Chinese may not perfectly represent the meanings and feelings of the participants.
- 3. The interviews were conducted through Skype voice calls without video recording; consequently, the investigator was not privy to the participants' facial expressions or level of attentiveness during the interview.

#### Conclusion

Research for this study regarding the experiences of four college students who used the TOEIC PREP software to prepare for the TOEIC test was conducted by one researcher only, using a case study method with the discipline of qualitative research. Participant Skype interviews were conducted through Internet and students could use their own computer with ease at home. Every student's identity in this study was protected in accordance with the informed consent form reviewed prior to their participation in the Skype interviews. All transcription data were analyzed with narrative analysis and all sources were double checked for accuracy. Findings of the analysis will be examined later in the final chapter of the study in Chapter VI.

### **CHAPTER IV**

#### THE PARTICIPANTS

The purpose of this study was to explore the personal experiences of individuals who use the TOEIC PREP software to prepare for the TOEIC test. All four of the 21-year-olds were juniors at a Taiwanese university. They used the TOEIC PREP software to prepare for the TOEIC test. All of them were using the software for the first time. Each met the requirement for using the software at least three times a week for one academic semester (Table 4.1). The participants in this study will be introduced in this chapter through a brief background introduction providing a glimpse into the educational background of each one.

Every participant in this study was enrolled in a TOEIC PREP course and was selected by the university instructor, Miss Lin. They all volunteered to be part of the study and were interviewed in the summer between the spring and fall semester year. While the participants' individual experiences may be different, their preparation was limited to the class instruction and the computer-aided instruction (TOEIC PREP). Although time varied, participants used the software at home every week. Participants practiced with the TOEIC PREP software in order to reach a score of 650 on the TOEIC, a university graduation standard.

**Table 2 Profile of the Four Study Participants** 

Name	Gender	Learning English since	Years of English
Chan	Female	2 <sup>nd</sup> Grade of Primary School	13
Ueng	Female	1st Year of Junior High School	8
Wang	Female	Kindergarten	16
Chou	Male	Kindergarten	15

The four students shared their English learning background from childhood to college and how they started to use the TOEIC PREP software. They also shared their goals and expectations regarding TOEIC PREP. I spoke with every student by cell phone before sending the informed consent. During our cell phone conversation, I clearly clarified the expectations and rights of students choosing to participate in the study.

The participating students subsequently were interviewed at their convenience via Skype. I began with personal inquiries to help build a "friendly relationship" and ease their anxiety about participating in the study. I talked with them about their school life and answered their questions about my life in America. Most students in Taiwan are curious about life in the U.S. and they all want to travel to the United States when given an opportunity. There was only one female student who had lived in America during her childhood (but without schooling experiences). Skype interviews took place in front of their personal computer where they could experience a relaxed atmosphere.

# **Participant One: Chan**

Chan was a 21-year-old Taiwanese female who grew up in Taiwan and had never traveled to other countries. When she heard the announcement in class by the teacher, she was very interested in being part of the project because she was curious about American life. She said that this would give her the opportunity to talk to me because I was a graduate from the school and currently studying as a PhD student in the United States.

## First Skype Interview

Chan was a college junior majoring in English of Applied Foreign Languages and was going to be a senior for her last college semester. She had been learning English since her second-grade year of elementary school. At the beginning of her education, her parents sent her to a private English institution. This was also her first time in contact with a language other than Mandarin. From that time on, her interest in learning English was sparked by the teachers of the private institution. The exposure to English was non-academic, more practical and conversational, along with a lot of fun activities. The teachers in the private institution all were native English speakers, who were adept at putting textbook content into real practice through role-playing and other such activities. Sometimes the institution held extra-curricular activities and brought the students to public places and encouraged them to speak English in daily life. There were some oral quizzes, but no grammar was taught in class. For her, the private institution was an English immersion school and built a whole English environment for students to learn by playing.

Compared to other subjects in school, she liked English the most and said it was her best subject. She has been using the TOEIC PREP software to practice for four months. The reason why she used it was because the college required that the English department students score 650 on the TOEIC test to graduate. For Chan, in addition to meeting the graduation criteria, she wanted to score impressively on the test so that she could be more appealing to potential employers. Many companies and organizations require TOEIC as a standard when hiring.

When I asked Chan if she spent a lot of time learning how to use the TOEIC PREP software, her answer was that she spent five minutes at most. Her overall computer literacy was sufficient for immediate involvement with TOEIC PREP. She hoped her use of the TOEIC PREP software would enhance not only her English in reading and listening, but also her performance on the TOEIC test as much as possible.

Since the format of the TOEIC PREP software was a model of the real TOEIC test, Chan used it to practice a lot. I asked her if there were any disadvantages or advantages of the TOEIC PREP software. She talked about the user friendly nature of the software. She also mentioned that TOEIC PREP software had a huge database of questions and the listening section was very clear. The most useful part of the software was its capability to offer a detailed review with thorough explanations at the end of each exercise. Every time she did not understand what she heard, she was able to go to listen to it repeatedly until she could get the meaning of the whole sentence or paragraph. She said she encountered no difficulty in using the software.

Before using the TOEIC PREP software, Chan thought it was inconvenient to learn through the Internet because it took pleasure time from her computer use. But gradually, she felt her effort would become more concentrated when learning through the software, and feedback was immediate. Compared to her face-to-face class, she was able to control the learning tempo and did not have to worry about falling behind.

## Second Skype Interview

Chan thought the most improvement in her English competence was her reading comprehension because she was able to learn more vocabulary from the articles. She thought the listening practice of the software might not help her as much because her English listening was "pretty good" enough. The one thing that bothered Chan about the TOEIC PREP software was that certain practice sections were excessively long and time-consuming. Once she began, she was required to complete the entire test, which requires 2.5 hours.

From her experiences of using the TOEIC PREP software, she believed she was becoming an independent and more motivated learner. She felt that she was better able to control the time for learning what she needed. Then, she could skip the part that she already understood and could focus her efforts on the unfamiliar concepts.

In sum, she liked the TOEIC PREP software a lot, but she expected the software to provide more questions in the database. Practicing with the software made her more confident in taking the TOEIC test and she felt it was one of the main reasons she met the criteria of 650 on the TOEIC practice test.

## **Participant Two: Ueng**

Ueng grew up in Hsin-chu, Taiwan, and was currently enrolled in the university as a junior student. She had not learned English until she went to junior high school. She liked English because, in her mind, English was an international language. She was very interested in learning English as her second language. She thought English could convey different expressions through changing speaking tones. It was the main motive for her interest in learning English. Since the time she encountered English, she had been convinced that learning English involved not only test taking but genuine communication.

## First Skype Interview

Ueng was a 21-year-old college student who was in her junior year as an English major in the Applied Foreign Languages Department. She talked about her initial experiences of being invited by friends to a cram school to learn English when she was in junior high school. Although the cram school teacher taught English for the college entrance exam, the teacher encouraged her students to keep trying to speak English instead of just correcting the grammar errors like many school teachers did. Error correction in class hindered her from learning under pressure, instead making her afraid to make mistakes. She preferred a more comfortable classroom setting and enjoyed being encouraged to learn from making mistakes.

Ueng has been using the TOEIC software for three years since her freshman year.

There were two reasons for her to use the software. First, it was a free resource provided

by the department and second, the school required that English major students score 650 on the TOEIC test to meet the graduation criteria.

Besides the TOEIC PREP software, she did not use any other similar software to practice. She spent hardly any time learning how to use the software to practice. She thought the TOEIC PREP software was quite accessible for people who were daily computer users or game players because of its friendly design.

Ueng expected to finish the whole database of questions of the TOEIC PREP software and strengthen her English competence in reading and listening. She also wanted to become familiar with the test through practicing as much as she could with the TOEIC PREP software, and the final goal was to achieve a higher score in the TOEIC test.

Since it was a free resource provided by the school, she had some personal opinions on advantages and disadvantages of the software. She stated that the after-test correction was a great aid and the software would offer detailed explanation to every question. The cons were that the test was very time consuming. She couldn't adjust the time during the test. Whenever she practiced higher levels of the TOEIC PREP software, time seemed to be insufficient for her to finish the test. Another shortcoming of the TOEIC PREP software was fatigue. The long time watching on the monitor screen made her eyes feel uncomfortable and she was not able to concentrate as she did at the beginning of the test.

Prior to the TOEIC PREP software experiences, she had only played games on the computer. It was not difficult for her to use the software on the computer and she believed it was pretty efficient learning through the Internet. In her face-to-face class, what teachers taught might be the part she already understood or she didn't understand but others did; the teacher taught the whole class rather than individually. If she did self-learning on the computer, Ueng believed she could focus on the section she did not understand until she was able to master the concept.

## Second Skype Interview

Ueng thought the TOEIC PREP helped to improve the pace of her reading in English. Through using the software to practice, she now could read very fast while her listening comprehension was improving as well, even though she had thought it good enough.

Ueng did not face any difficulty or challenge using the TOEIC PREP software.

Compared to a face-to-face class, she could select the test level, from easy to difficult.

But in class, the learning process was dependent on the teacher's decisions for the group; instead when using the computer to do self-learning, there wasn't any learning process if she didn't start to use it.

Overall, Ueng liked the easy access to the TOEIC PREP software and the freedom to choose the level at which to work. She also enjoyed the convenience of being able to use the software whenever her schedule would allow.

## **Participant Three: Wang**

Wang was a transfer student from one university in Taichung, Taiwan, now a senior student majoring in English of Applied Foreign Languages. She didn't explain to

me why she changed her college but she is satisfied with the school where she is studying. She had been learning English for sixteen years since she was 5 years old.

### First Skype Interview

Wang started to contact English when she was five years old in a pre-school (Chinese immersion school) in California, America. She didn't move to Taiwan until she went to the second grade of elementary school. She was entering a bilingual class in Hsin-chu, Taiwan, for the whole second grade year. In that class, teachers of all subjects were native English speaker teachers and every subject was taught in English. After one year of immersion in the bilingual classroom, she moved to the normal class when going to the third grade. From this point, her use and study of English diminished, and English became a subject, rather than a language.

Wang had been using the TOEIC PREP software for five months since late

March of 2013. She used the software to practice regularly about three to four times a

week. She used it because the school required the students in the department to take the

TOEIC test for graduation and she needed to practice with it in preparation for the

TOEIC test.

She stated that even if the school didn't require students to demonstrate competency on the TOEIC test, she would still use the software to practice often because she believed it was improving her competence in listening and reading English. No time was spent on learning how to use the software; Wang used her computer to surf on the Internet daily and there was no problem for her to be comfortable with the TOEIC PREP software from the beginning.

Wang wanted to score high when starting to use the TOEIC PREP software. She expected to be more skilled in the reading section of the test. When considering the pros and cons of the software, she said a big advantage of the software was the clock reminder on the screen, which the real TOEIC test will not provide to the test takers. It could help her manage time and make adjustments accordingly, a key test-taking skill. Her only criticism of the software was the need for the user to prompt a subsequent question, an unnecessary step during the actual TOEIC. Once the play button was clicked, the computer would provide the listening question. She took some time to adjust to clicking the play button.

As Wang experimented with this software's features, the test preparation became more interesting, as the software could play either a sentence or a word so that she could know how to speak or pronounce some new vocabulary. She believed this was increasing her motivation to learn. Besides, the TOEIC PREP software had a vast database, allowing her to find a plethora of unknown vocabulary when practicing with the software. She could learn from the process of practice and at the same time remember the new word in the reading. It was the most convenient part, in her opinion.

## Second Skype Interview

The TOEIC PREP software offered a variety of reading articles for practice. If Wang did not quite understand the meaning of something she had read, she always could review the article as necessary. From the listening practice section, Wang developed an ability to listen attentively for increasing periods of time without losing the main idea or

concept, allowing her to focus on listening to the whole article. She thought it was a big aid for her to improve her English listening competence.

There was only one challenge for her when using the software, which was the use of the "play button" when doing practice with the TOEIC PREP software. The real TOEIC test did not require a click to play the listening questions. Initially, Wang found this part a bit disconcerting.

Compared to the physical class in school, Wang felt learning through the online software was more interesting. In class, Wang occasionally would find herself distracted, and she did not like to do paper exam practice since she considered it boring. Due to no prior experiences of similar software, she liked the convenience and variety of it, as the TOEIC PREP had different sections which included all types of questions. Moreover, she was able to know her score right after completing the practice. Because of using the software to practice for a long time, she was very familiar with the test and scored 775 on the TOEIC PREP test, easily meeting the criteria for graduation.

## **Participant Four: Chou**

Chou was an English senior major whose first experience with English learning occurred in pre-school in Hsin-chu, Taiwan. He spoke of his intention to apply for graduate school in a university in northern Taiwan. He asked me some questions about how to prepare the application documents for graduate school. I gave him some suggestions before the Skype interview was initiated. After some casual conversation, he told me he was ready to be interviewed without anxiety.

### First Skype Interview

Chou's first contact with English learning occurred when he was in kindergarten. The teachers all were Taiwanese but only spoke to students in English, while providing plenty of picture instructions. When attending elementary school, he was sent to a private institution to learn English. The teachers in the institution designed their own teaching textbooks and focused on English for daily life. The teachers emphasized students' English listening, reading, and writing and taught the students some basic vocabulary and sentences. Grammar was not taught in the institution.

Due to the university requirement, Chou began using the TOEIC PREP software for practice, and it was also the primary reason for his continued use of it. In particular, he identified vocabulary as an area of need, so he always reviewed those sections carefully after every practice session. For him, the software was an assistant and prepared him for the TOEIC test with its extensive database of questions.

Chou didn't need to spend time on learning the use of the software since he was a computer user. He expected the software to help him score higher on the TOEIC test, especially for the listening section.

When he mentioned the main reason for using the TOEIC PREP software, he stated the desire to meet the criteria to graduate and to improve his English competence as well. He did not indicate any criticism of the software but rather praised its easy access so that he could practice any time he wanted. He liked the post-test explanations since they were very detailed. Additionally, the abundant database provided many kinds of practice for the test takers.

Before using the TOEIC PREP software, Chou considered the low popularity of online learning for the young generation in Taiwan. Students did not have the routine to learn on line and he felt the online learning resource was limited. For him, the software was a really new and exciting study aid, but he felt online learning may need some promotion to create a more positive image.

## Second Skype Interview

The TOEIC PREP software did improve Chou's English competence on vocabulary and his familiarity with the TOEIC test. The challenge for him while first using the software was the time length of the test – it was up to 2.5 hours long for the whole test, and sometimes he didn't have the patience to focus on the test. He overcame the problem by practicing by sections.

Compared to the traditional face-to-face class, the TOEIC PREP software provided detailed explanation in the answer part. Chou believed that the physical class is limited by time, but to self-learn on line was easy and time was flexible. He could have more time to think and internalize the new knowledge. In face-to-face class, there was only one teacher for many students and the teacher could not meet each student's need since the time was limited. However, the software could provide detailed explanation with the answers, and its easy access could maximize time for learning.

In sum, Chou felt the most beneficial part of the TOEIC PREP software was its easy access. He enjoyed learning by the software and demonstrated improvement on vocabulary while increasing his familiarity with the test format. He would recommend

the use of online resources like the TOEIC PREP software to prepare for the actual TOEIC.

### CHAPTER V

#### **THEMES**

This study was designed to explore four students' experiences about English learning and TOEIC test preparation through the TOEIC PREP software (CALL). The four participants were Skype-interviewed about their learning experiences with the TOEIC PREP software. Overall, their experiences on using the TOEIC PREP software were collected using a qualitative method. These experiences correlated with issues and themes such as learning background, learning motives, computer software adaptation, flexible learning, and TOEIC test preparation. When conducting qualitative research in the field of online language learning experiences, exploring the motives of a learner was the crucial element that may allow us to gain insight about how Taiwanese college students in general feel about self-learning with computer software.

# **Discussions of English Learning Motives**

The major research question for exploring students' experiences of the TOEIC PREP software was: What are the experiences of four Taiwanese college students regarding the TOEIC PREP software? Based on the four students' responses to the interview questions, several themes began to emerge from the students' experiences. The following paragraphs discuss the themes that were relevant to the research question about their TOEIC PREP software usage experiences. In the discussions of the emergent themes, each included theme was apparent in the responses of more than one participant.

In addition, certain themes seemed pervasive as they were identified in the thoughts and opinions of all those interviewed.

Themes Pertaining to Students' Motivations from English Learning Backgrounds

This study revealed that the differences in language and culture often were subtle but affected many aspects of the students' learning attitudes. An awareness of these differences will help increase students' learning motives, interests, and achievement.

Taiwanese students have different views of how to be a student or to "do schooling." For instance, though the teacher may want his or her students to participate in class by asking questions and joining in discussions, some students may not feel comfortable with such class participation. In the Asian culture, it is considered a sign of disrespect to ask questions of a teacher when the teacher is lecturing or embarrassing to be stared at by the teacher and peers when asking a question.

Chan, Chou, and Wang all came in contact with English when they were in the kindergarten (Figure 5.1). The common element of their learning environment was that the school designed the class with no textbooks. Their teachers played games in English and thus made learning more fun; in addition, the teachers conducted games for them to play with classmates in other classes and guided their social interactions with other children. Though Ueng did not learn English until junior high school, she stated her learning motivation was developed in the English cram school where the teachers' instruction did not include any grammar lessons. Ueng also identified the intonations of spoken English as a major reason for her attraction to the language.

The main theme in any format of language instruction is to make it as enjoyable as possible for the students. Try to find topics that interest the language learners and make the learning environment comfortable, often with non-traditional classrooms. The key of the theme is the context, which means that it is easier to learn new words and their usage when the students use or see them in a practical application. The more the students see and hear the new words in their context, and the more they will use them in their speech or writing, the easier it becomes to remember their meanings and correct spellings. From this point, language learners can develop a mental model of the target language system based on innate cognitive knowledge in interaction with comprehensible and meaningful language (Chomsky, 1986). Consequently, this encourages the students to take risks in their language usage, because even native speakers make mistakes and hesitate at times.

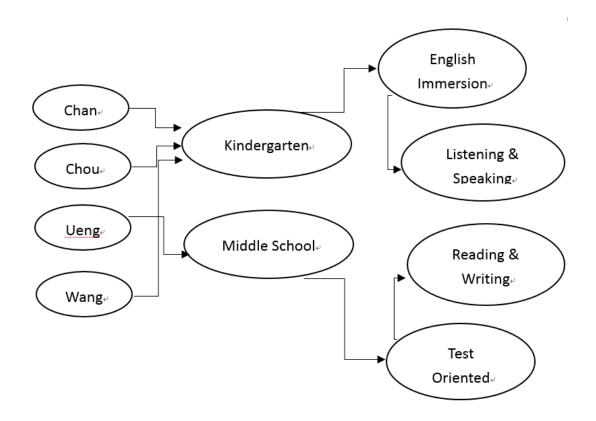


Figure 1 Themes about English Learning Background

Themes Pertaining to Students' Motivations for Online Learning and Flexible

Scheduling

This study indicated that easy access to the learning resources had a significant impact on students' learning motivations when first encountering the facility. Just like Nunan's (1998) opinion, "no curriculum can claim to be truly learner-centered unless the learner's subjective needs and perceptions relating to the process of learning are taken into account" (p. 177). Moreover, it also indicated that rapid adaptation to the learning resource could provide flexibility to students' learning schedules.

Computers are quite popular among today's students either because they are associated with fun and games (online games) or because they are considered to be a trend. Students therefore are inclined to be motivated toward computer-aided instruction, especially if a variety of activities are offered that make students feel more independent.

The feedback from all four students indicated they did not need to learn how to use the software the first time they logged into the school E-Learn platform. Using said she was a computer game player so it's not difficult at all to use the learning protocol on the Internet; Chan, Chou, and Wang were everyday computer users and likewise encountered no difficulty when using the software (Figure 5.2). For them, it was just a resource on line for them to use within their flexible schedule. Chou even suggested the increasing use of the online facility, like the TOEIC PREP software, could be promoted by school. The online learning software had elevated his learning attitude and self-confidence by helping him build self-instruction strategies.

Chan said it was so beneficial for her to use the TOEIC PREP software because she could know her weaknesses and receive immediate feedback on her improvement. Wang liked the self-pronouncing feature of the software as it could help her not only know a new word but also its proper pronunciation.

The only shortcoming mentioned by Wang in reference to the TOEIC PREP software design was the positioning of the prompting button, necessary for doing the listening practice. Since no such prompting is required on the actual administration of the test, the presence of the button created some confusion.

The themes emerging from online learning and flexible scheduling mainly were associated with student-centered learning. Even shy or inhibited students can benefit greatly from individualized, student-centered collaborative learning. High fliers also can realize their full potential without preventing their peers from working at their own pace. All four students talked about the pace of traditional classroom instruction. They did not want to listen to information that they already knew in class, but preferred to learn on their own pace and schedule.

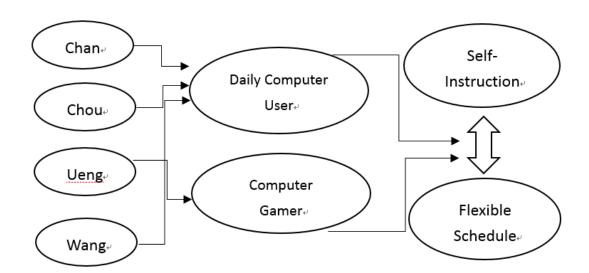


Figure 2 Themes about Online Learning

Themes Pertaining to Students' Motivations about Language Test Preparation through

Online Learning

Major themes that emerged from the research question related to the TOEIC

PREP software and online learning platform. Though each student's opinions reflected a
unique perspective, their experiences and feelings were similar in various respects.

First of all, students held the same position about why they chose to use the TOEIC PREP software to prepare for the TOEIC test – because it was provided as a free resource by the school which wanted to help the students get ready for the test (Figure 5.3). All of the four students expressed that they still would use the software for test preparation even if it was not free, as it did help familiarize them with the test. Moreover, Chou considered this resource as a better way to learn since he could select a particular section or concept and repeat the practice until he understood the content well.

Wang and Chan emphasized the answer correction feature which provided explanations for every incorrect answer immediately after the test practice. Ueng felt the listening section played an important role in the improvement of her English vocabulary knowledge, particularly in the area of pronunciation.

Chou observed that since this was still a new resource for the students in school, self-motivation was required when doing online learning. Asian students were conditioned to being pushed in their school work. Thus, they may lack the self-control and drive necessary for independent learning at home. He felt the learning process would be enhanced by experiencing the face-to-face course and the online learning simultaneously.

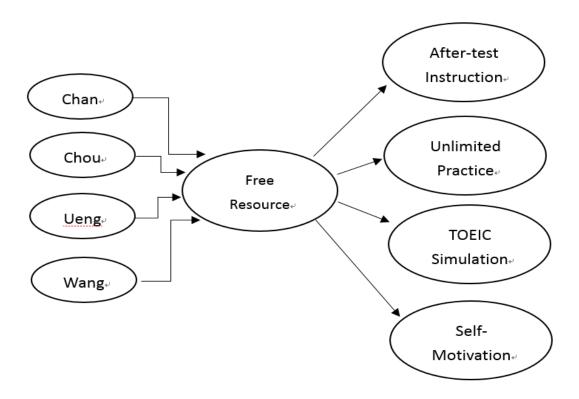


Figure 3 Themes about Test-Preparation Software

Themes Pertaining to Students' Motivations about Improving Performance on TOEIC

Like most Asian students, the four students participating in this study had the same targets when using the TOEIC PREP software, which was to pass the TOEIC test and to be qualified to graduate from college. Furthermore, higher TOEIC grades also could provide them better job opportunities. There is a proverb in Taiwan regarding college students, "Graduation equals unemployment", specifically for those who were not able to get a job or to enter higher education. The only way for them to keep competitive was to obtain certificates of skills or pass through certain tests that could be representative of their language competence.

For Chou, he was planning to apply for a Master's degree and the test would be an asset to his application. He used the TOEIC PREP software not only to be more familiar with the test but as well to improve his English ability in reading and listening. Chan wanted to work after graduation so she felt her familiarity with this software would give her a better opportunity when seeking a job. Ueng's and Wang's goal was simple – to practice as much as they could in order to satisfy the TOEIC test graduation criteria (Figure 5.4).

An increasingly severe employment environment was the major reason making students, like Chan, Ueng, and Wang, more fiscally vigilant. Each controlled his or her own life and, ultimately, decided whether or not to become a NEET (Not in Employment, Education or Training). Encouragingly, more and more college students have begun to prepare for a "rainy day." In this study, they were using the TOEIC PREP software to enhance their English competence and were trying to plan earlier for their lives after graduation from college.

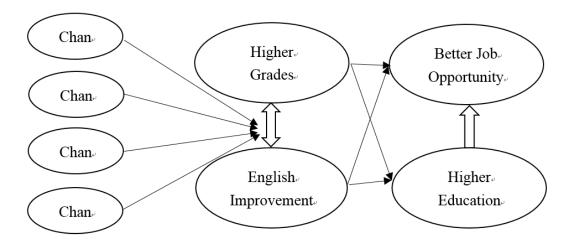


Figure 4 Themes about Better TOEIC Grades

## **Conclusions**

The themes conceptualized from the research questions were mentioned and inter-related by each of the four students. Throughout the two thirty-minute interviews following almost four months of using the software, students' experiences can be developed into four themes which have been discussed theoretically by previous researchers and scholars in the field of CALL (e.g., Beatty, 2003; Chapelle, 2001; Coryell & Chlup, 2007; Cunningham, 2000; Dillon-Marable & Valentine, 2006; Doughty, 1987; Eskenazi, 1999; Flowerdew, 1993; Hannafin & Foshay, 2008; Johnson, 1999; Kern, 1995; Kern, 2000; Koebke, 1998; Levy, 1997; Liao, 1999; Liao, 2004; Meskill, 2009; Moos & Azevedo, 2009; Moote, 2002; Pederson, 1987; Seo & Bryant, 2009; Tang, 1995; Warschauer, 1995, 1996, 2004; Ho, 1998).

Based on the findings and theories of previous researchers of CALL, the next chapter discusses the four issues derived from the findings of this study: learning background, flexibility of learning, learning motives, and online learning.

#### **CHAPTER VI**

## DISCUSSIONS, SUMMARY, AND CONCLUSION

Computer Assisted Language Learning (CALL) is an emerging trend in language education in Taiwan. Despite its awkward beginning and the on-going resistance of many in the language-teaching community, it is maturing and showing that it can be a powerful instructional means in the hands of experienced teachers. Once upon a time, CALL was driven by technology and technologists. Proponents of CALL tended to focus on the "Computer Assisted" part of the acronym rather than the "Language Learning" part. Technology seemed to offer solutions that could be installed and delivered through a box and with game-like interactions. Learning would be fun and relatively effortless, and the role of teachers would not be as important as it was before.

However, technical limitations and the lack of a reliable delivery and support infrastructure led to an adventurous but unstable environment where much money was wasted. Institutions invested in systems that either were underutilized or were used in ways that had little if any benefit for education other than to keep students occupied and labs appearing to be modern. As for teachers, they seldom were provided with training, partly because there were few in academia with relevant experiences and partly because teachers regarded CALL with rejection and fear. An implicit belief existed that teachers and CALL were competing for the same role rather than in a partnership where each approach "assisted" the other.

Consequently, the qualitative design of this study intended to explore four Taiwanese college students by interviews to know their feelings and experiences concerning their individual willingness and choice to use the TOEIC PREP software. During Skype interviews conducted by the researcher, the four Taiwanese college students were expressive about their motives, preference, and decision about how they could take advantage of the TOIEC PREP software after being offered access to the resource through the university.

#### **Discussions**

From the Skype interview protocol, it is clear that all of the four Taiwanese college students acknowledge the importance of learning English. Moreover, the responses to the interview questions indicate that most Taiwanese students perceive the importance of English competence in obtaining a good job and for functioning in daily life (Hsieh, 2010). In addition, based on the results of the interview questions, it is apparent that the TOEIC PREP software can be used as a motivational tool when students learn English and prepare for an English proficiency test, such as TOEIC. These findings help confirm the fact that, currently in Taiwan, English literacy and computer skills are essential to finding rewarding employment. Without both a working ability in English and appropriate computer literacy, students are challenged to find a good job in Taiwan. Hence, more and more colleges set criteria for students to demonstrate English proficiency in order to graduate.

It is important to note the four students' response to the question concerning the use of grammar during a student's introduction to English, whether that initial exposure

occurs in childhood or middle school. All the participants believe that English grammar should not be emphasized at that stage since that approach tends to lessen a student's interest to learn. It seems that Taiwanese college students may have had unpleasant learning experiences in junior high school English courses, which focus on memorization, repetition, and doing grammar exercises. Hui (1997) stated:

Students are taught in a fixed method, according to a uniform syllabus, from prescribed texts, in preparation for a standardized, nationwide examination. This fixed regimen seems almost never to be supplemented by any curricular English language input . . . Thus the experience of English instruction and the corpus of English-language models to which Chinese students are exposed are notably uniform and doubtless contribute to the standardized quality of Chinese English, and its attendant "problems." (p. 39)

The four Taiwanese college students have realized the importance of preparing for the TOEIC test in order to graduate and to enhance their English competence. Since most students in Taiwan are impacted by the test-oriented policy, which emphasizes high test scores rather than language fluency, they tend to be very much concerned with grammar and are afraid of making mistakes.

In the current environment, students know the importance of communication and view it as a key feature to effective foreign language learning; therefore, Taiwanese college students don't like formal learning of grammar and formal lectures about lessons in English class and consider that kind of instruction boring and ineffective. At the same time, most Taiwanese college students have a strong desire to speak English fluently and

to learn English from the experiences of taking tests. Ho (1998) noted that "English education in Taiwan has not been widely successful, holding that the English curriculum should emphasize developing students' ability to use the English language rather than focusing on the mechanics of the language" (p. 155). In addition, as noted in the statement "The most important thing in learning English is conversational skills," Taiwanese college students believe that it is important to provide opportunities for students to continue their study of communicative English, interact and express their feelings and thoughts in English, and remain motivated to stay focused on English instruction in or outside the classroom.

These findings suggest that it is important to continue to encourage Taiwanese college students to have more confidence in the classroom environment, to speak out more, and to take advantage of opportunities to use computers when learning English. As Almahboub (2000) stated, "based on behavior and cognitive theories, students should like and favor the subject or the activities in the learning environment in order to develop positive attitudes toward learning" (p. 66). The findings of the present study suggest that attitudes toward learning English, computers, and using computers in learning English generally are positive; therefore, teachers should encourage this change in attitude for all students.

Taiwanese college students addressed a crucial gap between the effectiveness of English grammar instruction in Taiwan and their communicative needs, in the sense that the current TOEIC PREP software does not offer students adequate training in English-speaking skills. The problems faced by Taiwanese college students arise from their need

to communicate at a higher level in English, but they have found that this is not possible without proper computer skills. As future executives in the workplace, Taiwanese college students must be able to communicate with others at a rather sophisticated level of English. That means that they not only have to manipulate using computers in learning English but also understand how to use CALL knowledge accurately and appropriately in a speaking situation. Therefore, it is apparent that more CALL activities which encourage communication should be incorporated into the Taiwanese curriculum to supplement valuable conversational lessons. In other words, a communicative-learning environment is an urgent need in Taiwan.

The following literature discusses the issues of CALL (Beatty, 2003; Chapelle, 2001; Coryell & Chlup, 2007; Cunningham, 2000; Dillon-Marable & Valentine, 2006; Doughty, 1987; Eskenazi, 1999; Flowerdew, 1993; Hannafin & Foshay, 2008; Ho, 1998; Johnson, 1999; Kern, 1995; Kern, 2000; Koebke, 1998; Levy, 1997; Liao, 1999; Liao, 2004; Meskill, 2009; Moos & Azevedo, 2009; Moote, 2002; Pederson, 1987; Seo & Bryant, 2009; Tang, 1995; Warschauer, 1995, 1996, 2004). In addition, certain students' feelings and attitudes, along with the issues in this study, were being expressed as well. The issues included students' reflections on their learning background, flexibility of learning, learning motives, and online learning in the process of using the TOEIC PREP software.

## Learning Motives

Motives are the thoughts and feelings the learners have which make them want to do something, continue to want to do it and convert these desires into action. The issue

of motives was mentioned at certain points in the findings of this study. Many students were convinced that test-oriented learning was not a very appropriate method; however, the educational system in Taiwan required students to pass exams in order to enter advanced-level education or gain certain certification.

The importance of motivation in language learning is undeniable. Lifrieri (2005) pointed out that "when asked about the factors which influence individual levels of success in any activity, such as language learning, most people would certainly mention motivation among them". Brown (2000) stated that "it is easy in second language learning to claim that a learner will be successful with the proper motivation". With similar views, Gardner (2006) asserted that "students with higher levels of motivation will do better than students with lower levels". He further added that "if one is motivated, he or she has reasons or motives for engaging in the relevant activities, expends effort, persists in the activities, attends to the tasks, shows desire to achieve the goal, enjoys the activities, etc." (Gardner, 2006).

In this study, four students' motives were the same, i.e. to pass the TOEIC test. What they said matched Lifrieri's (2005) statement of motivation. They were convinced that using the TOEIC PREP software was the best way to prepare for the TOEIC test. Besides, Chan stated that she still would use this software to enhance her listening competence even if there was no requirement to pass the TOEIC test because she wanted to have a better chance to find a job after graduation. They all believed that (a) they were motivated when they wanted to learn a language to pass the TOEIC test, and that (b) they used the TOEIC PREP software to prepare for the TOEIC test. Moreover, they were

motivated to use what they learned in their future education or jobs, a change from expectations of their parents' generation.

# Language Learning Background

While the students talked about the learning environment of their early childhood instruction in English, the theme of the learning background also was mentioned when they reflected upon their feelings about their first contact with English. In the early childhood classroom, silence is not golden. Spoken words are opportunities for learning that can take place throughout the day, during conversations not only between children and teachers, but also among the children themselves.

In Chou's childhood English learning, the teacher created conversation buddies and encouraged students to converse with each other. Several times during the day, the teacher motivated the children in the class to "discuss" various topics with their conversation buddies. Topics might include what they saw in a picture, their opinion of a story, or some basic communication skills. Words were introduced by theme. Word games helped the children learn to pronounce and read, find as many words to describe an object as possible, and discover the names of new objects. The course content often was made more interesting through the use of a guiding theme.

Wang talked about being engaged in listening and conversation exercises in the English classroom setting. All four students agreed that language learning should be both receptive and expressive. They did not simply mimic words but learned to express ideas; they interacted, receiving accurately and processing effectively what they heard from

their teacher. All the learning was in a fun setting without any test-oriented pressure.

Their English learning primarily was story-based or activity-based.

All the four students believed the initial setting of the English classroom was a crucial component in a student's desire to keep learning. The course was designed to meet the students' learning choices in a fun setting replete with activities and pictures. Students were better able to focus on their learning without the structure and test pressure of traditional instruction.

# Online Learning

Based on the findings from the research question about the students' experiences on TOEIC PREP software, this study suggested that the English teachers in the test preparation course should include a computer-assisted program as an aid to the curriculum. All four students talked about the flexibility of learning in any place where there was Internet access, granting them, as college students, the capability for autonomous learning.

Chou indicated that he would like to use the online learning because he could choose what and when to learn. They all believed online learning could be adaptive depending on everyone's learning situation. Indeed, it was seen as a preferable method for many Taiwanese students whose inherent shyness makes them reluctant to ask questions in class. A face-to-face classroom might be a good lecturing setting for the teachers to monitor students' learning; however, students possessed different learning levels and some of them often felt disinterested in the class. For Wang and Ueng, they liked to self-study and were anxious to receive the results immediately after they were

done with the practice. Wang focused on the reading section because she wanted to enhance her reading speed and vocabulary. Through repeated practice, she could adapt to the test format while simultaneously increasing her overall literacy.

To the students, the best thing about online learning was that the computer became a versatile learning tool. The software could accept varying types of input and provided useful and informative feedback. Such software blurs the role of the computer as teacher or tester and could be recommended to students who are comfortable learning in this way. If students had questions not answered by the software, they could send the questions to the teacher through the E-Learn platform and the teacher could respond promptly and without the use of class time.

Hence, this study recommended all language related courses could incorporate online learning into the course design so that the learning process could occur not only in class but anywhere the language learners might have access to the Internet.

# **Summary**

The purpose of this study was to provide an opportunity to listen to the voices of Taiwanese college students who used the TOEIC PREP software to prepare for the TOEIC test. Four 21-year-old students entering their senior year in college participated in this study. All of them were using the TOEC PREP software to practice for the TOEIC test. Participants' statements reflected their experiences with the online learning through the school's E-Learn platform. Interviews were held individually through Skype with the four students in Taiwan. They all used their own personal computers at their own home.

One research question provided the framework for this study. The open-ended interview protocols provided the basis for the investigation, allowing the development of further questions and providing a voice for the participants. The research question guiding this study was:

What are the experiences of the four college Taiwanese students about the TOEIC PREP software?

#### **Conclusion**

Most CALL empirical studies focus on the effectiveness of the medium itself, particularly in comparison with conventional teaching tools, narrowly examining the technological components rather than taking a more holistic approach to the process. Briefly speaking, CALL is seen as a treatment applied to the language learner, and the effect of the treatment on learning is then measured. In this regard, Pederson (1987) pointed out three major trends in CALL research that might account for the nonilluminating findings concerning the impact of CALL: (a) the past studies were mostly comparative studies (CALL versus non- CALL); (b) researchers attempted to attribute learning gains to the medium itself rather than to the attributes of the CALL software used; and consequently, (c) there was a tendency among these comparative studies to limit the types of CALL programs to tutorial or drill-and practice. This techno-centric approach to the evaluation of the effectiveness of CALL had proven unsatisfactory primarily due to inattention to the central role of the learning process and the corresponding influence of learner characteristics (Doughty, 1987). Therefore, it is really hard to consider the fuller view of technology-enhanced language learning software like

the TOEIC PREP software. Thus, we need empirical research on how the technology used in classrooms or Internet affects the whole language learning environment in order to determine how such changes are experienced in language classrooms with technology broadly.

## **Recommendations for Further Research Topics**

The design of this study was a qualitative design, which was not that common in the CALL field in Taiwan. In addition to the suggestion that more qualitative research be conducted to investigate Taiwanese students' experiences, feelings, attitudes, or difficulties of English learning with CALL, this study also revealed certain important issues mentioned or implied by the college students' responses. Based on the data collection and literature review of this study, some future research topics were able to be identified.

Perhaps some of the following suggested issues for future studies may have been discovered and researched by previous researchers in the field of CALL, but few of them were being conducted in Taiwan. Because different cultures and languages did affect the factors in different countries that may result in different applications of CALL, the researcher recognized a need for further research studies specific to Taiwan in the near future for the purpose of improving the current education system and language course curriculum. Topics for further study were as follows:

➤ Teachers' Acceptance Level of CALL

This study explored the students' experiences and viewpoints on the TOEIC

PREP software. It could be very useful and practical to explore in a similar manner the

teachers' background information, such as their English teaching experiences, motivation of using CALL, course design, and adjustment to CALL as a teaching resource.

The current of education is in flux. CALL alters the face-to-face instruction that was considered the norm in the past, and by doing so, creates a new teaching dynamic. However, there was a natural tendency for schools to resist the technological reform. Wrong conceptions about the use of technology may limit innovation or inhibit teachers' willingness to implement these new resources. Traditional teachers were inclined not to use technologies that require substantially more preparation time, and, in their mind, it was not practical to provide instructors and learners access to technologies, even those that were relatively easy to use.

Engaging in CALL is a continuing challenge that requires time and commitment. As educational reforms pass by, educators need to realize that technology as such was not the answer to all our problems. What really matters is how the instructors coordinate technology and current in-class courses. Computers will never be able to replace teachers, but they offer new ways for better language practice. They now actually make the process of language learning significantly richer and play a key role in the reform of Taiwan's educational system. The next generation of language teachers will feel a lot more confident with information technology than those nowadays do. As a result, they also will be able to use the technology to convey information more effectively, practice language skills more thoroughly and solve language learning problems more easily.

#### REFERENCES

- Agar, M. (1986). Speaking of ethnography. Beverly Hills, CA: Sage.
- Almahboub, S. F. (2000). Attitudes toward computer use and gender differences among Kuwaiti sixth-grade students. Unpublished doctoral dissertation, University of North Texas, Denton.
- Beatty, K. (2003). *Teaching and researching computer-assisted language learning*. New York: Longman.
- Bogdan, R., & Taylor, S.J. (1975). *Introduction to qualitative research methods*. New York: John Wiley.
- Bogdan, R. C & Biklen, S. K. (2003). *Qualitative research for education: An introduction to theories and methods* (4th ed.). New York: Pearson Education group.
- Borg, W. R., & Gall, M. D. (1989). Educational Research. New York: Longman.
- Breen, M. P. (1987). Learner contributions to task design. In C. N. Candlin & D.
  Murphy (Eds.), Lancaster Practical Papers in English Language Education: Vol.
  7. Language Learning Tasks. Englewood Cliffs, NJ: Prentice Hall.
- Brown, H. (2000). *Principles of Language Learning and Teaching*. New Jersey: Prentice Hall.
- Candlin, C. N., & Murphy, D. (Eds.). (1987). *Language Learning Tasks*. Englewood Cliffs, NJ: Prentice Hall.

- Chaudron, C. (1987). The role of error correction in second language teaching. In B. K. Das (Ed.), *Patterns of Interaction in Southeast Asia* (pp. 17-50). Singapore: SEAMEO Regional Language Centre.
- Chen, Q. L. (1999). The whole language approach and EFL teaching, in: Q. L.; Chen &
  M. L. Liao (Eds) EFL Teaching: Teachers' Teaching Guides at Elementary and Secondary School Levels. Taiwan, Taipei, Caves Books, 60–75.
- Chen, S. C. (2003). *The Spread of English in Taiwan: Changing Uses and Shifting Attitudes*. Taiwan, Taipei: Crane Publishing Co., Ltd.
- Chapelle, C. A. (2001). *Computer Applications in Second Language Acquisition*. New York: Cambridge.
- Charmaz, K. (2000). Grounded theory: Objectivist and constructivist methods. In Denzin, N. & Lincoln, Y. (Eds.), *Handbook of Qualitative Research* (2<sup>nd</sup> ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Chomsky, N. (1986). *Knowledge of Language: Its Nature, Origin, and Use*. New York: Praeger.
- Coryell, J. E., & Chlup, D. T. (2007). Implementing E-learning components with adult english language learners: Vital factors and lessons learned. *Computer Assisted Language Learning*, 20(3), 263-278.
- Creswell, J. W. (1994). Research Design: Qualitative and Quantitative Approaches. Thousand Oaks, CA: SAGE.
- Creswell, J. W. (1998). Qualitative inquiry and research design: Choosing among five traditions. Thousand Oaks, CA: Sage.

- Cunningham, K. (2000, May 5). Integrating CALL into the writing curriculum. *The Internet TESL Journal*, 6, Article 5. Retrieved May 31, 2002, from

  http://iteslj.org/Articles/Cunningham-CALLWriting/
- Denzin, N.K. & Lincoln, Y. (2003) (eds) *The Landscape of Qualitative Research*: *Theories and Issues*. Second Edition. London: Sage.
- Dillon-Marable, E. & Valentine, T. (2006). Optimizing computer technology integration. *Adult Basic Education*, 16(2), 99-117.
- Doughty, C. (1987). "Relating second-language acquisition theory to CALL research and application." In W.F. Smith (Ed.), *Modern Media in Foreign Language education: Theory and Implication*. Lincolnwood, IL: National textbook company, 133-167.
- Eskenazi, M. (1999). Using automatic speech processing for foreign language pronunciation tutoring: Some issues and a prototype. *Language Learning & Technology*, 2(2), 62-76.
- Fischer, R. (2007). How do we know what students are actually doing? Monitoring students' behavior in CALL. *Computer Assisted Language Learning*, 20(5), 409-442.
- Flowerdew, J. (1993). Content-based language instruction in a tertiary setting. *English* for Specific Purposes, 12, 121-138.
- Gardner, R. (2006). The socio-educational model of second language acquisition: a research paradigm. *EUROSLA Yearbook*, 6, 237–260.
- Gee, J. P. (1996). Social Linguistics and Literacies. London: Taylor & Francis.

- Glaser B G and Stauss A L (1967), The Discovery of Grounded Theory, Chicago: Aldine.
- Government Information Office. (2004). *Taiwan Yearbook 2004*: People and language.

  Retrieved May 1, 2005, from http://www.gio.gov.tw/taiwanwebsite/5-gp/yearbook/P021.htm.
- Graham, C. (2005). Blended learning systems: Definition, current trends, and future directions. In C.J. Bonk & C.R. Graham (Eds). *Handbook of blended learning:*Global Perspectives, local designs (pp. 3-21). Francisco, CA: Pfeiffer Publishing.
- Greenbank, P. (2003) 'The role of values in educational research: the case for reflexivity', *British Educational Research Journal*, 29, 6.
- Hannafin, R., & Foshay, W. (2008). Computer-based instruction's (CBI) rediscovered role in K-12: An evaluation case study of one high school's use of CBI to improve pass rates on CAI Effect on Rural Algebra I Students 33 high-stakes tests. *Educational Technology, Research and Development*, 56(2), 147-160. doi:10.1007/s11423-006-9007-4
- Hismanoglu, M. (2000, August 8). Language-learning strategies in foreign language learning and teaching. *The Internet TESL Journal*, 6, Article 8. Retrieved May 31, 2002, from http://iteslj.org/Articles/Hismanoglu-Strategies.html
- Ho, I. P. (1998). Relationships between motivation/attitude, effort, English proficiency, and socio-cultural educational factors and Taiwan Technological

  University/Institute students' English learning strategy use. Unpublished doctoral dissertation, Auburn University, Auburn, AL.

- Hsiau, A-chin. (2000). *Contemporary Taiwanese cultural nationalism*. New York: Routledge.
- Hsieh, P. J. (2010). The impact of globalization on foreign language education policy in Taiwan: Policy initiatives and industrial demand. *International Journal of Educational and Psychological Assessment*, 5, 237-254.
- Huang, S.J., & Liu, H. F. (2000, February 2). Communicative language teaching in a multimedia language lab. *The Internet TESL Journal*, 6, Article 2. Retrieved January 31, 2002, from http//iteslj.org/Lessons/Muehleisen-Projects
- Hubbard, P. (2005). A review of subject characteristics in call research. *Computer Assisted Language Learning*, 18 (5), 351-368.
- Hui, L. (1997). New bottles, old wine. *Communicative Language Teaching in China*. 35(4), 38-40.
- Johnson, M. (1999). CALL and teacher education: Issues in course design. [Electronic version]. CALL-EJ Online, 1(2), 12-24.
- Kern, R. G. (1995). Restructuring classroom interaction with networked computers:Effects on quality and characteristics of language production. *Modern Language Journal* 79 (4), 457-476.
- Kern, R., & Warschauer, M. (2000). Introduction: Theory and practice of network-based language teaching. In M. Warschauer & R. Kern (Eds.), *Network-based Language Teaching*: Concepts and practice (pp. 1-19). Cambridge: Cambridge University Press.

- Koebke, K. (1998). Computers and collaboration: Adapting CALL materials to different learning styles. In J. M. Reid (Ed.). *Understanding Learning Styles in the Second Language Classroom* (pp 46-52). Upper Saddle River. NJ: Prentice Hall Regents.
- Kubota, R. (2002). *The Impact of Globalization on Language Teaching in Japan*. InD.

  Block & D. Cameron (Eds.), *Globalization and Language Teaching*. New York:

  Routledge.
- Leininger, M. M. (1985). Nature, rationale and importance of qualitative research methods in nursing. In M. M. Leininger (Ed.), *Qualitative Research Methods in Nursing* (pp. 1-28). New York: Grune & Stratton.
- Levy, M. (1997) *CALL: Context and Conceptualization*. England. Oxford: Oxford University Press.
- Liao, C. C. (1999, March 3). E-mailing to improve EFL learners' reading and writing abilities: Taiwan experience. *The Internet TESL Journal*, 5, Article 3. Retrieved February 18, 2002, from http://:iteslj.org/Articles/Liao-Emailing.hml
- Liao, Y. (2004). Effects of computer-assisted instruction on students' achievement in Taiwan: A meta-analysis. *Computers & Education*, 48, 216–233. doi:10.1016/j.compedu.2004.12.005
- Lifrieri, V. (2005). A Sociological Perspective on Motivation to Learn EFL: The case of Escuelas Plurilingües in Argentina. M.A thesis, University of Pittsburgh.
- Lincoln, Y.S., & Guba, E.G. (1985). Naturalistic Inquiry. London: Sage Publication.
- Long, M. H., & Crookes, G. (1992). *Three Approaches to Task-based Syllabus Design*. TESOL Quarterly, 26(1), 27-56.

- Meskill, C., 2009. Computers as Tools for Sociocollaborative language learning. In K. Cameron (Ed.), *CALL: Media, Design and Applications*. England. Oxford: Elsevier.
- Min, B. C. (1998). A study of the attitudes of Korean adults toward Technology-assisted

  Instruction in English-language Programs. University of Northern Illinois,

  DeKalb.
- Moos, D., & Azevedo, R. (2009). Learning with computer-based learning environments:

  A literature review of computer self-efficacy. *Review of Educational Research*,

  79, 576-600. doi:10.3102/0034654308326083
- Moote, S. (2002, March 3). Evaluation considerations for online ESL courses. *The Internet TESL Journal*, 8, Article 3. Retrieved May 31, 2002, from http://iteslj.org/Artivles/Moote Evaluation.html
- Murray, J. H. (1997). Hamlet on the Holodeck: The future of narrative in Cyberspace.

  Cambridge, MA: Cambridge University Press.
- Nunan, D. (1988). The learner-centered curriculum. Cambridge: Cambridge University Press.
- Pederson, K. M. (1987). "Research on CALL." In W. F. Smith (Ed.), *Modern Media in Foreign Language Education: Theory and Implementation*. Lincolnwood, IL:

  National Textbook, 99-131.
- Prabhu, N. S. (1987). Second language pedagogy. Oxford: Oxford University Press.
- Schieffelin, B. B., & Ochs, E. (1986). Language socialization. Annual Review of Anthropology, 15, 163-191.

- Seo, Y., & Bryant, P., (2009). Analysis of studies of the effects of computer-assisted instruction on the mathematics performance of students with learning disabilities.

  \*Computers & Education\*, 53, 913-928. doi:10.1016/j.compedu.2009.05.002
- Snow, M. A. (1991). Teaching language through content. In M. A. Snow (Ed.), *Teaching English as a Second or Foreign Language*. Boston: Newbury House.
- Tang, L. (1995). Whole language instruction in the computer-assisted instruction setting:

  ESL learners' attitudes (English as a second language). University of Southern

  Illinois, Carbondale.
- Taylor S. J. & Bogdan, R. (1984). *Introduction to Qualitative Research Methods: The Search for Meanings*, New York: Wiley.
- Thaipakdee, S. (1922). Relationship Among Writing Quality, Attitudes toward Writing, and Attitudes toward Computers in a Computer-mediated Technical Writing Class for English as a Foreign Language Student. University of North Texas, Denton.
- Tsao, F. F. (1999). The language planning situation in Taiwan. *Journal of Multilingual* and Multicultural Development, 20(4&5), 328-375.
- Tsao, F. F. (2001). Teaching English from elementary school in an Asian context: A language-planning perspective. *The Language Teacher Online*, 25(6), 1-5.
- Tsao, F. F. (2004). Taiwan. In H. W. Kam & R. Y. L. Wong (Eds.), Language policies and language education: *The Impact in East Asian Countries in the Next Decade* (pp. 307-328). New York: Eastern University Press.

- Wang, C. (2002) Innovating teaching in foreign language contexts: the case of Taiwan, in: S. J. Savignon (Ed.) *Interpreting Communicative Language Teaching*. New Haven, CT, Yale University Press.
- Warschauer, M. (Ed.) (1995). *Virtual Connections*. Honolulu, HI: University of Hawaii, Second Language Teaching & Curriculum Center.
- Warschauer, M. (1996) Computer-assisted language learning: An introduction. In Foto S. *Multimedia Language Teaching*. Tokyo: Logos International.
- Warschauer, M. (2004). Technological change and the future of CALL. In S. Fotos & C. Brown (Eds.), *New Perspectives on CALL for Second and Foreign Language Classrooms* (pp. 15-25). Mahwah, NJ: Lawrence Erlbaum Associates.
- Wu, M. L. (1997). The Relation Research among Primary School Student's Match Learning Behavior, Computer Anxiety and Attitude toward Computer:Unpublished doctoral dissertation, National Kaohsiung Normal University, Kaohsiung, Taiwan.
- Yuan. (2003). Challenge 2008: National development plan (2002-2007). Taiwan: Executive Yuan.

#### APPENDIX A

#### EMAIL TO INSTRUCTOR OF APPLIED FOREIGN LANGUAGES DEPARTMENT

From: To-yu Chen/Texas A&M University

**To:** Miss Lin (A Psedonym)

bcc:

Dear Miss Lin,

I hope all is well. As you know I am a doctoral candidate in the Curriculum & Instruction program at Texas A&M University. I am currently conducting my dissertation research on the experience of students who prepare for the TOEIC though the TOEIC PREP software.

I would like to request your assistance in obtaining a comprehensive list of freshman students from your institution who have been using the TOEIC PREP software from Fall, 2012 to Spring 2013. This list will help identify potential participants for the study.

Participants will be interviewed twice through SKYPE at a time and location of their choice for a period of no more than one hour for each interview.

Along with the list of freshman students who have used the TOEIC PREP software, I am also requesting that you provide contact information (Name and Email Address) for the potential participants.

For your perusal, I have provided a copy of the IRB approval letter from my institution to conduct this study as well as a brief summary of my study. Your student list would be greatly appreciated, as I am eager to begin my project. I am excited about the information your faculty could share and I look forward to providing to you a synopsis of the collected data.

Thank you in advance for your assistance, and please feel free to contact me if you have questions regarding the study.

Respectfully Submitted,

85

To-yu Chen, Doctoral Candidate Curriculum & Instruction Program Texas A&M University

#### APPENDIX B

## **INVITATION EMAIL**

#### TEXAS A&M UNIVERSITY

# **Invitational Email for Participants**

**Title of Project:** Voices of Four Taiwanese Students' Experiences with the Test of English for International Communication (TOEIC) Preparation (PREP) Computer Assisted Language Learning (CALL)

**Investigators:** To-yu Chen, Doctoral Candidate and Investigator

Dear Participant:

Upon recommendation from your institution, you are invited to participate in a study to explore the experience of how the TOEIC PREP software assists you on the TOEIC exam preparation. Your experiences and opinions are extremely valuable to my study and I would like to ask for you participation.

I would like to request two interviews to discuss your experiences in using TOEIC PREP software to prepare TOEIC exam at Applied English Department. The two times of interviews, which would last no more than one hour individually, will be held at your institution or your home through Skype at a date and time most convenient for you. In addition, prior to the interview, I would like you to complete a written narrative of three questions that will provide additional insights into the experience of learning through online programs. Involvement in the project will not involve any risks or costs for you and you may withdraw from the interview at any time. You will not be questioned about any University or personal activities other than those relative to your experiences learning through on line programs.

If you are interested in participating, please respond to this email (or call xxx-xxx-xxxx) no later than 30 days from receipt of this email.

Thank you in advance for your participation and we look forward to talking with you!

To-yu Chen, Doctoral Candidate Curriculum & Instruction Doctoral Program Texas A&M University

#### APPENDIX C

## INFORMED CONSENT FORM

Project Title: Voices of Four Taiwanese College Students' Experiences with the Test of English for International Communication (TOEIC) Preparation (PREP) Computer Assisted Language Learning (CALL)

You are invited to take part in a research study being conducted by To-yu Chen, a researcher from Texas A&M University. The information in this form is provided to help you decide whether or not to take part. If you decide to take part in the study, you will be asked to sign this consent form. If you decide you do not want to participate, there will be no penalty to you, and you will not lose any benefits you normally would have.

# Why Is This Study Being Done?

The purpose of this study is to obtain information about your experiences of the TOEIC PREP software.

# Why Am I Being Asked To Be In This Study?

You are being asked to be in this study because you are using the TOEIC PREP software to prepare the TOEIC exam..

# How Many People Will Be Asked To Be In This Study?

Four people (participants) will be invited to participate in this study.

# What Are the Alternatives to being in this study?

No, the alternative to being in the study is not to participate.

# What Will I Be Asked To Do In This Study?

You will be asked to participate in a Skype interview. Your participation in this study will last up to an hour per interview and includes two interviews through Skype (audio recording).

Visit 1 (Week one)

This visit will last about one hour. During this visit you will be interviewed through Skype with the provided interview questions.

You may be removed from the study by the investigator for these reasons:

• You don't feel comfortable to the study and choose to leave the study.

# Will Photos, Video or Audio Recordings Be Made Of Me during the Study?

Audio recording will be made during the study.

The researchers will take an audio recording during the study so that interview contents will be transcribed later. If you do not give permission for the audio recording to be obtained, you cannot participate in this study.

The researchers will take an audio recording during the study so that the contents will be transcribed only if you give your permission to do so. Indicate your decision below by initialing in the space provided.

 I give my permission for audio recording to be made of me during my
participation in this research study.
 I do not give my permission for audio recording to be made of me during my
participation in this research study.

## **Are There Any Risks To Me?**

The things that you will be doing are no more risks than you would come across in everyday life.

Although the researchers have tried to avoid risks, you may feel that some questions/procedures that are asked of you will be stressful or upsetting. You do not have to answer anything you do not want to. Information about individuals and/or organizations that may be able to help you with these problems will be given to you.

Are There Any Benefits To Me? (\*If there are no direct benefits, this section may be omitted)

N/A

# Will There Be Any Costs To Me?

Aside from your time, there are no costs for taking part in the study.

## Will I Be Paid To Be In This Study?

You will not be paid for being in this study.

# Will Information From This Study Be Kept Private?

The records of this study will be kept private. No identifiers linking you to this study will be included in any sort of report that might be published. Research records will be stored securely and only Dr. Patricia Larke and To-yu Chen will have access to the records.

Information about you will be stored in the researcher's pass-code protected computer. This consent form will be filed securely in an official area.

People who have access to your information include the Principal Investigator and research study personnel. Representatives of regulatory agencies such as the Office of Human Research Protections (OHRP) and entities such as the Texas A&M University Human Subjects Protection Program may access your records to make sure the study is being run correctly and that information is collected properly.

Information about you and related to this study will be kept confidential to the extent permitted or required by law.

## Who may I Contact for More Information?

You may contact the Principal Investigator, To-yu Chen, PhD candidate, to tell him/her about a concern or complaint about this research at xxx-xxx-xxxx or xxxxx@gmail.com. You may also contact the Protocol Director, Dr. Patricia Larke at xxx-xxx-xxxx or xxxxx@tamu.edu.

For questions about your rights as a research participant, or if you have questions, complaints, or concerns about the research, you may call the Texas A&M University Human Subjects Protection Program office at (979) 458-4067 or <a href="mailto:irb@tamu.edu">irb@tamu.edu</a>.

## What if I Change My Mind About Participating?

This research is voluntary and you have the choice whether or not to be in this research study. You may decide not to begin or to stop participating at any time. If you choose not to be in this study or stop being in the study, there will be no effect on your relationship with Texas A&M University. Any new information discovered about the research will be provided to you. This information could affect your willingness to continue your participation.

## STATEMENT OF CONSENT

I agree to be in this study and know that I am not giving up any legal rights by signing this form. The procedures, risks, and benefits have been explained to me, and my

will be provided to me as it	becomes avail study. I can ask	t new information about this research study able and that the researcher will tell me if I more questions if I want. A copy of this
Participant's Signature		Date
Printed Name	Date	
INVESTIGATOR'S AFF	IDAVIT:	
Either I have or my agent h	as carefully exp	plained to the participant the nature of the
above project. I hereby cert	ify that to the b	pest of my knowledge the person who signed
this consent form was infor	med of the natu	are, demands, benefits, and risks involved in
his/her participation.		
Signature of Presenter		Date
Printed Name		Date

#### APPENDIX D

#### WRITTEN NARRATIVE PROTOCOL

Participant ID:	Date of Completion
Introduction:	

We are conducting a dissertation case study that explores the experience of how TOEIC PREP software assists students to learn English on line. Your views of your experience are extremely valuable to us; as a result, we would like you to share as much information as you can for each question. Please complete the narratives no later than 30 days from receipt of this email and send via email to lexus1208@tamu.edu.

# **Narrative Questions**

- 1. How would you describe your overall experience learning English online through TOEIC PREP at the School?
- 2. While using the TOEIC PREP software, did you encounter any difficulty? If so, what where they and how did you overcome them?
- 3. What recommendations would you offer to school administration based on your experiences to support software improvements in TOEIC PREP for the course at this particular school required course?

#### APPENDIX E

## INTERVIEW PROTOCOL

Spoken Introduction:
We are conducting a case study that explores the experience of freshman students who
one taking TOPIC arrang courses with TOPIC DDED assistance. Large menticularly

Participant ID: \_\_\_\_\_ Interviewer: \_\_\_\_ Date: \_\_\_\_

are taking TOEIC exam courses with TOEIC PREP assistance. I am particularly interested in the comprehensive picture of the experience. Your views and opinions are extremely valuable to me; therefore, I would like you to share as much information as you can for each question. I have scheduled an hour for the interview; however you may take as much time as you need to answer each question. Do you have any questions before we begin?

# Part A. Background Information

- 1. Tell me a little about yourself?
  - a. How long have you been studying English?
  - b. Tell me about your background of English learning.
  - c. How long have you been using the TOEIC PREP software to prepare the TOEIC exam?
- 2. Why did you take the course?
  - a. Did you meet the requirements of the course?
  - b. Did you use TOEIC PREP to prepare for the TOEIC exam? Why?
  - c. How long did it take you to learn to use TOEIC PREP?
- 3. What were your expectations using the TOEIC PREP software for the TOEIC exam preparation?

# Part B. TOEIC Prep Software

4. What were your main concerns about using the TOEIC PREP software?

- 5. What would you say are the advantages and/or disadvantages for the TOEIC PREP software?
- 6. What beliefs and attitudes did you have towards online learning prior to the TOEIC PREP software and how did they change?
- 7. Did this particular TOEIC PREP software provide you with any formal training opportunities or assistance in developing your English competence? If so, describe the practice and assistance?
  - a. What were the topics? Were they helpful or useless?
- 8. While using the TOEIC PREP software to prepare the exam, did you encounter any barriers or challenges? If, so how did you overcome them?
- 9. How was the TOEIC PREP software similar to or different from a face to face course?
- 10. Describe for me your overall experiences with the TOEIC PREP software?

#### APPENDIX F

#### **CULTURAL REVIEW LETTER**

Miss Lin

Lecturer of the University

Department of Applied Foreign Languages

Hsin-chu, Taiwan

Phone Number

E-mail: xxxxxx@wmail.edu.tw

June, 12, 2013

**Institutional Review Board** 

750 Agronomy Rd, Suite 3501,

College Station, Texas 77843

#### **Dear Institutional Review Board Member:**

I am writing to you to inform you that I have evaluated the Doctoral student, To-yu Chen's study titled "Voices of Four Taiwanese College Students' Experiences with the Test of English for International Communication (TOEIC) Preparation (PREP) Computer Assisted Language Learning (CALL)" to see if the subject recruitment, consent, and risks associated with this study are appropriate and overall if the proposed study design has any risk to the participants.

To-yu Chen's study proposes to collect data from the four college students in one university in Taiwan. I have found no evidence that this study is culturally inappropriate for the Mandarin context and provides any risk to the participants other than the minimal.

In the designed study, the researcher will be exploring the Taiwanese college students' attitudes and experiences on the TOEIC PREP software towards the TOEIC exam

preparation. The principal investigator, To-yu Chen, will contact the participants, communicate the research purpose and their rights as participants, administer the instruments and organize the data collected, all of which will be on the audio recorded files through Skype interview. The study participants are adults and they have the capacity to comprehend the proposed research design and its procedures.

To-yu Chen is dedicated to follow the necessary procedures in collecting data for the proposed study as outlined by the IRB office at the Texas A&M University. To-yu Chen's research proposal and his data collection methods are culturally appropriate in Mandarin context. To-yu Chen will contact the potential participants via e-mail and invite them to participate voluntarily. The data collection instruments are 14 interview questions that will be administered in Mandarin to the Taiwanese participants. I evaluated the translated research instruments and found them culturally appropriate for the Mandarin context. The study instruments do not provide any risk to participants other than the minimal risk that participants can encounter in their daily lives.

To-yu Chen is dedicated to make all the effort not to enclose the participants' decisions to participate or not to participate to anyone other than themselves. If the individuals To-yu Chen contact will agree to participate, then they will be directed to complete the Skype interview instruments. Subject recruitment steps To-yu Chen proposes following are culturally appropriate.

I also realize that To-yu Chen doesn't offer monetary compensation for his participants. However, he expresses that his participants' contribution to the project will be greatly appreciated and upon their request, To-yu Chen will share his research findings with them. Participation is completely voluntary in this project. The individuals To-yu Chen will collect data from and volunteering to participate have the right to cancel their participation anytime with no penalty, is my understanding.

To-yu Chen has written the interview protocol questions both in English and in Mandarin. The language and the format of the consent form and the online surveys are culturally appropriate in Mandarin context.

It is my understanding that the participants To-yu Chen would like to collect data from will not be put in any risk other than the minimum. To-yu Chen will take all the necessary precautions to keep the data he will be collecting completely confidential and will not communicate his participants' decision to participate or opt out with their supervisors in the schools they work for or they attain. There is less than the minimal risk in this designed study.

If you have any questions or concerns about the study and/or the researcher's conduct of it, please let me know. I have full consent that this study is culturally appropriate for the Mandarin context. There is no need to alter any of the procedures to reduce the risk participant take, which is less than the minimum.

Regards,

Lecturer of the University