

**Action Research on the Effects of an Innovative Use of
CALL (Computer Assisted Language Learning) on the
Listening and Speaking Abilities of Chinese University
Intermediate Level English Students**

Submitted by

Xianghu LIU

To the University of Exeter

As a thesis for the degree of Doctor of Philosophy in Education

March 2013

This thesis is available for Library use on the understanding that it is copyright material and that no quotation from the thesis may be published without proper acknowledgement.

I certify that all material in this thesis which is not my own work has been identified and that no material has previously been submitted and approved for the award of a degree by this or any other University.

Signature: *Xianghu Liu*

Abstract

This research aims to explore the effective use of modern technology and the encouragement of learner autonomy in support of English language teaching and learning at a university in Northeastern China in order to address a number of learning and teaching problems, in particular, the so-called “time-consuming, low efficiency” and “deaf and dumb English” problems. Action research was employed as a research methodology in this study. The action research project consisted of three cycles: the teaching time of each cycle was six weeks, with two teaching hours each week in each class. The 102 research participants were the second-year undergraduate non-English major students who had (or had nearly) reached an intermediate level in terms of English proficiency. Research methods included questionnaires, pre-testing and post-testing, interviews, classroom observation, learning diaries and research journal. All the data were analyzed using qualitative and quantitative techniques as appropriate. SPSS (Statistical Package for the Social Sciences) was used for statistical analysis.

The research findings from the qualitative and quantitative data analysis show that the students made greater progress and improvements within a very short time (6 weeks) in each cycle in terms of listening and speaking skills by the effective use of modern technologies such as computers and the internet, which were used in ways designed to promote learner autonomy and effective learning strategies. More importantly, a more novel and more effective approach to teach listening from the intermediate level to the advanced level has been discovered from this project and a new teaching model using CALL (Computer Assisted Language Learning) environments in a Chinese context has come into being. On the whole, the students benefitted a great deal from autonomous learning by using modern technologies, dependent upon the quantitative data such as test

score changes and qualitative data such as interview and learning diaries. In the meantime, the student learning experiences, my “teacher as researcher” teaching experience, and my professional development have been improved.

This study is of great significance, particularly in the Chinese context, in contributing to the current literature on English teaching and learning research, CALL research and applications such as the novel listening teaching approach and the new teaching model using the CALL environments mentioned above. Finally, pedagogical implications are discussed and some suggestions on further research are also proposed.

Acknowledgements

This PhD research project is dedicated to all those who have encouraged and supported me in this process, and to my mother Suzhen LI (1931—2012) and my father Guangxian LIU (1924—2013), who could not be with us to witness this accomplishment.

Firstly, I would really like to express my sincere gratitude for my supervisors' supervision. Professor Keith Postlethwaite's patience, understanding, professionalism, wisdom, and encouragement supported me throughout my doctoral studies. Without his kind help and patient guidance, I could not have completed this research and thesis writing. Dr. Sarah Rich guided me very patiently and gave much good advice in my studies as well. Meanwhile, her encouragement supported me to work hard toward the completion of my research project. I would like to thank both my supervisors for their help and support in my studies with enormous heartfelt gratitude.

Secondly, I would like to extend my sincere gratitude to Dr. Kuang-yun Ting, who has provided unstinting academic constructive suggestions, kind help and encouragement throughout the whole process. I also express my deep gratitude to my colleague Betty Lin, who kindly encouraged and supported me in this project. Many particular thanks go to the following friends for their help and encouragement: WU Xueqiang, XU Yanchang, LI Jing, ZHANG Yanhua, ZHAO Baosheng, ZHAO Hui, DENG Yeping, YU Desheng, MENG Fanrong, ZHU Mu, HUANG Lingying, WANG Yanming, Christopher Clapham and Ruth Clapham.

Thirdly, I gratefully acknowledge Ms. BI Jia, who offered me opportunities to conduct this action research project. Special thanks go to my research

participants, who supported me and contributed their time and experiences to this study. I would also really like to appreciate Dr. Paul Deacon's help for his proofreading this thesis in terms of grammar and vocabulary. Many thanks go to Mr. Kevin Terrell, who helped me practise speaking English via Skype before the viva.

Finally, I am very grateful to my parents, wife and daughter, brothers and sisters, and the other relatives such as my nephews and nieces. It was with their full love, support, and great encouragement that I was able to reach this milestone. In particular, I would further like to extend my sincere gratitude to my wife Yuyan BAI and my daughter Anqi LIU for their extraordinary support and understanding at all times. Additionally, this thesis is dedicated to the memory of my mother, Suzhen LI, whose kindness, patience, support, encouragement and passion for life inspire me immensely to complete this project. Also, it is dedicated to the memory of my father, whose fortitude, persistent and dauntless character has great influence on me and my study.

On the whole, my supervisors, my family members, relatives and friends have helped me to complete the hard job (the PhD research project) fully.

Date of Submission Version to the University of Exeter: 25 March 2013

Date of Final Version to the ORE (Open Research Exeter) online: 28 November 2013

Table of Contents

Abstract.....	2
Acknowledgements.....	4
Table of Contents.....	6
List of Tables.....	10
List of Figures.....	13
List of Acronym.....	14
Chapter 1 Introduction.....	16
1.1 My Motivation for CALL Research.....	16
1.2 Background information on English Language Teaching in China.....	18
1.2.1 Brief information on English Language Teaching in higher education in China.....	19
1.2.2 The use of CALL in higher education in China.....	21
1.3 The reasons for the importance of the use of CALL in China.....	23
1.3.1 The problems of learning English in China.....	23
1.3.2 The cause of the learning problems in teaching English in China.....	25
1.3.3 Possible solutions to the learning problems.....	28
1.4 Rationale of this study.....	28
1.5 The Aims of This Study.....	35
1.6 A Brief Overview of the PhD Thesis.....	35
Chapter 2 Literature Review.....	39
2.1 Introduction.....	39
2.2 An Overview of CALL.....	40
2.2.1 CALL, online learning and e-learning.....	40
2.2.2 The advantages and disadvantages of CALL.....	43
2.2.3 CALL environments and development of language learning skills.....	48
2.2.4 Teaching Listening and Speaking by Using CALL.....	49
2.2.5 The Evaluation of CALL Materials.....	50
2.2.6 Use of podcasts and the promotion of Listening and Speaking Abilities.....	54
2.3 An Overview of Second Language Learning Theory.....	57
2.3.1. Behaviourism.....	58
2.3.2 Cognitive theoretical perspectives on SLA Theory.....	60
2.3.3 Constructivism.....	67
2.3.4 Sociocultural Theory.....	70
2.3.5 Summary of Second Language Learning Theories.....	72
2.4 Key Learning Factors and CALL.....	74
2.4.1 Motivation, learner autonomy and CALL.....	74
2.4.2 Learner autonomy and CALL.....	77
2.4.3 Learning Strategies, Learner Autonomy and CALL.....	81
2.4.4 Summary.....	84
2.5 Student-centred Teaching Approaches and Learner Autonomy.....	85
2.6 Use of Podcasts and Learner Autonomy.....	86

2.7 Summary of the Literature	87
2.8 Research Questions	88
Chapter 3 Research Methodology and Methods	94
3.1 Introduction.....	94
3.2 Research Paradigms	94
3.2.1 Defining Research Methodologies and Methods	95
3.2.2 The Scientific Research Paradigm (Positivism).....	98
3.2.3 The Interpretive Research Paradigm.....	99
3.2.4 The Critical Research Paradigm.....	102
3.3 Action Research	103
3.3.1 Defining Action Research	103
3.3.2 Types of action research.....	106
3.3.3 Principles and Characteristics of Action Research.....	107
3.3.4 Criticisms of Action Research.....	109
3.3.5 Locating Action Research in the Interpretative Paradigm.....	113
3.4 The Research Participants	114
3.4.1 College English Tests (Bands 4 and 6) in China	115
3.4.2 Background Information on the Participants	117
3.5 The Framework of Research Design in This Study	118
3.5.1 The Rationale of the Choices of Data Collection Methods.....	119
3.5.2 The Rationale of the Choices of Common Data Analysis Methods	125
3.5.3 The Rationale of the Choices of General Data Analysis Methods	127
3.6 Procedures of Data Collection and Data Analysis in This Study	129
3.6.1 The Pilot Study of the Research Project.....	129
3.6.2 The Action Research Processes.....	130
3.7 Ethical Considerations in this research project	137
3.7.1 Informed Consent.....	138
3.7.2 Anonymity and confidentiality.....	139
3.8 Summary of Chapter 3	140
Chapter 4 Action Research Cycle One.....	141
4.1 Introduction.....	141
4.2 A Brief Introduction to the Course.....	141
4.2.1 The Aims of the Course	142
4.2.2 The Textbook Used	143
4.2.3 The Business English Website Used in Class and outside Class.....	148
4.3 Action Research Stage One: Planning.....	151
4.3.1 Identification of the Main Problems in Learning English.....	151
4.3.2 Planning the Research in Practical Teaching	157
4.4 Action Research Stage Two: Action.....	159
4.5 Action Research Stage Three: Observation.....	167
4.5.1 Data Collection and Data Coding	167
4.5.2. Data Analysis and Findings.....	169
4.6 Action Research Stage Four: Reflections.....	179
4.7 Learning Problems at the End of Cycle One.....	183
4.8 Changes in Teaching Styles next Cycle	185
4.9 Summary of Chapter 4	186

Chapter 5 Action Research Cycle Two	188
5.1 Introduction.....	188
5.2 Teaching Materials and Learning Materials.....	189
5.2.1 Introducing the BBC Learning English Website	190
5.2.2 Description of the University ‘Blackboard’ Academic Suite	193
5.3 Action Research Stage One: Planning.....	196
5.3.1 The Lesson Planning.....	196
5.3.2 Explanation for the Classroom Teaching Activities	197
5.4 Action Research Stage Two: Action.....	198
5.4.1 Reading, Listening and Speaking Interactive Activities	198
5.4.2 Giving Oral Presentations in Class	201
5.4.3 Guidance in Autonomous Learning	203
5.4.4 Guidance to Learning Strategies	204
5.5 Action Research Stage Three: Observation.....	209
5.5.1 Data Collection and Data Coding	209
5.5.2. Data Analysis and Findings.....	211
5.6 Action Research Stage Four: Reflections.....	225
5.6.1 Reflections on the importance of selecting appropriate learning materials	225
5.6.2 Reflections on the improvement of listening and speaking skills	226
5.6.3 Reflections on autonomous learning from using CALL environments.....	227
5.7 Summary of Learning Outcomes	233
5.8 Learning Problems at the End of Cycle Two	234
5.9 Changes in Teaching Styles next Cycle	235
5.10 Summary of Chapter 5	237
Chapter 6 Action Research Cycle Three	238
6.1 Introduction.....	238
6.2 The TOEFL Listening Podcast Website	238
6.2.1 Primary Reasons for Selecting the Website	239
6.2.2 Characteristics of the TOEFL Podcast Website.....	240
6.3 Action Research Stage One: Planning.....	241
6.3.1 The Lesson Planning.....	241
6.3.2 Explanation of the Classroom Teaching Activities	243
6.4 Action Research Stage Two: Action.....	244
6.4.1 The Listening Activities	244
6.4.2 The Speaking Activities	246
6.4.3 Guidance to Students’ Autonomous Learning and Learning Strategies	248
6.5 Action Research Stage Three: Observation.....	248
6.5.1 Data Collection and Data Coding	248
6.5.2 Effectiveness of the New Teaching Listening Approach.....	250
6.5.3 Effects of the TOEFL Podcast Website on Autonomous Learning	254
6.5.4 Impact of TOEFL Listening Pre-test on Students’ Learning.....	256
6.5.5 Effects of TOEFL Podcasts on Students’ Listening and Speaking Proficiency	258
6.6 Action Research Stage Four: Reflections.....	261
6.6.1 Reflections on Topical Discussions.....	261
6.6.2 Reflections on the Novel Listening Teaching Approach.....	262
6.6.3 Reflections on the Promotion of Learner Autonomy	263

6.7 Learning Outcomes and Changes for Future Teaching Practice	265
6.8 Summarizing the Action Research Three Cycles	268
Chapter 7 Summary of the Action Research Project.....	271
7.1 Brief Restatement of Research Questions.....	271
7.2 Research Question 1	274
7.2.1 Perceptions of the Internet-based Materials	274
7.2.2 Analysis of the Pre-test and the Post-test in Cycle One	277
7.2.3 Effects of the TOEIC Listening Pre-test	280
7.2.4 Summary Answers for Research Question 1	282
7.3 Research Question 2	284
7.3.1 Perceptions of the Advantages and Drawbacks of CALL.....	284
7.3.2 Analysis of the Pre-test and the Post-test in Cycle Two.....	286
7.3.3 Summary Answers for Research Question 2.....	288
7.4 Research Question 3	293
7.4.1 Student Reflections on Learner Autonomy by Using CALL	293
7.4.2 Analysis of the Pre-test and the Post-test in Cycle Three.....	297
7.4.3 Summary Answers for Research Question 3.....	299
7.5 Research Question 4	302
7.5.1 English Learning Experiences by Using Modern Technology.....	302
7.5.2 Summary of the Students' English Learning Experiences by Using CALL	318
7.5.3 Summary of the Students' Performance in TOEIC, IELTS and TOEFL Tests	320
7.5.4 Summary Answers for Research Question 4.....	321
7.6 Summary of Chapter 7	322
Chapter 8 Implications and Conclusions	324
8.1 Introduction.....	324
8.2 Description of This Study	324
8.3 Summary of Major Findings	326
8.3.1 An Overview	326
8.3.2 Findings Related to the Research Questions	329
8.4 Implications of This Study	343
8.5 Limitations of this study and suggestions for further research	346
8.6 Significance of This Study	348
8.7 Summary of Chapter 8	349
Appendices.....	350
Appendix I: One example of teaching speaking by the use of brainstorming	350
Appendix II: The speaking topic on advertising and its sample speaking outline	351
Appendix III: Homework 3 (Make an oral presentation).....	352
Appendix IV: Assessment Form of an Effective Presentation (Comfort, 1997:56)	353
Appendix V: Final Assignment (Term Paper)	354
Appendix VI: The Pre-questionnaire at the start of AR Cycle One	356
Appendix VII: The Questionnaire at the end of AR Cycle One.....	358
Appendix VIII: The Questionnaire at the end of AR Cycle Two	360
Appendix IX: The Questionnaire at the end of AR Cycle Three	365
Appendix X: A sample of data analysis trail.....	370
Appendix XI: The ethical certificate of this research project	372
References.....	377

List of Tables

Chapter 2

Table 2. 1 The six criteria for CALL evaluation (Chapelle, 2001)	52
Table 2. 2 CALL evaluation principles and their associated criteria and variables (Jamieson et al, 2004: 398)	53
Table 2. 3 Overview of learning theories and teaching implications	74

Chapter 3

Table 3. 1 The classification of research methodology and methods (Crotty, 1998: 5)	97
Table 3. 2 The Framework of Research Design in this study	119
Table 3. 3 The Procedures of Data Collection and Data Analysis in AR Cycle One	135
Table 3. 4 The Procedures of Data Collection and Data Analysis in AR Cycle Two	136
Table 3. 5 The Procedures of Data Collection and Data Analysis in AR Cycle Three	137

Chapter 4

Table 4. 1 Main characteristics of <i>Business Benchmark Advanced</i> (students' book)	145
Table 4. 2 The students' main learning problems in English study	152
Table 4. 3 The other specific problems in English study	155
Table 4. 4 The students' needs analysis survey on the teaching before the course	157
Table 4. 5 The teaching plan in Action Research Cycle One	159
Table 4. 6 Questions investigating students' use of the Business English podcast website	168
Table 4. 7 The statistical results of investigating the Business English podcast website (I)	171
Table 4. 8 The statistical results of investigating the Business English podcast website (II)	174
Table 4. 9 Comments on improving of listening and speaking skills by using CALL	176
Table 4. 10 The students' specific learning problems at the end of Cycle One	184

Chapter 5

Table 5. 1 Teaching and learning materials from the BBC learning English website	192
Table 5. 2 Key function of the Blackboard Platform learning system	194
Table 5. 3 The teaching lesson planning in Action Research Cycle Two	197
Table 5. 4 Questions investigating the learners' feedback of using CALL environments	210
Table 5. 5 Categories of the learners' favourite materials from CALL environments	213
Table 5. 6 The learners' favourite English language learning websites	214
Table 5. 7 Main reasons of the students' favourite website (the BBC learning English)	215
Table 5. 8 Students' perception on their improvement in listening and speaking at Cycle Two	217
Table 5. 9 Students' learning experiences of improvement in listening by using CALL	218
Table 5. 10 The students' perception of the improvement of speaking skills	219

Table 5. 11 Percentage of students' satisfaction of listening & speaking improvement at Cycle Two.....	220
Table 5. 12 The positive effects of giving oral presentations	222
Table 5. 13 Oxford's adaption of Nunan's stages of autonomy of fit independent L2 learning 229	
Table 5. 14 The students' main problems in learning English at the end of Cycle Two.....	235

Chapter 6

Table 6. 1 The teaching lesson planning in Action Research Cycle Three	243
Table 6. 2 Categories of questions surveying learners' feedback of using TOEFL podcast website	249
Table 6. 3 Student perceptions on effectiveness of the new teaching approach from the TOEFL web.....	251
Table 6. 4 Comments on effectiveness of the new teaching approach from the TOEFL podcast web.....	252
Table 6. 5 Comments on the effects of autonomous learning from the TOEFL podcast website	255
Table 6. 6 TOEFL listening test (pre-test) investigation	257
Table 6. 7 The impact of the TOEFL podcast on student English listening and speaking proficiency.....	259
Table 6. 8 Student comments on effects of the TOEFL podcasts on listening and speaking.....	260

Chapter 7

Table 7. 1 Favoured learning materials for English study.....	275
Table 7. 2 Class One (1) TOEIC listening pre-test and post-test.....	279
Table 7. 3 Class One (2) TOEIC listening pre-test and post-test.....	279
Table 7. 4 Class Two (1) TOEIC listening pre-test and post-test.....	279
Table 7. 5 Class Two (2) TOEIC listening pre-test and post-test.....	279
Table 7. 6 TOEIC listening pre-test investigation	280
Table 7. 7 Student comments on the impact of the TOEIC pre-test on teaching and learning.	281
Table 7. 8 Student perceptions of the drawbacks of CALL	285
Table 7. 9 Class One (1) IELTS listening pre-test and post-test	287
Table 7. 10 Class One (2) IELTS listening pre-test and post-test	287
Table 7. 11 Class Two (1) IELTS listening pre-test and post-test	287
Table 7. 12 Class Two (2) IELTS listening pre-test and post-test	288
Table 7. 13 Class One (1) TOEFL listening pre-test and post-test	297
Table 7. 14 Class One (2) TOEFL listening pre-test and post-test	298
Table 7. 15 Class Two (1) TOEFL listening pre-test and post-test	298
Table 7. 16 Class Two (2) TOEFL listening pre-test and post-test	298
Table 7. 17 Student learning experiences on developing learner autonomy by modern technology	305
Table 7. 18 Student learning experiences of other learning websites/resources	308
Table 7. 19 Student English learning experiences with CALL during middle schools, the 1st three semesters and 4th semester in the University (I).....	319
Table 7. 20 Student English learning experiences with CALL during middle schools, the 1st	

three semesters and 4th semester in the University (II)	320
Table 7. 21 The comparison of the TOEIC, IELTS and TOEFL Tests Marks	321

List of Figures

Chapter 3

Figure 3. 1 The Action Research Three Cycles.....	134
---	-----

Chapter 4

Figure 4. 1 The Business English Podcast Website	148
Figure 4. 2 Management lessons page on the Business English Podcast.....	149

Chapter 5

Figure 5. 1 General & Business English web page on the BBC learning English website	191
---	-----

Chapter 6

Figure 6. 1 The TOEFL listening podcast website (http://www.eslpod.com/toefl)	239
---	-----

Chapter 8

Figure 8. 1 The four leading factors found to be influencing successful English learning	327
--	-----

List of Acronym

AR	Action Research
BBC	British Broadcasting Corporation
BEC	Business English Certificates
CALL	Computer Assisted Language Learning
CET	College English Test
CMC	Computer Mediated Communication
EFL	English as a Foreign Language
ELT	English Language Teaching
ESL	English as a Second Language
ESP	English for Special Purposes
FL	Foreign Language
ICT	Information and Communications Technology
IELTS	International English Language Testing System
IT	Information Technology
L1	First Language
L2	Second Language
MC-Q	Multiple-Choice Question
RQ	Research Question
SD	Standard Deviation
SL	Second Language
SLA	Second Language Acquisition
SPSS	Statistical Package for the Social Sciences
TESOL	Teaching English to Speakers of Other Languages
TOEFL	Test of English as a Foreign Language
TOEIC	Test of English for International Communication
VOA	Voice of America

wpm

Words per minute

Chapter 1 Introduction

First I begin by offering my experiences of learning and teaching English, and my research interests. Then, I will discuss the importance of using CALL (Computer Assisted Language Learning), including the problems of learning English in China, the possible solutions and the rationale of this study. Additionally, the purposes of this study will be presented. As CALL is succinctly defined as “the search for and study of applications of the computer in language teaching and learning” (Levy, 1997: 1), this study makes a great effort to integrate the effective use of CALL into my teaching and my students’ English language learning so that they can make greater achievements within the shorter time. Finally, an overview of this thesis will briefly be introduced.

1.1 My Motivation for CALL Research

I began to learn English at the end of the 1970s, when the Chinese government adopted the open policy to the outside world. As China still was very under-developed at that time, there was a large shortage of not only qualified English teachers in schools and universities but also a lack of the necessary teaching tools such as tape recorders. Because of poverty, I could not afford to buy a tape recorder either. Additionally, as English proficiency of teachers was then very low, the majority of the teachers’ pronunciation and intonation were not good. As a result, learners had to imitate the teachers’ incorrect pronunciations. Although I spent a lot of time in learning English, my communication abilities, especially listening and speaking still were very weak mainly because I never listened to native speakers (including recordings) and I had no chance to communicate with native speakers of English.

A few years later, I could use recorders to learn English and teach English: indeed, the recorder was one of the main tools for use in learning and teaching a foreign language at that time. Meanwhile, my listening and speaking abilities were improved in some ways by listening to the recordings of English native speakers. But the tape recorder has some problems when it is used to learn English. Sometimes the sound of the recordings is not clear and sometimes listening to the tape is uninteresting for learners because they can see no pictures to provide context for what has been heard. But the recorder is cheaper and easier to carry, compared with the personal computer.

It was in 1997 that I decided that it might be interesting and motivating to learn English by the use of computers after I had visited a multimedia computer laboratory in Tsinghua University, one of the best universities in China. Then, I bought some multi-media CD-ROM discs for myself and my students to help them learn English. In class, I often used the computer to have students see English movies or other English teaching programmes so that their listening and speaking abilities could be improved. Additionally, in 1998, the Internet was connected to my work unit, one of the earliest users of the Internet among all the Chinese universities. It was another landmark that pushed our English teaching reforms by the use of the new advanced scientific technologies. From that time on, I often used English teaching and learning resources from the Internet, finding that it motivated and interested the students to learn English faster and improve more quickly compared with the traditional learning tools, such as the recorder. Meanwhile, I encouraged the students to email their peers/friends or me so that they could discuss difficult problems and could get feedback promptly. Also, I often recommended some useful websites to learn English (for example, BBC English learning website:

<http://www.bbc.co.uk/worldservice/learningenglish/index.shtml> (English Version) or <http://www.bbc.co.uk/china/learningenglish/> (Chinese Version, for Chinese students)) and encouraged them to learn the language autonomously after class

by using computers and the Internet-based learning resources. From my teaching observation and the students' test results, the students did improve their English language proficiency, especially their listening and speaking skills, faster than before.

Comparing with the different periods of my learning and teaching experience above, I have concluded that the use of the computers and the Internet will be very useful and helpful for Chinese students to learn English. The functions of the advanced technologies today can bring greater changes into English language learning than before although there may be some drawbacks to learning with CALL.

As Chapelle (1997) suggests, CALL activities should be improved through second language classroom research. As a result, it is important that language teachers undertake research on how CALL can be used effectively and on whom it can help. Following Chapelle's recommendation, I conducted this action research project in classroom teaching by using CALL so that my students could maximize the enhancement of their English language proficiency with a minimum of learning time.

Meanwhile, my personal previous learning and teaching experiences, and my reflections on CALL, have increased my interest in CALL very much. This is why I am extremely motivated and interested in this study.

1.2 Background information on English Language Teaching in China

1.2.1 Brief information on English Language Teaching in higher education in China

The history of teaching English as a foreign language in China dates back to 1862, when the first English class was taken at the Tong Wen Guan (the Imperial Tongwen College) in Beijing (Ruan & Jacob, 2009). Since then, it has continued for over one hundred and fifty years. More recently (in 1978), when the Chinese government adopted the open policy to the outside world to develop the Chinese economy and modernize the country in terms of agriculture, industry, science and technology, it realized the great importance of English language teaching in all levels of schools, colleges and universities. Part of the argument was that China must learn advanced science and technology from Western developed countries such as the UK and the USA. Since much of the research literature is written in English, and many key conferences in these fields are conducted in English, English is a crucial bridge in reaching that goal. Since then, English has become one of the obligatory courses for all level of educational organizations from primary schools to universities in China (Note: because of the shortage of qualified English teachers in rural primary schools, English was not taught until late 1990s there.).

In this thesis I will mainly talk about English language teaching in China's higher educational institutions for non-English majors, which is also called "College English Teaching". College English is a compulsory course for non-English major undergraduate students in China. It was first taught in the early 1980s and it quickly became one of the most important courses in the Chinese higher education systems (Ruan & Jacob, 2009). According to the recent "College English Teaching Syllabus" (Ministry of Education, 2007), there are three requirements (basic requirement, high requirement and higher requirement) in different higher educational institutions in different areas. Among them, the basic

requirement, in terms of listening and speaking skills and vocabulary, is as follows (stated in terms which are translated from the syllabus mentioned above):

Listening: The students can understand lectures and daily English conversations in English or get the main ideas of authentic radio/TV programmes of English speaking countries at 130—150 words per minute (wpm).

Speaking: The students can discuss or communicate on certain or some daily topics in English or make a short speech after preparation on a familiar topic with clear expression and pronunciation.

Vocabulary: The students should know or be familiar to at least 4,795 words and 700 phrases, including 2,000 active words that can be applied skillfully in both speaking and writing.

Of course, the “high requirement” is more than the basic requirement quantitatively. For example, the required listening speed is 150 —180 wpm. The known words should reach at least 6,380 words and 1,200 phrases, including 2,200 active words. Regarding the “higher requirement”, the students can basically understand radio/TV programmes in English-speaking countries and get the main ideas or grasp main points. They can also understand native English speakers at normal speed or understand their major courses in English. They can also present their research papers orally in international conferences fluently and participate in discussion in their majors. The known words should reach at least 7,670 words and 1,870 phrases, including 2,360 active words.

Meanwhile, the above requirements are basically matched with the syllabus for the College English Test (CET) (Bands 4 and 6) for non-English major in China (See Syllabus for College English Test, 2006). The undergraduates for non-English major courses in China, who have finished the College English

Courses Bands 1 to 4 (usually the second-year students), take the CET 4. Those, who have passed CET 4 and have completed the College English Courses Bands 5 to 6 (usually the 3rd year students), sit the CET 6. Those students, who have reached the level of the test requirements, can take the corresponding level of the test earlier. CET 6 is the highest level English proficiency test for non-English majors, but no other test bands except CET 4 and CET 6 are held in the nation-wide country (for more information on CET 4 and CET 6, please see Section 3.4.1, Chapter 3). In addition, CET 4 is nearly equal to the “basic requirement” and CET 6 is nearly equal to the “high requirement”, but “higher requirement” has surpassed CET 6 a little bit more. However, the listening speed of CET 4 just reaches the minimum of the basic requirement (130 wpm) and that of CET 6 just reaches its maximum (150 wpm). Therefore, the listening requirement of CET 6 is less than its corresponding requirement. In other words, if a university student passes CET 6, his or her listening level will have reached intermediate level (around 150 wpm). However, the normal speech rate on average for British English in terms of radio programmes, conversation, interviews and lectures was 175 wpm (Tauroza & Allison, 1990). It is therefore likely that the student will struggle to use English effectively with a native speaker.

1.2.2 The use of CALL in higher education in China

Firstly, CALL is used in language classroom teaching. At present many universities and colleges in China, especially leading universities, have installed modern technology such as the computer and the internet in the majority of classrooms. Teachers can use Power-point to present their teaching content, or to show pictures related to that content, on large screens in the front of classrooms. Similarly, video programs can be shown on large screens. Also, there are some loudspeakers on the classroom walls, which enable students to

hear audio/video files more clearly.

Secondly, more modern technology for language learning is available for university students in China. For students, almost everyone owns a laptop computer, mobile phone and a digital media player such as MP3 and MP4. In addition, in college or university dormitories, there is an internet connection so that they can get access to the internet conveniently. Also, the majority of present college English textbooks in China are accompanied with CDs or DVDs or video/audio files so that students can watch or listen to them out of class by using computers. Furthermore, there are some English language learning websites which suit Chinese college students as they make their preparations for the CET (College English Test) Bands 4 and 6. An example is the Huijiang English website.

Thirdly, virtual course learning tools are established in most of Chinese colleges and universities. These include the Blackboard Academic Suite (also called a Blackboard learning system or Blackboard Platform), which is similar to the WebCT system that is available at the University of Exeter. The key functions of Blackboard Platform are as follows (Southworth et al, 2006): 1). Students online are allowed to chat in their target language in real time with their peers or teachers in order to practise their spoken language or improve communications with others. 2). Both students and teachers are permitted to create a discussion thread and reply to ones already created. Some students get rapid feedback about the difficult points that they encountered from their teachers or their peers. 3). Teachers can upload articles, e-books, assignments, video/audio files and so on in relation to the course contents for students to browse/download. Students can obtain more supplementary materials from the Blackboard Platform in order to support their language learning out of class and promote their autonomous learning abilities. 4). Online testing is available. Posted quizzes and exams allow students to access them online very conveniently. Also, students' assignments or homework are permitted to be submitted online. Their teachers can assess their

written work and give them their marks or feedback on their assignments.

Besides the above technology and CALL environments, there are some autonomous language learning centres available for students in most colleges and universities in China. These own many computers which are connected to the Internet, in order that students can learn English autonomously out of class. On the whole, in present China, college and university students can get access to the good CALL environments in English language learning. However, one of the most important issues is how to make full and effective use of the above technology and the CALL environments in order to improve their English study.

1.3 The reasons for the importance of the use of CALL in China

1.3.1 The problems of learning English in China

China not only has the largest population in the world (1.3 billion) but also the largest number of the EFL (English as a foreign language) learners in the non-native English-speaking world. It has recently been estimated by some experts of language teaching that approximately 300 million learners in China are learning English, including nearly 23 million college students who are studying compulsory courses (Liu & Yu, 2006).

It is interesting to consider why there is this astonishing number of the learners of English in Modern China. I argue that there are three primary reasons. One reason is that China lags far behind Western countries such as the UK and the USA in areas such as advanced science and technologies, economics, and

education. Therefore, China needs a large number of highly talented people in those fields. In order to learn advanced scientific technologies and to gain management experience from the Western countries, Chinese people must master the English language as a first step so that they can get access to the professional and research literature in those fields.

The second reason is that jobs in China have always been highly competitive because of its large population. In China, there are three kinds of foreign-invested enterprises: Sino-foreign joint ventures, cooperative businesses and exclusively foreign-owned enterprises. In these enterprises, the working language is English, not Chinese, so the English proficiency of Chinese staff should be at a very high level so that they can communicate with the foreigners easily. As a result, if a job seeker's English proficiency is better than that of the others, he/she can have more opportunities to get better jobs and better salaries.

The third reason is that many students would like to go abroad for further study in the developed English-speaking countries such as the UK and the USA so that they can return to China to find better jobs when they complete their studies in these countries. These factors offer a strong motivation for learners to learn English. Therefore, it has been seen that English study is more important than any other foreign language learning in China.

Despite the prominence and importance of English language learning in China, today's learners still meet a number of learning and teaching problems, in particular the so-called "time-consuming, low efficiency" and "deaf and dumb English" problems, which have not been solved completely (Ruan & Jacob, 2009). The "time-consuming, low efficiency" approach (also called "inefficient learning strategies") mean a learner has spent a lot of time learning English but he/she has made a little progress. "Deaf and dumb English", also called "limited listening and oral ability", means a learner can only read and write; however, he/she can neither understand nor speak English. The existing language

learning problems have prevented not only the learners' improvement of oral communicative abilities but also the promotion of their comprehensive language abilities. In other words, these two problems for Chinese students' English language learning have led to lower learning efficiency and weaker communicative abilities.

1.3.2 The cause of the learning problems in teaching English in China

From my teaching experience, I have identified four possible primary reasons for the learning problems in teaching English in China.

First of all, the majority of English teachers in China still use traditional teaching methods, such as the grammar-translation teaching method, which focuses on translating texts and teaching grammar in class. This teaching method is especially common in some middle schools in rural areas. In their classes, they still teach students grammatical knowledge, other language knowledge, and techniques/tips to take English examinations so that they can ensure their students to achieve higher scores in the entrance examinations to Chinese higher education institutions. This has been confirmed by recent research on English language learning problems in senior middle schools in China (Luo, 2012). By practising a large number of exercises related to the entrance examinations repeatedly, many students indeed get high marks in the examination, but they have poor skills in communicative abilities, especially in terms of speaking skills (ibid). Additionally, due to the increased enrolment in Chinese colleges and universities since 1998 and the shortage of qualified English language teachers, class sizes are so large (it is said that the maximum English class contains nearly two hundred students) that teachers have to adopt traditional teaching methods, such as the teacher-centred approach. For

example, I used to teach English to more than 100 college students in a classroom. Facing so many students, I had to conduct the teacher-centred approach. Although there were some teaching activities such as group work and pair work, most of the time in class I only focused on teaching them knowledge of the English language. Sometimes I translated difficult sentences from the English textbook into Chinese so that the students could understand them clearly. Perhaps one of the advantages of the grammar-translation method used in class is that the meaning of the target language is made clear by the use of translation into their native language (Larsen-Freeman, 2000). However, their listening and speaking practice have been neglected by the use of this teaching method.

Secondly, some Chinese learners appear to have ineffective learning strategies. Perhaps because of the teacher-centred methods employed, they dislike learning English autonomously, but prefer to be “spoon-fed” by their teachers. Such a phenomenon might be caused by the popularity of the teacher-centred approach and the teaching methods used in China’s English language teaching and learning context over a long period of time (Fang, 2002). As a result, it has led to lower communicative abilities. For instance, one of the typical approaches requires students to remember grammatical rules and a large number of discrete words. Despite these, they cannot use them freely in their actual conversation and they cannot freely communicate with native speakers of English either. On the whole, their language learning is largely by rote, but they are unable to apply their language knowledge in real communicative situations.

Thirdly, English examinations may mislead a student’s language learning. In language testing, one of the most important concepts is called backwash/washback, which refers to “the positive or negative impact of a test on classroom teaching or learning” (Richards & Schmidt, 2002: 586). The effects of a test on teaching and learning can be divided into the two kinds of backwash. One is called positive backwash, a kind of beneficial backwash, which can improve teaching and learning (Baxter, 1997). For example, if there are listening

and speaking sections along with reading and writing sections in an English as a second or foreign language test, the teachers and their students will emphasize the teaching and learning of listening and speaking, because the students find it more difficult to improve listening and speaking than the other two sections. The impact of such a test has therefore a positive effect on teaching and learning. On the other hand, if there are only reading and writing sections in an English test without listening and speaking sections, then teachers and their students will be less likely to focus on the teaching and learning of listening/speaking, which is called negative backwash. As teachers, we want to increase the positive backwash of tests on teaching and learning. However, because of a test backwash effect on language learning, most Chinese college students place an emphasis on learning a certain number of isolated words and structures in order to pass English tests such as the CET (College English Test) (Bands 4 and 6) in China. The primary reason is that in China's testing system there is a strong emphasis on reading comprehension and grammar, although writing and listening comprehension are tested as well. Generally speaking, Chinese college students seldom practise speaking English because there is no speaking section in the English examinations such as the CET Test (Bands 4 and 6), mentioned above.

Finally, despite the fact that the government encourages students to learn English autonomously by using advanced technology, computer assisted language learning (CALL) has not been applied to English Language Teaching in all colleges or universities in China. Probably, funding shortages have been a principal drawback, but even if the facilities such as computers have been provided, some English teachers fail to guide their students in how to learn English autonomously by using computers, seemingly unaware of the benefits of this for their learning or perhaps unfamiliar themselves as how to use computers.

On the whole, the above four possible causes that I have suggested might lead to the learning problems in teaching English in the Chinese context such as the

“time-consuming, low efficiency” and “deaf and dumb English” problems. It is very important for language teachers to try to solve the above learning problems in their teaching experience, and I suggest some solutions next.

1.3.3 Possible solutions to the learning problems

While there are many approaches to solve the above learning problems, in my opinion, not all are necessary feasible. For example, in Chinese universities, a large number of English native speakers need to be employed to teach students listening-speaking courses, as this may be expected to enhance the students' communicative abilities. However, this would cost the students much more in tuition fees, which many students could not afford. From the point of view of economics, such a solution does not seem to work in China's context. But in today's colleges and universities in China, almost every student owns a personal computer/laptop and digital media players such as MP3 and MP4. Meanwhile, many universities provide students the internet connection in their dormitories and the course learning tools such as the 'Blackboard Academic Suite' (or 'Blackboard Platform'), whose functions are similar to those of WebCT at the University of Exeter. Besides, teachers can use computers to teach students English instead of traditional teaching equipment such as tape recorders. Therefore, it is economically viable that the learning and teaching environments by the use of modern technologies, such as computers and the Internet, may help to solve the learning problems mentioned above.

1.4 Rationale of this study

Drawing upon the various arguments above, the purpose of the study reported in this thesis is to explore the potential of computers and the internet in English

language learning in China. The following are the principal reasons why I conducted this action research project, to show that the study could help solve students' problems in their English language learning, produce theories in educational research and enhance the quality of CALL research and practice, English language learning and teaching in China as well as improve a teacher-as-researcher's professional development.

1) CALL is one of the feasible solutions to English learning problems in China

At present a very important issue is how to solve the learning problems in teaching English in China. As mentioned above, one of the more feasible solutions is for learners to use the computers to learn English in the future, given the popularity of the use of CALL. I would like to explain the reasons why in the following.

As stated earlier, although the advantages of teaching English by native speakers are very obvious, it is very difficult for the majority of students to afford much higher tuition fees. As a result, one of the most probably solutions is using computers and the internet learning environments which can potentially reproduce of 'native speakers' to teach English. With the development of advanced technologies, some forms of spoken interaction online, such as audioblogs and voice email, have been developed recently (Levy, 2009). Meanwhile, a type of the computer program called a chatterbot/chatbot, "a type of computer program designed to simulate a conversation with one or more human users via auditory or textual methods" (Levy, 2009: 776), has been developed so that language learners can be offered more opportunities to speak the target language as they would in the real world. This is very helpful for language learners to improve their communicative abilities.

Additionally, from the recent research literature on the combination of language

education and modern technologies, there is a number of research evidence (e.g., Gu (2006); Lu et al (2010); Tian & Yang (2008)) to show that CALL is proving to be very effective in a Chinese context. For example, Lu et al's study (2010) is one of the most successful cases of the development and application of the student-centred teaching approach and ICT (Information and Communication Technologies). Their research paper examines the feasibility of the student-centred teaching model employed in an English audio-video speaking class in CALL environments at a Chinese university by undertaking two quantitative longitudinal case studies. The results indicate that this specific teaching model in general is both plausible and effective in improving students' communicative language abilities, especially in their speaking abilities. Also, it shows that the combination of the student-centred teaching model and the CALL environment in classroom teaching is more effective than adopting just a single teaching model. In this case, their research did enlighten and encourage me as a teacher and researcher to undertake this action research project in my language teaching practice so that the language proficiency of my students could be enhanced promptly.

In short, from the examples listed above, it can be clearly seen that CALL may be useful and helpful ways in solving learning and teaching problems that exist in English language teaching in China.

2) The Investigation into the English language learning and teaching experience in the Chinese context helps to improve teachers' professional development

In the educational setting, successful teaching practice may be dependent upon good theories which can inform educational practice and activities. In this situation, teachers need to select a range of theories which are the most relevant to their teaching context.

As the relationship between theory and practice is often both complicated and subtle, different types of theory apply to educational practices in different ways (Winch & Gingell, 2008). That is to say, theory is not only pre-existing knowledge found in books, journals and so on but it can be created by teachers through their own exploration and actions in practice. In fact, teachers are reminded that they should employ correct learning and teaching theories to conduct their teaching practice appropriately. In the meantime, they should pay attention to theories which have been derived from different contexts/situations. On this point, Biesta's argument (2007) is helpful for teachers. Having pointed to the importance of John Dewey's work on practical epistemology, Biesta (2007) utilized Dewey's theories to argue that research can only show people what worked in a particular situation in the past, not what will work in any future situation. Generally speaking, theories that refer to research results are generated in a particular context or situation, or at a certain period of time. If all the conditions are changed, it is uncertain as to whether the theory can work in the new context/situation. Therefore, how to apply educational research findings or educational theory properly to educational practices in different situations/contexts is very important and significant and it is well worth teachers' considering this issue very carefully before they conduct their educational research. In other words, teachers should examine similarities or differences between the contexts of earlier studies in the papers and their own contexts before they re-interpret their research teaching or research study so that their research can meet with the required criteria of educational research.

Additionally, reflective practice, closely related to a teacher's professional development (Norton, 2009), plays an important role in educational practice. It is a very complex concept, first introduced by Donald Schön. As defined by Schön (1983), reflective practice includes considering one's own experiences contemplatively in applying knowledge to practice. The importance of reflective practice focuses on the reflection, which is particularly valued in the context of a professional life because the aim of reflective practice is "to increase learning at

the individual and organisational levels so that educational practice continuously improves and student learning is enhanced” (York-Barr et al., 2006: 31). The main advantage of reflective practice is to positively affect professional growth and development by leading to the development of new knowledge about professional practice and to a broader understanding of the problems that practitioners face (Osterman, 1990). Therefore, reflective practice can help practitioners develop professionally. When professional development is promoted effectively, a teacher’s practice in an educational setting will improve correspondingly (Carlton, 2010). Consequently, reflective practice is one of leading means to enhancing not only teachers’ professional development but also their educational practices.

Finally, it would be useful for language teachers to understand language learning theories and their reflections/reflective practice in relation to CALL. For example, it would be important to understand how teachers in China use ideas from SLA (Second Language Acquisition) Theory inform their work in a Chinese context. Also, it would be interesting to see how they use their reflections around their experiences of CALL practice. From the recent research, Nassaji (2012) confirms that the majority of teachers perceived that mastering SLA research findings and theory would be useful to improve second language teaching. Meanwhile, it is also found that teachers’ knowledge obtained from their teaching experiences was more relevant to their teaching practices than theirs gained from research or theory. Furthermore, SLA (Second Language Acquisition) Theory is useful to develop CALL and evaluate its materials (Chapelle, 2009). From the above relationship between SLA theory and teachers’ reflections in relation to CALL, the connection between SLA theory and CALL would be helpful to improve second language teaching and learning. In the meantime, teachers’ reflections from their teaching experiences are useful to better understanding their teaching practices so that their professional development can be promoted.

3) The application of action research helps to enhance the quality of CALL

research and English teaching.

As Burns (2010) points out, action research can be a very valuable way to extend a teacher's teaching skills and gain a better understanding of themselves as teachers, their classroom and their students. Teachers can apply action research as a research methodology in their teaching practice in order to try their best to solve the learning problems that their students encounter. Regarding the concept 'action research', various definitions are presented by different researchers. Kemmis and McTatgart (1992: 10) argue that "to do action research is to plan, act, observe and reflect more carefully, more systematically and more rigorously than one usually does in everyday life". Bassey (1998) defines 'educational action research' as an enquiry undertaken so as to understand, to evaluate, then to change and to improve, educational practice. In fact, action research refers to teacher-conducted classroom research, including a cycle of activities centering on identifying a problem/issue, collecting information about the issue, devising a strategy to address the issue, trying out the strategy, and observing its effects (Richards & Farrell, 2005). From the above definitions, the criteria of action research in educational research, mentioned in Kemmis and McTatgart's definition (1992) ("more carefully, more systematically and more rigorously"), basically corresponds to the requirements of scientific research. Thus, it can be ensured that the qualities of researches such as CALL research may be enhanced. For the same reason, from the former definitions, educational practice will be improved and reformed from action research.

The importance of action research also has a beneficial impact on the professional development of teachers (Costello, 2011), which is key to improving teaching practice in an educational setting (Carlton, 2010) and may lead to the enhancement of teaching quality.

4) Educational action research practice helps to generate educational theory.

For many years, theory has been considered to be abstract and something unattainable, perhaps because it might have been thought to be generated by prominent scholars or experts in a certain research area, not by ordinary people, such as practitioners and teachers. Indeed, for instance, scientific theories did derive from scientific experiments conducted by some well-known scholars in the field of natural sciences. However, since the emergence of action research in social sciences in the late 1940s, some educational theories have been born of inquiry and investigations in practice conducted by practitioners in using practice-based research (Mott, 1996). This could be considered to be a benefit of the action research approach because the approach promotes the relationship between theory and practice, where theory supports practice in action research projects and practice is informed by theory (Snodgrass, 2009). It has been clearly shown that theory and practice are very closely related. Additionally, practice in education is one of the most important sources of educational theories. For example, a practitioner (or a teacher) undertakes an action research project in his/her professional practice. The outcomes of the action research project can be shared with other colleagues. Also, the written paper based on the project can be submitted to relevant educational research journals in both national-level journals and international-level journals in order that it can be published and shared with a wider academic audience. Once it has been accepted in a research journal, the research findings may become part of an educational theory. In this situation, just as McNiff et al (1996) point out, the practitioner by his/her individual professional practice makes some contribution to a new epistemology of educational practice. In other words, the action research approach can help teachers/educators in their professional practice to generate new educational theories.

1.5 The Aims of This Study

On the basis of the above, the study reported in this thesis aims to explore the effective use of CALL, how it may improve and support teaching and learning, and how to make sense of the impact of CALL on English language learning and teaching to enhance the quality of education. Additionally, it presents a language teacher's successful teaching experience and his students' learning experiences through the use of the modern technologies such as computers and the Internet so as to solve learning problems such as "deaf and dumb English" when they learn English. From the teacher's practice and the students' learning experiences, it is expected that a new theory on language learning in relation to the use of the modern advanced technologies might be generated.

Finally, action research as a research methodology has been employed in this research project, which has been considered as one of the newest research approaches by China's educators, different from other traditional research approaches, so that this kind of research methodology can be developed further in the Chinese context to improve teachers' educational practice in the future.

1.6 A Brief Overview of the PhD Thesis

As stated in the previous section, the principal purpose of this study is to explore the use of CALL and how CALL environments may be effectively improved to support English language learning in the Chinese context through the use of the Western educational approaches, such as student-centred teaching approaches and learner autonomy. Additionally, action research as a research methodology has been undertaken in this research project in order to better improve the teacher and researcher's teaching practice and professional development.

The thesis consists of eight chapters. This chapter presented the research project background information, the current situation and key learning problems of teaching and learning English in China's higher education institutions. Also, one of the more plausible solutions to problems such as 'deaf and dumb English' in English language learning in China was briefly discussed.

Chapter 2 mainly reviews the literature in the research areas of Second Language Acquisition (SLA), learning theories such as behaviourism, constructivism and cognitive psychology theory, in addition to an overview of Computer Assisted Language Learning (CALL), all of which are related to the research questions and the principal aims of this study. In particular, it focuses on the relationship between CALL, learner autonomy and motivation because these three factors are some of the most significant elements in supporting learners' language learning. The advantages and disadvantages of CALL in relation to the teaching of basic language skills are also discussed. The focus of this review emphasizes the importance of the application of CALL environments and of Internet resources, combined with a learner's autonomous learning abilities, so that the quality of English language learning and teaching can be enhanced. Meanwhile, it stresses the correct and appropriate application of modern technologies to language teaching and learning practice. The chapter also presents some successful practical teaching and learning experiences to improve listening and speaking skills by the use of CALL and the application of podcasting.

In Chapter 3, some terms in relation to research approaches such as quantitative research and qualitative research are defined and the distinctions between them are discussed. It also presents the theoretical foundations of action research as a research methodology employed in this study, along with the brief discussion of the research paradigms between ontology, epistemology and methodology philosophically. Additionally, background information relating to

the research participants and teaching contexts in one of the northeastern China's universities is introduced. Furthermore, research procedures, choice of research instrumentation and data analysis methods are presented in this chapter as well. Finally, ethical issues are considered seriously and discussed.

This study, as a teacher-as-researcher's individual action research, consists of three cycles. Chapters 4, 5 and 6 describe the detailed research processes and report some of the findings of the whole research project on each cycle respectively, including the teacher and the students' reflections from their teaching and learning English by the use of modern technologies, such as the computer and the Internet, and the teacher's plan on changing his teaching style in the next cycle. Chapter 4 introduces firstly the aims of the course and the coursebook adopted in classroom teaching. Also, the first English language learning website (Business English learning site) used in classroom teaching and by the students in their study outside class is described in detail. During Action Research (AR) Cycle One, some existing problems in English language learning are addressed by the researcher's teaching practice. Chapter 5 explores the improvement of the learners' comprehensible input (listening) and output (speaking) by the combination of CALL environments (including the second learning website (BBC Learning English site) and the University Blackboard Platform), and the learners' active performance in class and their autonomous learning outside class in order to better solve some learning problems left over by AR Cycle One. Chapter 6 addresses the remaining learning problems identified in AR Cycle Two so as to better enhance the students' communicative abilities, in particular to improve their advanced English listening skills, via the third learning website (the TOEFL Podcast website).

In the final two chapters of the thesis, Chapter 7 presents the responses to the research questions posed by this study, based on the major research findings of the three cycles of the action research project. Chapter 8 summarizes the major findings with respect to the research questions, provides recommendations on

future teaching practice and further research in education and offers some suggestions on CALL research and on future educational practice. Finally, the significance of this study regarding the theoretical and practical contributions made to educational research is presented.

Chapter 2 Literature Review

2.1 Introduction

As this thesis is driven by the desire to enhance English teaching and learning in China using CALL (Computer Assisted Language Learning), the purpose of this chapter is to develop an informed understanding of the concept of CALL, its benefits, and to consider insights from second and foreign language learning theory that can be used to apply modern technology appropriately. A particular focus of interest, in keeping with the rationale developed in Chapter 1, is to identify a set of guiding principles to promote the spoken and listening skills of students through autonomous learning with digital media.

This chapter reviews learning theories such as behaviourism, cognitive learning theory and constructivism, CALL theories, linked to second language learning theory and to some of the key learning factors influencing second language learning, such as motivation and learner autonomy. The above theories are closely linked with teaching practice and research project conducted by the author himself. This review will emphasize the importance of CALL environments and internet resources, combined with the autonomous learning abilities of learners, so that English language learning and teaching can be enhanced. It also stresses the application of modern technologies to language teaching and learning practice. The following is an overview of each section in this chapter.

Section 2.2 presents an overview of CALL and defines other relevant concepts, such as online learning. It discusses the advantages and the disadvantages of CALL and the importance of the effective use of CALL environments and internet

learning resources in English language learning and teaching, especially the improvement of listening and speaking skills. It also discusses about the evaluation criteria of CALL materials and the promotion of learners' listening and speaking abilities by using podcasts. Section 2.3 presents an overview of second language learning theory and sociocultural theory. It also stresses the importance of comprehensible input and output and the role of interaction in CALL environments in the processes of language learning. Section 2.4 discusses the relationship between CALL and other important learning factors such as motivation, learner autonomy and learning strategies, which greatly influence a learner's success in second language learning. Section 2.5 explores the relationship between a student-centred teaching approach and learner autonomy in language teaching and learning. Section 2.6 presents the application of podcasts in terms of learner autonomy. Section 2.7 briefly summarises what has been taken from the literature review. Section 2.8 provides research questions for this study, dependent upon the literature review in this chapter.

2.2 An Overview of CALL

2.2.1 CALL, online learning and e-learning

CALL can be succinctly defined as the application of computers to help learners learn a second or foreign language. Historically speaking, the emergence of CALL dates back to 1960, when the PLATO (Programmed Logic/Learning for Automated Teaching Operations) system for language learning and teaching was initially developed by the University of Illinois, a very important milestone in the early development of CALL (Levy, 1997; Marty 1981). From that time on, the development of computer technology passed through three main phases: mainframe (in the 1970s), the increasing availability of the microcomputer (in the

1980s) and the invention of the internet (in the 1990s). With the rapid development of modern technology, mainly in relation to computers, the development of CALL has been improved gradually. Warschauer (2000) suggests three stages of the evolution of CALL. The first stage is Structural CALL (from 1970s to 1980s). At this stage, language was viewed as a formal structural system and the principal use of computers stressed language structure (e.g., drill and practice) in language learning and teaching. Also, one of the primary aims of computer technology either in or out of the classroom was to improve students' language proficiency and language skills. The central issue here was still to accomplish teaching objectives or learning objectives through technology, which is considered to be a tool to assist and support language learning and teaching (Warschauer, 1996).

The second stage of CALL is described as Communicative CALL (from the 1980s to the 1990s). This evolved to reflect the availability of internet learning resources and the development of technology which allowed for increased human-computer interaction. This provided an opportunity to develop a pedagogy entailing a substantial interactive (communicative) involvement. Moreover, it includes the search for, and the investigation of, applications in language teaching and learning. Therefore, the use of CALL in classroom and outside classroom is intended to help and improve language teachers' teaching and their students' target language proficiency. In short, CALL means the use of the computer, including the use of the internet, in order to enhance language teaching and learning (Kern & Warschauer, 2000; Levy, 1997).

The third (current) stage of CALL has been described by Warschauer (2000) as Integrative CALL, which combines multimedia and the internet in the 21st century. Indeed, the use of the term CALL has been expanded and now has a greater coverage and wider scope than when the term was first introduced. For example, the application of new modern technologies in language learning and teaching includes personal digital assistants (PDAs), cell phones with text

messaging and Web searching capabilities, laptops (or tablet computers), peripherals and other electronic devices such as digital media players (e.g., MP3, MP4 and MP5). This has expanded the opportunities for language learning, particularly out of class as many learners will have access to digital resources through their own PDAs making it possible for learners to learn a language “in any context with, through and around computer technologies” (Egbert, 2005a: 4). Kern (2006) argues that today CALL can be understood to refer to a pedagogy which prioritizes language learners’ learning and widens the potential types of relationships between computer technologies and language learning.

As digital technology has continued to expand well beyond the limits of computers, as mentioned earlier, other terms have been developed which can be seen to correspond to integrative CALL. One term widely used is on-line learning. This is learning through educational material that is presented on a computer connected to the internet (Carliner, 1999) and learning experiences that comprises a learner’s interaction with the content and instructor, as well as other learners (Ally, 2008). It may occur in class or remotely, using the Web as a medium (Khan, 1997).

E-learning also refers to an alternative method of teaching and learning using electronic media, such as the internet, networks, audio/video tapes and CD-ROM (Compact Disc Read-only memory). Mason and Rennie (2006) define e-learning as the location of the learning, which is the use of network technologies to create, foster, deliver and facilitate learning, anytime and anywhere. They argue that e-learning is an effective learning process created by combining digitally delivered content with (learning) support and services.

The expression “digital technology enhanced language learning” has become more popular in the TESOL field than CALL (Evans, 2009). This term highlights one of the primary purposes of the combination of technology and education, that is, to improve the quality of education. The emphasis is on networked

computers and laptops as well as digital media players and their role in supporting a learner's language learning, and recognizes that these technologies are increasingly the technologies of choice for younger people (Bates, 2005).

In this thesis, the term "CALL" will be used because it is familiar to teachers and researchers in the field of TESOL. In spite of other new terms, such as Technology Enhanced Language Learning (TELL), the central core of technology is always related to computer technology. Therefore, there does not seem to be a need to discard the term "CALL".

2.2.2 The advantages and disadvantages of CALL

This section discusses the advantages and disadvantages of CALL, which will enable me and my students to identify both advantages and disadvantages in applying modern technologies, such as computers and the internet, and CALL programmes, so that we can get the maximum effectiveness of advanced technologies to enhance English language teaching and learning in our practice, as Lai and Kritsonis (2006) advocate. Being aware of some of the potential disadvantages of CALL can also help raise awareness of things to try to avoid, so increasing the efficiency of the application of technology. As will be seen below, my review of the literature suggests that despite some drawbacks, a substantial body of research from the last 10-15 years suggests that CALL provides significant support for language learning.

2.2.2.1 Advantages of CALL

With regard to the advantages of CALL, firstly, CALL can offer language learners flexibility and convenience by providing learning opportunities to anyone, at

anytime and anywhere, especially with online learning (Flowers & Cotton, 2003; Hollenbeck et al, 2005; Shin & Lee, 2009). This flexibility can help students who have full-time jobs, or childcare or other family obligations (Hurt, 2008). From an economic perspective, online learning can also help students save money and effort. From people's learning experiences, self-study is more difficult than school education or formal education, because school teachers with professional training can give a lot of help and support, but self-taught learners can get no such help or support in their studies. But like school students, online students can obtain the same learning materials and teaching video files from the internet and can also communicate with their tutors or peers via online chat or discussion, so their difficulties can be dealt with. Having reviewed studies showing the positive effects of the application of technology in language education, Zhao (2003) finds that technology-supported language learning is at least as effective as language teachers. Therefore, it can be seen that online language learners can basically receive nearly the same language education as formal education.

Secondly, in the field of online learning, CALL can facilitate easy communication and interaction between students and facilitators or with the other members in a group (e.g., through a chat room or discussion forum, in addition to the internal emailing system) (Lai & Kritsonis, 2006; Rohleder et al, 2008). Such interactive activities can help encourage and improve communication between teachers, students, and peers (Flowers & Cotton, 2003; Lai & Kritsonis, 2006). These activities can stimulate students to learn actively and promote their cooperation and motivation in their studies. For example, Skype is an internet voice, video and instant messaging communication tool that can connect a classroom to the world, and can provide students learning a foreign/second language with an authentic language experience in the classroom (Tsukamoto et al, 2009). In their research, Tsukamoto et al (2009) describe how web conferencing between Japanese high school students and US high school students encouraged the Japanese English-language students to play more active roles in the classroom

than before because they began speaking much more English during conference calls and preparing more eagerly for their lessons. One of the most important findings was that the Japanese students clearly enjoyed speaking with American students through Skype, which gave them more confidence in practising oral English than before.

A third advantage of CALL identified is that learners can get access to the internet to find abundant authentic learning materials (Rohleder et al, 2008; Hurt, 2008). Students are able therefore to have more opportunities to develop their four basic language learning skills (listening, speaking, reading and writing) by using authentic materials. For instance, in the Chinese EFL (English as a Foreign Language) context, Hu (2007) explored a student-centred pedagogy in a technology-rich learning environment to discover the role of instructional technology in improving Chinese students' reading proficiency in English study. She argues that a technology-rich learning environment enabled students to learn more efficiently without the restrictions of time and place. They could read online news and other authentic materials from internet learning resources. She concluded that a technology-rich student-centred approach enabled students to improve their reading ability more quickly, efficiently and independently, compared with more traditional ways of learning.

Fourthly, CALL can cultivate good learning habits, motivate learners and promote learner autonomy (Fang, 2002; Gu & Xu, 1999; Prathibha, 2010). Students can get immediate feedback when they do online exercises, especially objective item exercises, such as multiple choices. Also, they can get instant feedback from their teachers or peers when they encounter difficult questions by email or by other communicative forms, such as online chat/discussion, in real time.

Finally, one of the most important points is that CALL and its attached programs can enhance a learner's achievement and increase their learning efficiency in

language learning (Chen & Chung, 2008; Lin, 2010; Prathibha, 2010; Zhao, 2003). For example, Lin (2010) suggests that video-based CALL programs rapidly increased a student's vocabulary acquisition. Teachers can also benefit from CALL by becoming more creative in the ways that they present their teaching materials and in designing online courses in a more structured and organized way than traditional courses (Hurt, 2008; Prathibha, 2010). From my teaching experience, language teachers can create something novel in terms of the selection of learning materials from the internet, the design of courseware and the adoption of the teaching approaches in CALL contexts, in order to meet their students' needs.

2.2.2.2 Disadvantages of CALL

In spite of the many advantages of CALL leading to its growing popularity, there are some disadvantages that need to be given due consideration. Firstly, CALL might lead to the user's health problems (Lamanauskas, 2008). In particular, if users have been in front of computers for a long time, this can harm their eyes or backs. Secondly, online communication sometimes becomes disconnected (Rohleder et al, 2008). Students feel very isolated in online courses or in e-learning courses because of the lack of interaction or communication with others (Hurt, 2008). Although learning is considered to be a collaborative process (Wang, 2005), students may prefer to learn collaboratively with computers or they may prefer face to face communication.

Another disadvantage mentioned by Lai and Krisonis (2006) is that the software and computer programs in second language learning are imperfect, and computers and most learning programs are not intelligent enough to be truly interactive, mainly because computers and human beings cannot interact completely. A final disadvantage is the difficulty of quality control. As there are tens of thousands of English language learning websites, it is difficult for a

learner to find a suitable learning website to meet his/her requirements in English study. As a result, some time spent in seeking suitable learning websites is wasted.

On the basis of the above discussion, it is evident that despite its advantages, CALL also has some possible disadvantages. In this respect it is not different from many other educational resources which also have both positive and negative sides. For example, one of the CALL advantages is that it can enhance communication between teachers, learners and peers. On the other hand, for reasons such as technical problems, sometimes online communication is difficult to conduct. Also, another of the advantages is to increase learners' learning efficiency, i.e. to save their learning time. However, if learners lack self-motivation or time management skills or autonomous learning abilities, they will waste a great deal of time on the internet spent on something irrelevant to their studies, such as playing games. Given that motivation and autonomy are closely connected to success in CALL applications, I will consider these in more depth in Section 2.4 below.

Given the various points raised above, while we cannot deny the important role of CALL, we should not exaggerate its role in teaching and learning a foreign language, because computers are imperfect. In the long run, it is difficult for computers to substitute a teacher's role in education. Therefore, we cannot ignore the important role of teachers because they still play a vital role in language learning. As the term CALL implies, the computer and its attached hardware and software, including the internet and the other modern electronic devices, are tools to support language learning.

2.2.3 CALL environments and development of language learning skills

The language learning environment plays a vital role in language learning and teaching because the classroom language learning environment is the component of language acquisition that teachers, researchers, learners and technology can directly affect (Egbert et al, 1999; Kern et al, 2004). In fact, such environments are closely related to modern technologies, such as the computer and the internet, because technology has been used for a long time to improve language learning (Salaberry, 2001). As far as the types of the modern technologies used in language learning and the learning issues to be addressed are concerned, the applications of all kinds of modern technologies have become more and more popular. Zhao (2003) argues that some of the most available technologies including video, audio, multimedia, communication, network, and speech technologies have been used to support the teaching of various aspects of language learning including vocabulary, grammar, reading, writing, speaking, listening, and culture.

One of the key issues that concerns language teachers is how students can make good use of CALL environments and internet learning resources in order to support and enhance their language learning. Echoing many of the advantages outlined above, a comparative study of CALL environments and traditional ESL (English as a Second Language) classroom environments undertaken by Warschauer (1996) compared student participation in face-to-face discussion in the second language classroom and electronic discussion, using computer-mediated communication (CMC), such as emails and text chat. He found that there was a significant tendency toward more equal participation with computers, and the language the students used in terms of vocabulary and grammar was more formal and complex in electronic discussion, than had been the case with face-to-face discussion in a traditional classroom. The results of

his study suggest that CALL can be used to help learners develop their formal written work, such as academic writing. Sullivan and Pratt (1996) confirmed that the more positive effects of the students' English writing with a CALL networked environments than those of non-CALL environments. Of particular interest to this study is whether CALL might also be seen to have a similar positive effect on students' spoken and listening skills, and I will consider this in more detail below.

2.2.4 Teaching Listening and Speaking by Using CALL

While much has been written about the benefits of CALL for a number of language learning skills, the benefits for developing listening and speaking have received less attention and many educators have tended to assume that computer software and the internet cannot easily support listening and speaking or is not better than face to face communication (Egbert, 2005b). However, Egbert (2005b) also points out that in fact computer technology can assist students to interact with other English language learners and with native speakers in many different forums, not only to practise, but also to develop listening and speaking skills. Additionally, she argues that interaction with more fluent speakers may be possible because learners can use computers as a means of communication with native speakers and more advanced second language learners around the world. Here 'interact' on the internet means that language learners can communicate with native speakers or other language learners orally, by Skype or MSN or web/video conferencing, which may require learners to listen and speak rather than other forms of computer-mediated communication, such as chat (through text), which might indirectly support the development of speaking and listening, but actually involves writing.

Klassen and Milton (1999) evaluated the effectiveness of a multimedia-based English language learning programme at the City University of Hong Kong. They found that students in a multimedia-enhanced mode improved their listening

skills more significantly, compared with those in the traditional mode.

Lu et al (2010) found, in an English audio-video speaking class in a CALL environment at a Chinese university, that a teaching model combining a student-centred approach and CALL environment was very effective in enhancing the communicative language abilities in students, especially their speaking abilities.

With regards to listening skills in language learning, the majority of studies on the use of technology in listening were of self-developed courseware and these took some different forms, such as a system for learners of French that included sound, video, pictures, glossaries, dictionaries and a record keeping system (Stockwell, 2007). With respect to speaking skills, the most commonly used technologies were CMC (Computer-Mediated Communications) technologies such as text chat, voice chat and audio-conferencing technologies. Voice chat varies from audio-conferencing in that it is possible to record a message and check it first before sending it, whereas with audio-conferencing, the audio is recorded and sent in real time. This is a particularly useful technology to support language learning, but other technologies, such as podcasts, were used in my study in order to enhance student listening and speaking abilities, discussed below.

2.2.5 The Evaluation of CALL Materials

Compared with the evaluation of language learning materials, the evaluation of CALL materials may be more complicated because CALL materials consist of software, computer programmes, CDs, DVDs, audio/video files and other materials such as Pdf and WORD documents. The evaluation of CALL materials should therefore involve CALL developers, SLA researchers, language teachers and students. In the past three decades, among the various evaluation criteria

on CALL materials which have been presented, Chapelle (2001) has provided very valuable and important criteria. These relate to the application of software, teacher-planned CALL activities and learners' performance in order to inform CALL design and research and to help language teachers select and evaluate CALL activities (Villada, 2009). The six criteria for CALL evaluation, defined by Chapelle (2001), are summarised by Jamieson, Chapelle and Preiss (2005: 94), listed in Table 2.1.

Table 2. 1 The six criteria for CALL evaluation (Chapelle, 2001)

1	Language learning potential	The degree of opportunity present for beneficial focus on form
2	Meaning focus	The extent to which learners' attention is directed toward the meaning of the language
3	Learner fit	The amount of opportunity for engagement with language under appropriate conditions given learner characteristics
4	Authenticity	The degree of correspondence between the learning activity and target language activities of interest to learners out of the classroom
5	Positive impact	The positive effects of the CALL activity on those who participate in it
6	Practicality	The adequacy of resources to support the use of the CALL activity

Jamieson, Chapelle & Preiss (2004) argue that researchers often feel that the most important one of the six criteria in Table 2.1 is language learning potential, and they therefore usually analyze the extent to which the CALL materials provided evidence of language learning potential in terms of enhanced input, interaction and production. They also analyzed the extent to which the CALL assessments provided evidence of usefulness, or quality, in terms of authenticity and construct validity. Table 2.2 presents the two most important principles and five criteria (i.e., enhanced input, interaction and production; authenticity and construct validity) for evaluating CALL materials and activities (Jamieson, Chapelle & Preiss, 2004: 398). Also, the researchers provided the other two principles for CALL evaluation. Principle 3 states "the criteria used to conduct the analysis should be drawn from theory and practice in SLA and language assessment". Principle 4: "judgmental evaluation through defined variables is valuable for examining materials in a way that can improve future design" (ibid). Based on these principles and evaluation criteria, judgmental evaluation approach is very practical for language teachers to assess CALL materials.

Table 2. 2 CALL evaluation principles and their associated criteria and variables (Jamieson et al, 2004: 398)

Principles	Criteria	Variables	Examples of Operationalized Variables
1. Language learning potential should be the central concern when developing and evaluating CALL.	Enhanced input	Input salience, modification, elaboration	Text highlighted on the screen
	Interaction	Between people, between a person and computer, within a person	Learner-learner communication tasks; grammar help available
	Production	Planning, correcting production, using help	Taking notes suggested; model for constructed responses
2. CALL should be evaluated in terms of the quality of assessment in addition to instruction.	Authenticity	Domain sampling	Correspondence between tasks on test and in courseware
	Construct Validity	Score interpretation	Meaningfulness of scores

In the 1980s and the 1990s, simple checklists were mainly used in the assessment of CALL materials (Villada, 2009). However, Chapelle (1998) opposes this and argues that CALL evaluation should be guided by Second Language Acquisition (SLA) research. Additionally, Chapelle (2001) considers other important elements as principles of CALL assessment. One is that multiple research methods should be used in CALL evaluation. For example, both judgmental and empirical evaluation approaches should be used (Chapelle, 2001). That is to say, judgmental evaluation is on the basis of individual's logical analysis while empirical evaluation is on the basis of observed data from an individual or more people. On the whole, the six criteria about the evaluation of CALL materials mentioned above, proposed by Chapelle (2001), will be very helpful to any researcher researching CALL materials, because they emphasise evaluation of effective language learning through CALL materials, focussing in issues such as software design or task development, including the interactive ways for learners (Jamieson, Chapelle & Preiss, 2005). It is particularly vital to evaluate CALL for college language classrooms where CALL materials must fit the requirements of learners in order to enhance the quality of English language learning.

2.2.6 Use of podcasts and the promotion of Listening and Speaking Abilities

2.2.6.1 Defining podcasts and podcasting

The term “podcast” emerged in 2004 as a combination of the Apple’s iPod and the word “broadcast” (Robinson & Ritzko, 2009). In fact, a podcast refers to any digital media file (either audio or video) posted on the internet and which can also be downloaded. Many podcasts are not just played on a regular computer, but may also be used on portable digital media players and may also be delivered via Really Simple Syndication (RSS) (Andersen, 2011).

It is worth mentioning the fact here that the podcast user can subscribe to a podcast that will be downloaded automatically every time there is an update or new content is uploaded (Rosell-Aguilar, 2007), which is different from straightforward downloading from the internet. As soon as the latest content is delivered to the user, he/she can receive it. Therefore, there are a number of advantages to podcasts, which will be discussed in detail in the next section.

2.2.6.2 Advantages of using podcasts

Firstly, podcasts are audio and video files which can easily be downloaded from the internet onto mobile digital media players. It has been suggested that podcasting has great potential for improving language learners’ listening skills (Artyushina et al., 2011). Numerous recent research projects on digital technology have confirmed Artyushina et al’s claim. For example, Hawke (2010) developed science students’ scientific English listening skills through podcasts. Hawke’s research findings indicated that these students’ post-test scores were

significantly higher than their pre-test scores. Also, by using various research methods such as pre- and post-tests, interview, and students' reflective diaries, Ashraf, Noroozi and Salami (2011) investigated the effect of listening to podcasts on the listening skill of some Iranian EFL sophomores. They concluded that podcasts can be used to improve the listening skill of ESL (English as a Second Language) learners.

Secondly, using podcasts can save learners more time than other audio technologies such as audio cassette tapes and compact discs (CDs) because the digital technology needed to play podcasts (e.g., mobile phones, or iPods) are widely used and completely portable. Use of podcasts is not, therefore, constrained by considerations of time and space (Hew, 2009). If language learners can autonomously learn the target language by using podcasts downloaded onto digital media players, they can make full use of the time and the location available, increasing a learner's flexibility and accessibility (McGarr, 2009).

Thirdly, enhancing students' learning and their study skills is one of the main advantages of using podcasting (Edirisingha et al, 2007) because podcasting has not only increased in use with distant education programmes, but has also become popular with on-campus courses (McGarr, 2009). The increasing use of podcasting in education has the potential to significantly change the teaching and learning experiences of students (Harris & Park, 2008). Copley (2007) notes that some universities have started to use podcasts to 'deliver supplementary lecture materials for campus-based students' (p.388). He claims that the most common use of podcasting is for the distribution of lectures. Evans (2007) describes a study on the effectiveness of mobile learning (m-learning) in the form of podcasting, for teaching undergraduate students in higher education. Statistical analysis of the results of his research indicates that his students believed that podcasts were more effective revision tools than their textbooks and they were more efficient than their own notes in helping them to learn. It has

also been shown that they were more receptive to learning material in the form of a podcast than a traditional lecture/textbook. His study suggests that the use of podcasts as a revision tool had clear benefits as perceived by undergraduate students in terms of the time they took to revise and how much they felt they could learn.

In addition to the advantages of flexibility in when, where and how it is used, podcasting seems to have significant potential as an innovative learning tool for adult learners in higher education. Ip et al (2008), Edirisingha et al (2007) and Clark et al (2007) also confirm that podcasting or module podcast can help students improve their learning. One of the main disadvantages of podcasting, however, is the lack of visual links to overheads, PowerPoint slides or writing on a board (Tynan & Colbran, 2006).

2.2.6.3 Using podcasts to improve listening and speaking skills

In the above literature on podcasting, some examples of enhancing learning with podcasts were cited. In this section, enhancing English listening and speaking skills using podcasting will be discussed.

Kavaliauskienė (2008) describes learners' perceptions of listening to online podcasts, self-evaluations of their own performance in individual listening practice and reflections on ways to improve listening skills. Some implications of the research are that podcasts play a significant role in teaching and learning English as a foreign or second language. Firstly, they raise learners' awareness of suitable, individual, ways of perfecting listening skill that promote language learning; and, secondly, learners have come to realize that listening skills can be improved through practice by their own choice, such as the choice of using podcasts.

Choi and Chen (2008) used MP3s to enhance the English listening skills of

students. Results of their study indicate that students showed significant improvement compared to those in a control group. The study also suggests that MP3s were a cost-effective tool that could positively enhance a learner's listening ability. The students were able to download MP3s and listen to them at anytime, anywhere. As a result, they had more listening practice and also improved their spoken English.

Many researchers have pointed to the benefits that podcasts can offer learners to develop their listening and speaking skills in particular. Sze (2006) focuses on using ELT podcasts resources to improve listening skills and organizing speaking activities to enhance speaking skills. The teachers encouraged their students to produce their own podcasts in order to enhance their motivation in developing their English listening and speaking skills.

In summary, based on the above research, podcasts can play a vital role in learning English, especially in developing a learner's listening and speaking abilities. Therefore, if English teachers can guide their students in the use of podcasts, the quality of language education will be better enhanced, compared to traditional learning.

The section that follows discusses second language learning theory, laying the theoretical foundations for this study.

2.3 An Overview of Second Language Learning Theory

This section reviews recent second language learning theories that are relevant to this research project and prominent second language learning or acquisition (SLA) theories that impact on CALL in different ways are discussed, namely: behaviourism, cognitivist learning theory (including constructivism and interaction perspectives) and sociocultural theory.

2.3.1. Behaviourism

According to behaviourist learning theory, learning is viewed as the formation of habits (Ellis, 1994). These are formed when the learner is confronted with specific stimuli which lead to responses, which are, in turn, reinforced by rewards. Behaviourist learning theory highlights environmental factors rather than internal and mental factors (ibid). As habits are developed when learners respond to stimuli in the external environment, their responses are strengthened afterwards in order to be remembered (Ellis, 1997). American psychologist B.F. Skinner's approach to behaviourism in classroom teaching emphasizes rote learning by imitating and memorizing through the repeating of drills, so that learners can get some achievement by small positive responses, as well as perhaps move to a new level of drill (Beatty, 2003). Another important feature of Skinner's theory is "the role of reinforcement: things or actions that strengthen a desired response by making the learners feel better about themselves" (ibid, p.86). Accordingly, learners, especially language learners, may learn more or get better marks within a short time of intensive training on a particular subject.

Behaviourist learning theories have had a lasting impact on our understanding of the process of human learning because there is much in the theory that is true and valuable (Brown, 2000). In terms of its application to language teaching, this has led to the development of a number of pedagogical practices. In addition to drilling mentioned above, it has also encouraged the arrangement of learning activities in a sequence, from simple to complex, with frequent reviews and tests of important points.

Behaviourist learning theory has also influenced CALL pedagogy, particularly the development of programmed instruction (Beatty, 2003). Programmed

instruction on the behaviourist model suggests that learners can be taught various subjects, at each stage requiring appropriate answers from the learner before going on to more difficult stages. For instance, some of the important features of programmed instruction in CALL practice are the use of multiple-choice questions and constructed response answers, which are also used in language testing, such as computer adaptive tests (CAT). However, along with a general criticism of behaviourist learning theory to be discussed below, programmed instruction has been criticised for its emphasis on teaching detailed language points while ignoring communicative activities in language teaching (Rivers, 1981).

Skinner's behaviourist theory attracted criticism from a number of quarters, most significantly from Noam Chomsky in linguistics and from Jean Piaget from the perspective of child developmental psychology. What these criticisms share in common is a view that the theory does not take into account the active role that learners play in processing the information they receive. Chomsky argues that behaviourist theory cannot explain 'the logical problem of language acquisition' (Lightbown & Spada, 2006: 15), the ability of individuals to be creative with language and produce things they had not previously encountered. Piaget stressed the active role of children in the learning process from the angle of cognitive developmental psychology (Williams & Burden, 1997), in contrast with their passive role as behaviourists advocated.

In summary, behaviourist learning theory has played a significant role in the history of SLA and in the application of CALL. With respect to the implications for online learning in terms of behaviourism, learning materials selected must have clear objectives and appropriate reward strategies for correct responses so as to promote learning (Ally, 2008). This requires teachers to choose appropriate learning materials from a large wealth of learning resources on the internet, from the easier to the more difficult ones, in order to motivate and interest students, to enhance their learning. However, its negative side is that learners may lack

creative abilities, and logical and critical thinking in their learning processes. Also, in terms of language teaching and learning, communicative abilities are overlooked by using the behaviourist model.

In spite of its drawbacks, one of the practical applications, programmed instruction continues to be widespread in CALL practice nowadays (Betty, 2003). The criticisms of behaviourism outlined above have led to the need to develop an understanding of language learning as a mental or cognitive process and to the growth of cognitivist theories of SLA, to which I will turn next.

2.3.2 Cognitive theoretical perspectives on SLA Theory

Cognitive theory derives from cognitive psychology, which deals with internal mental processes, such as problem solving, memory, thinking, reasoning and perception (Pritchard, 2009; Richards & Schmidt, 2010; Thornbury, 2006). Theoretically speaking, cognitivist perspectives encompass a number of different theoretical movements, including mentalist or innatist perspectives, information processing models and constructivism. Among these, those which have attracted the most attention in SLA theory in recent years are interactionism and constructivism, and these will be therefore be discussed in depth below.

2.3.2.1 Interactionist SLA perspectives

Interactionist theory in terms of SLA perspectives is one of very useful theoretical approaches in SLA to develop and evaluate CALL tasks and materials (Chapelle, 2009), so this section focuses on its basic theory and principles in SLA, including the best-developed model, IIO (Input, Interaction and Output) Model, which is arguably the dominant theoretical perspective on SLA (Block, 2003).

(1) Defining Input, Output and Interaction

According to second language acquisition theories, input refers to the language which learners hear or read, which they are learning (Richards & Schmidt, 2002; VanPatten & Benati, 2010). Similarly, the language that learners produce, (i.e., speak or write) is often called output (Richards & Schmidt, 2002). From our language learning experiences, whether first language or second language, it is impossible for learners to learn without input. For the same reason, learners can generate (speak or write) no language without input (listening or reading). Most scholars in the second language acquisition research area hold the view that “input is indispensable for acquisition” (VanPatten & Benati, 2010: 39). Additionally, according to Stephen Krashen’s input hypothesis, the input must be comprehensible (Thornbury, 2006). Therefore, input is the first step and the important premise to acquiring a second language.

Dependent upon Krashen’s theory of language acquisition, a new concept has emerged, called comprehensible input, which is also a necessary condition for second language acquisition, although not sufficient (Block, 2003). Comprehensible input refers to “spoken language that can be understood by the listener even though some structures and vocabulary may not be known” (Richards & Schmidt, 2002: 99). In other words, comprehensible input emphasises that the listener should really make sense of the whole meaning of what is spoken, not just the meaning of some words or phrases.

Another important element in language learning is output, which is considered to be the product of spoken or written language produced by a language learner (Richards & Schmidt, 2010). Comprehensible output also refers to a language learner’s spoken or written language which makes him/her understood by other speakers of the language (ibid). Such comprehensible output can lead to the language growth of the learner (Swain, 1985), which suggests a crucial role for output in the development of a second language or foreign language (Gass &

Selinker, 2008).

A third important element in language learning is interaction, which occurs when language learners communicate with one of the three kinds of people: their peers (or other learners), their teacher and other speakers of the target language (Thornbury, 2006). The above three types of interaction can be conducted by learners either in face-to-face interaction or in online interaction. For example, learners can communicate with their classmates by pair/group work under teacher-led interaction or under the teacher's instruction/guidance in a language classroom. Outside class, learners can use social environments such as 'English corners' in some larger cities in China, which provide more opportunities for learners to practise speaking English. Besides these, learners can use the internet to interact with the above three kinds of people in online learning environments, such as the Blackboard platform and WebCT. Through the above ways of interacting, a language learner's consistent language practice is helpful in improving their language learning proficiency.

Finally, another interactive approach develops language learning through input (exposure to language), production of language (output) and other aspects, such as feedback (Gass and Mackey, 2006). That is to say, learners with sufficient language input can perhaps produce some certain amount of production in language (output). In such a way, the entire language learning process can be accomplished.

(2) Relationship between Input and Output

For many years, comprehensible input has been considered as a necessary and sufficient condition for essential for SLA (Krashen, 1985). The acquisition of second languages lies in a learner understanding messages or their receiving comprehensible input, which is called input hypothesis, developed by Krashen (1985). In his famous one of the SLA theories, called "i+1", "i" represents a

current state of knowledge in language and in the next stage called “i+1”, just beyond it so that comprehensible input received by learners can be useful to their acquisition (Gass & Selinker, 2008; Krashen, 1985). In some sense, if learners do not have enough comprehensible input in their language learning, it is very difficult for them to produce comprehensible output. The main reason is that the processes of language learning are very complicated. For example, among the four basic language skills (listening, speaking, reading and writing), learners can “input” a language practising listening and reading, and can “output” the language by speaking and writing. As long as the amount of input for language learners reaches a certain level, they can produce comprehensible output. Here it should be stressed that the amount of input is not equal to that of output. However, generally speaking, as long as the amount of comprehensible input is much more than that of comprehensible output, language acquisition will occur.

As mentioned above, as far as language learners are concerned, the realization of comprehensible output is very complicated. Swain (1985) argues that when learners have to make an effort to ensure that their output is comprehensible (i.e. produce ‘pushed output’), acquisition may be developed. It shows that language acquisition and output need more effort and hard work.

However, in recent theoretical models, output has been explored as a learning process, in which the English-language learner is tested on second-language understanding and learns from the feedback received (Anthony, 2008). Swain (2005) points out that in the 1980s, the word “output” was used to indicate “the outcome, or product, of the language acquisition device”, which was synonymous with “what the learner/system has learned”. Gradually, the concept of output has been considered to be a very important part of the process of learning, not simply the product of it, and has emphasized the importance of producing the target language (i.e. output) for English language learners (Swain, 2005). Meanwhile, her research evidence indicates that input alone is not

sufficient for learning a second language or a foreign language and the importance of input in learning a language has been stressed. Input is undoubtedly important for a child who is learning either a first or a second language (Anthony, 2008). Without sufficient input, it is very difficult for language learners to produce a certain amount of output. Of course, the amount of output makes up a very low amount of input. The 'intake' stage between input and output is a pivotal stage during which learners must process the linguistic materials assimilated (Gass, 1997; Block, 2003) and match it against existing knowledge (i.e., what has been learned previously) and integrate the comprehended input, either storing it for later use (or future reference) or applying it for immediate output (Hite & Evans, 2006). It should also be noted that comprehensible output (i.e., production results) that learners produce is more difficult than the comprehensible input that they gain because production generally requires more syntactic processing than comprehension (Nagata, 1998).

From the above, it can be clearly seen that both input and output are closely related and play a very vital role in language learning, especially in second/foreign language learning, and is considered to have a positive influence on language learning (Gass & Selinker, 2008).

2.3.2.2 Interaction in the process of language learning and CALL

As mentioned above, one of the most important theories in second language learning (or acquisition) is IIO (input, interaction and output). The term 'interactionist' is used to describe the ways in which the tradition has evolved to recognise the importance of other people and the social world in understanding second language learning (Lightbown & Spada, 2006). Susan Gass (1997) has put these different strands together into an IIO model (input, interaction and output), which has been a dominant model in recent years.

Interaction in SLA refers to “the way in which a language is used by interlocutors” (Richards & Schmidt, 2002: 263). Thornbury (2006) lists three kinds of interaction, which happens when learners communicate with three kinds of people: A) with classmates/schoolmates; B) with their teacher(s); and C) with other speakers of the target language, including their friends, peers, and native speakers of the target language. I feel that another type of interaction between learners and computers in the age of the modern advanced technology exists, although intelligent CALL is currently imperfect. Whether all these of kinds of interaction can enhance second language learning or not is to be discussed in this section.

How language learners make input and output comprehensible is still an issue with which language teachers should be concerned. Mackey (2002) points out that learners can get comprehensible input or make input more comprehensible by means of “interaction”. Long (1996) argues that second language interaction can make language acquisition easier by offering more opportunities for learners to receive comprehensible or different input as well as to modify their own output more opportunities for output (see also Swain, 1985). Through such interaction, learners have more chances to understand and use the language that was incomprehensible (Mackey, 2002).

Mackey (2002) describes interaction with different kinds of people, indicating different results. When learners interact with their teacher or a classmate in the classroom, they achieve 76% of comprehensible input. When interacting with native speakers of the target language and peers respectively, they obtain 80% and 65% of comprehensible input. This shows that interaction between learners and native-speakers can obtain the most comprehensible input, but the least comprehensible input is between their peers. Additionally, a language learner’s active participation in interaction plays a role in the process of language learning. Mackey (1999) reviewed others’ research on interaction, and suggests that

learners with very active participation in interaction would receive the most benefit and that learners with very passive participation—for example, those who observed interaction without taking part in it, or who took part in scripted interaction—would receive less benefit. Mackey (1999) also confirms the point that actively participating in conversational interaction has a positive effect on the production of developmentally more advanced structures and that interaction without active participation has limited effects, which does not lead to the development of second language acquisition very well. Swain and Suzuki (2008) have reviewed the research on the role of interaction in second language learning from the early 1980s to the mid-1990s, and conclude that: “interaction promotes second language acquisition” (p.558). Meanwhile, Wang and Castro (2010) investigate the effects of classroom interaction between EFL (English as a Foreign Language) adult students and students or between students and their teachers in a Chinese context. They indicate that classroom interaction and language output have a positive effect in enhancing the learning of a foreign language, echoing the findings of Swain and Suzuki (2008).

Interactive multimedia has the potential to create high quality learning environments, which provide learners with two types of interaction: synchronous and asynchronous (Cairncross & Mannion, 2001). Cairncross and Mannion (2001) point out that “interactivity can be used to enhance the learning process through creating integrated learning environments” (p156). This study also argues that if an effective interactive learning application is to be designed, then a user-centred approach to the design should be taken. This approach should be based on general human-computer interaction principles as well as educational theory. Their research shows how the key elements of interactive multimedia (multiple media, user control over the delivery of information and interactivity) can be used to enhance the learning process and promote deeper learning. Smith (2004) examines the Interaction Hypothesis (Long, 1996) in a computer-mediated communicative environment. Smith’s study supports the Interaction Hypothesis and has provided evidence that the negotiated interaction

with lexical acquisition between non-native speakers is extremely effective in a CMC environment, similar to face-to-face interaction in some ways. Therefore, his study suggests teachers should encourage learners to conduct interactivity in language learning online in order to improve language learning.

From the above research findings, it can be clearly seen that the advantages of computers or a multimedia environment through human-computer interaction or interactivity is beneficial, supportive and helpful to education, especially to language teaching and learning. Similarly, Sinclair (2003) reports on the experience of a university professor and her graduate students as they started face-to-face and online learning. Her research results, in terms of student learning, professional practice and mentoring, indicate the benefits of utilizing technology as a support to direct personal interaction, rather than replace it. From that research project, it can be seen that it is a better learning style for learners to combine the use of technology with face-to-face tutorials so that learning efficiency can be enhanced.

2.3.3 Constructivism

Constructivist learning theory represents a paradigm shift from education dependent on behaviourist theory to education based on cognitive theory (Wangpipatwong & Papisratorn, 2007). The concept of 'constructivism' in education refers to "theories of knowledge and learning" (Lowenthal & Muth, 2009: 177). Constructivists hold the view that learning should be an active process rather than a passive one (Ally, 2008; Beatty, 2003). Erben et al (2009: 63) claim that "in constructivist pedagogy, all learning is active and not passive." Ally (2008) argues that learners should be permitted to construct knowledge rather than teachers impart knowledge, because the learner is at the centre of the learning, with teachers playing a facilitating role. Based on a constructivist

framework, learning is defined as an active process by which learners construct new knowledge and awareness based upon current and past knowledge and experience (Rüschoff & Ritter, 2001). Constructivists believe that learners should construct their own knowledge or their own new ideas or concepts rather than accepting those given by the instructor (Ally, 2008; Betty, 2003). However, in many constructivist pedagogies, there remains an important role for ideas and concepts given by the instructor. Constructivism affects how students are prepared to enable them to engage with these ideas and what they should do with them.

Constructivists claim that all knowledge is constructed socially or individually (Lowenthal & Muth, 2009). Although constructivism is not a theory of teaching, constructivists argue that “pedagogy should be based in theories of learning to ensure that teaching always centers on student learning” (ibid, p.179). A number of important features of constructivist learning theory have been summarized by Pritchard (2009):

A) The construction of knowledge for learners is very important, rather than the reproduction of knowledge. B) Multiple representations of reality caused by learning, such as the use of a variety of resources (e.g. first-hand experience, interactive materials), can be used to develop critical thinking. C) Reflection on prior experience, collaborative work for learning and autonomy in learning are encouraged. In particular, encouraging collaborative work and autonomous learning are extremely helpful.

On the whole, based on the above constructivist views on learning, teachers should adopt a student-centred approach in classroom teaching and students should play an active role in their learning processes.

2.3.3.1 Contribution of constructivist perspectives

Some of very typical implications of online learning from a constructivist point of view are that, firstly, collaborative and cooperative learning should be inspired to promote constructivist learning (Johnson & Johnson, 1996; Palloff & Pratt, 1999). The promotion of collaborative and cooperative learning may help effective learning. Secondly, learners should take charge of the learning process and be allowed to make decisions about learning goals, with some guidance from their instructors in some respects (Ally, 2008). Here the importance of learner autonomy is emphasized. Thirdly, the learning process should include interactive activities in order to promote higher-level learning (ibid). The implication is that interaction plays a vital role in online learning processes.

Additionally, in comparison with traditional learning, Wangpipatwong and Papisator (2007) show that students who used constructivist e-learning system have better learning outcomes and knowledge development than those who did not use such a system. They conclude that students studying in a constructivist e-learning environment had a better knowledge development than those in a traditional learning environment.

The characteristics of a constructivist e-learning environment (ibid) are: firstly, constructivist learning emphasizes a student's learning experience rather than a teacher-centred approach. In such a constructivist e-learning environment, the role of a teacher is mainly to guide them to learn more effectively, using appropriate learning methods. Secondly, students are encouraged to actively explore information and build knowledge rather than passively receive knowledge. Finally, e-learning easily enables students to communicate with each other without the limits of time and place.

Constructivism is in considerable agreement with the fundamental characteristics of CALL. The main essential characteristics of CALL applications are usefulness, interesting content, interactivity, and ease of use, which help to

develop autonomous learning, in students (San, 2007). These characteristics in turn have a strong influence on student attitudes and behaviour towards independent learning. San (2007) found that students viewed email, word processing and the use of the internet, as useful or interesting things to help them to learn English. Constructivism therefore plays an important role in the use of CALL and in the development of learner autonomy.

2.3.4 Sociocultural Theory

Social constructivism was developed from Piaget's constructivist learning theory, as well as the work of Bruner and Vygotsky (Pritchard & Woollard, 2010). Vygotsky's sociocultural theories in particular play a central role in developing second language learning theories, so he has been considered to be an important figure in TESOL research (Lightbown & Spada, 2006; Mitchell & Myles, 2004). For example, mediation is a central concept for Vygotsky (Kao, 2010; Lantolf, 2000; Lantolf, 2006; Warschauer, 2005; Williams & Burden, 1997) because "all human activity is mediated by tools or signs" (Warschauer, 2005:41).

Two aspects are emphasized in social constructivist learning theory (Pritchard & Woollard, 2010). One is the role of social interaction in the process of building knowledge and understanding, because knowledge is considered to be a social product, and learning is viewed as a social process. The other is "the role of culture and context in developing personal and shared interpretations and understanding of reality" (ibid, p. 9). It is helpful for language teachers as researchers to understand this to conduct better research.

Mediation for Vygotsky is any tool employed to help solve a problem or achieve a goal (Kao, 2010; Williams & Burden, 1997). Generally speaking, these tools of

mediation encompass language, which is viewed as a symbolic (or psychological) tool of mediation in mental activities (Lantolf, 2000; Williams & Burden, 1997), and the use of technology is a physical tool and sign system, which mediate interaction between humans and the environment (Haas, 1996; Warschauer, 2005). Through such mediation, the use of different tools can mediate learning, solve problems and improve learning abilities. Williams and Burden (2009) showed that mediators played a vital part in enhancing a learner's learning, because interaction with different people, such as parents, teachers and peers, with different levels of skills or knowledge, often led to effective learning, encouraging learners to move on to the next stage of learning or understanding. It is believed that such mediation can help effective learning because learners can relax in friendly interaction with relatives or friends or teachers and learn more in such harmonious environments. On the whole, it is important that language teachers understand how to use physical tools such as computers appropriately in their classroom teaching through suitable mediation as mentioned above, so that students can enhance their learning efficiency, which is also one of the most important aims that should be achieved in educational research.

2.3.4.1 The Application of Sociocultural Theory to CALL

As Owen (2005) points out, it is possible that socio-cultural theory offers one of the most auspicious frameworks for educational technology, especially CALL. Therefore, it is important for language teachers to understand how sociocultural theory can be applied to CALL. Warschauer (2005) puts forward three main aspects of Vygotskian thought that are useful to understanding CALL: mediation (mentioned above), social learning and genetic analysis (also called developmental analysis). As space is limited, social learning is to be introduced briefly here.

One of the most important characteristics of 'social learning' is that it must occur through social interactions and processes between actors within a social network, either through direct interaction, e.g., conversation, or through other media, e.g., mass media, telephone, or Web 2.0 applications (Reed et al, 2010). Consequently, it can be inferred that social learning must happen in CALL environments, which is helpful for language learners in improving their language communicative abilities. In particular, Warschauer (2005) also stresses the great value of social learning for CALL research and practice, especially for CMC, which is defined as any communicative exchange that happens through the use of two or more networked computers, such as by instant messages, e-mails, chat rooms, and so on (McQuail, 2005).

Regarding CALL research from the angle of sociocultural theory, Warschauer (2005) covered the following three overlapping contexts: "(1) technology-enhanced learning in individual language classes, (2) language learners' informal uses of new technologies outside the classroom, and (3) telecollaborative exchanges between classes" (p.43). Generally speaking, language teachers, who undertake CALL research, mainly focus on the study of the first and the second contexts, i.e., in classroom learning and out-of-classroom CALL contexts. For example, Warschauer (1999) examined the implementation of online and computer-based language learning in various situations in individual technology-enhanced language and writing classes at college level. From the experiences of language teachers, the application of modern technology takes place outside classroom. It is helpful then for researchers to examine learners' out-of-classroom learning experiences using a sociocultural approach, which tries to address the wider social context (Warschauer, 2005; Lam, 2000).

2.3.5 Summary of Second Language Learning Theories

According to Lavadenz (2010/2011), learning theories are best described as conceptual or philosophical orientations about ways that human beings learn consist of behaviorist, cognitive, and sociocultural perspectives. Some learning theories, such as cognitive learning theory, can be viewed as psychological aspects from learners' learning ways as well. Table 2.3, from Lavadenz (2010/2011: 19), summarizes learning theories and the teaching implications.

Table 2. 3 Overview of learning theories and teaching implications

Learning theory	Origination	Definitions and instructional implications
Behaviourist	The USA, 1914; influenced by European empiricism	Learning as a response to environmental stimuli and can be manipulated, observed, and described (Watson, 1919; Skinner, 1938). Teaching thus is through practice, repetition, and rewards.
Cognitive	1950s to present	Learning can be explained as deep, complex psychological phenomena such as motivation, schemas, and processes for learning (Bruner, 1996; Piaget, 1974). Teaching occurs in phases with gradual complexity.
Sociocultural	1970s to present	Learning is influenced by social, cultural, and historical factors. Learning takes place through social interactions (Vygotsky, 1978; Wertsch, 1991). Teaching occurs through meaningful interactions between experts and novices.

2.4 Key Learning Factors and CALL

Many learning factors lead to successful language learning, directly and indirectly. In this section, learning factors such as motivation and learner autonomy, which may have a major impact on learners' learning second language proficiency by the use of CALL, are discussed.

2.4.1 Motivation, learner autonomy and CALL

As motivation plays an important role in language learning, there has been a lot of research on the relationship between motivation and language learning. Motivation is considered to be important in achieving a learner's goal and determining his/her success or failure in language learning (Thornbury, 2006). Generally speaking, motivational theories are based on a learner's attitudes/desires, goal setting, goal value, expectation of success and so on. According to some theories of motivation (Gardner & Lambert, 1972; Richards & Schmidt, 2010), various kinds of motivation have been distinguished.

Instrumental motivation occurs when a learner has a functional goal, such as getting a job or passing an examination. On the other hand, integrative motivation occurs when a learner wishes to identify with the culture of the L2 group. Another distinction is made between intrinsic motivation, such as enjoyment of language learning itself, and extrinsic motivation, which is driven by external factors, such as parental pressure, societal expectations, academic requirements, or other sources of rewards and punishments.

Statistical evidence indicates that motivation is a predictor of language-learning success, confirmed by numerous quantitative studies (Gass & Selinker, 2008). Therefore, motivation is regarded to be one of the primary learning factors that determine success or failure in second/foreign language learning.

There have been also numerous researches on motivation and learner autonomy (e.g., Benson, 2007; Dickinson 1995; Dörnyei, 2001a; Dörnyei, 2005; Reid, 2007). Dickinson (1995:165) asserts that autonomous learners become more highly motivated and that autonomy leads to better, more effective work. The reviewed literature on motivation in his paper suggests that there is an important link between autonomy and some educational theories of motivation, which could account for the claimed power of autonomy.

Spratt et al (2002) examine the relationship between motivation and autonomy. Their study aimed to assess student readiness for learner autonomy in language learning by examining their views of their responsibilities and those of their teachers'; their confidence in their ability to operate autonomously; and their assessment of their level of motivation to learn English. It also investigated their actual practice of autonomous learning in the form of both outside and inside class activities. Results indicate that motivation played a key role in this readiness, and this led the authors to look at the relationship between autonomy and motivation as revealed in the study and in the literature. The authors conclude that motivation is a key factor that influences the extent to which

learners are ready to learn autonomously, and that teachers might therefore endeavour to ensure motivation before they train students to become autonomous. In short, Spratt et al (2002) argue that it is motivation that precedes autonomy.

Additionally, there are the other three research articles (Hu, 2008; Yu, 2007; Zhou, 2008) on the relationship between motivation and English language teaching in the Chinese context. Zhou (2008) focuses on the discussion of three main factors that affect language learning in the Chinese context the most. The three important factors are: (1) Self-consciousness; (2) Learners' emotion and their attitudes towards the second language learning; and (3) Social environment and demands. The author presents the four suggestions on how to promote the learners' motivation: A) Language teachers should adopt a learner-centered teaching model; B) Language teachers should create an authentic language learning environment; C) Language teachers should assign appropriate tasks; and D) Language teachers should cultivate students' confidence.

Yu (2007), similar to Zhou (2008), found that motivation can be inspired by appropriate tasks, the teacher's role and feedback. Meanwhile, Hu (2008) discusses the correlation between an increasing sense of achievement and sustaining student motivation in a Chinese cultural setting, in which language learning cannot be understood in terms of Western cultural values. Hu (2008) also suggests that language teachers should try every means and utilize any occasion to ensure that students can feel a sense of achievement and see progress during more advanced levels of learning, in order to promote learner motivation.

All of the above research confirms that motivation plays a very vital role in language learning and teaching.

Finally, the use of CALL and the internet leads to learner motivation. Katz (2002)

shows that certain psychological attitudes towards the use of ICT facilitate the efficient use of distance learning. Satisfaction with learning, level of control of the learning process, and study motivation for distance learning are all positively related to student preferences for structured distance learning. Schofield and Davidson (2003), in their five-year primarily qualitative study to bring the internet to a large urban school district in the United States, suggest that the use of the internet increased not only learner enjoyment and motivation but also their autonomous learning abilities.

In short, the above studies reveal that positive attitudes by learners towards the use of modern technology, their learning motivation and autonomous learning are helpful in enhancing their learning.

2.4.2 Learner autonomy and CALL

2.4.2.1 Defining Learner Autonomy

Learner autonomy, or learner independence, self-direction, autonomous learning, and independent learning (Palfreyman, 2003), is the ability of language learners to control their own learning, and has become an important concept in language teaching and learning research area. In this section, I will briefly examine the concept of learner autonomy.

Holec (1981:3) defined learner autonomy as “the ability to take charge of one’s own learning”, including determining objectives, selecting methods and techniques to be used and so on. Dickinson (1987: 11) defines it as “the situation in which the learner is totally responsible for all of the decisions concerned with his learning and the implementation of those decisions” and is of great importance to learners in outside class self-study contexts, and is also similar to

Holec's basic definition of autonomy. Dickinson extended this definition, however, and argues that autonomy comprises both "an attitude towards learning" and "a capacity for active, independent learning" (Dickinson, 1995: 167). Similarly, Little (1991: 34) defines "autonomy" as "a capacity—for detachment, critical reflection, decision-making, and independent action", i.e. autonomy is a capacity for self-direction. He also suggests that independence is a component of the broader notion of autonomy. However, Little (1990: 7) denies that autonomy is a synonym for self-instruction and explains that autonomy is not limited to learning without a teacher. In this situation, a student's autonomous learning ability will be developed under their teacher's guidance by using learning strategies.

Additionally, Benson (1997) put forward three versions of learner autonomy for language learning ("technical", "psychological" and "political" versions). He summarizes the three versions of learner autonomy this way: "1. Autonomy as the act of learning on one's own and the technical ability to do so; 2. Autonomy as the internal psychological capacity to self-direct one's own learning; 3. Autonomy as control over the content and processes of one's own learning." (p. 25).

Broadly and Kenning (1996) highlights a dimension of social autonomy developed by Allwright (1990) and Little (1995): the ability to function effectively as a cooperative member of a group. This kind of autonomy focuses on social communication and cooperation with others.

Finally, in contrast to the usual definition, "the capacity to take charge of, or responsibility for, one's own learning" (Benson, 2001:47), Benson himself prefers to define autonomy as "the capacity to take control of one's own learning". Meanwhile, he emphasizes the importance of three levels at which learner control may be exercised: learning management, cognitive processes and learning content. The relationship between the three levels of control are effective that learning management depends upon control of the cognitive

learning processes, while control of cognitive processes necessarily has consequences for the self-management of learning.

Autonomous learning also implies that self-management and control over cognitive processes should involve decisions about the content of learning.

In summary, the concept of learner autonomy could be simply defined as the abilities or capacity to take charge of one's own learning. Learners with autonomy should be motivated to take responsibility of their learning, plan what is to be learned and implement how to learn in their learning behaviours, in order to finally accomplish their learning objectives.

2.4.2.2 The Importance of Learner Autonomy

Learner autonomy may enhance the effectiveness of a learner's learning. Benson (2001) mentions learner-based approaches, which focus directly on the production of behavioural and psychological changes that will enable learners to take greater control over their learning (Benson, 2001). Also, Broady and Kenning (1996) show that learning is more effective if the learner integrates knowledge within a personal framework.

Learner autonomy may also reduce the cost of learning. Broady and Kenning (1996) provide an economic rationale for promoting learning autonomy which gained considerable currency a decade ago in higher education in the UK. Benson (2001) argues that the economic imperative is often one of meeting complex educational needs at a low cost.

Learner autonomy may be helpful for life-long learning. Nowadays, because of the 'information explosion', people should continue to learn new knowledge, new technologies and new skills. Benson (2001) points out that the social-economic

and other changes, such as educational systems, and the practice of language teaching, are rapidly bringing the notion of the autonomous learner into harmony with dominant ideologies of what it means to be a fully functioning member of a modern society. In the current situation of the information explosion, Ally (2008: 34) argues that: "Learners of the future need to be autonomous and independent learners so that they can acquire current information to build a valid and accurate knowledge base. Appropriate use of the internet is an ideal learning strategy in a networked world".

2.4.2.3 Learner Autonomy and CALL

As Schmenk (2005) points out, "the popularity of learner autonomy may be at least partially related to the rise of computer technology and the growing importance of computers in language learning environments worldwide." (p107). The best of these applications support the development of autonomy by offering rich linguistic and non-linguistic input, by presenting new language through a variety of media, and by offering branching options. One of the advantages is that such applications encourage exploratory learning and encourage learners to exercise control over the selection of materials and strategies of interpretation. Thus Kaltenböck (2001) observes that the advantage of CD-ROMs, for example, in language learning is their emphasis on learner independence and individual learning. CD-ROM learning programs enable learners to work independently of a teacher or a classroom, allowing them to decide their own pace, which provides for a high degree of flexibility in the learning process.

Healey (1999) discusses the conditions that enhance autonomy and learning, concluding that: "in general, technology can be a valuable tool for autonomous learning, providing help in setting goals, making progress toward achieving them, and gathering information for self-assessment." (p. 402).

With regard to the effectiveness of learner autonomy, Benson (2001) makes the

assumption that in the case of CALL, technology can provide learners with the kinds of support needed in order to develop skills associated with autonomy. Meanwhile, he points out that there has been very little empirical research on the effectiveness of CALL, despite its long history. However, Brett (1998) has made empirical investigations in relation to the effectiveness of CALL and his findings indicate that multimedia may be a very effective language learning tool, along with autonomous learning, because learner autonomy can be promoted with multimedia applications (Benson & Voller, 1997; Dickinson, 1987).

More support from teachers and schools or universities should be offered when students conduct autonomous learning practice in CALL contexts or environments (Zou, 2011). A teacher's encouragement and their guidance on learning strategies (methods) are very important in this situation. On the other hand, the university or school should provide more CALL equipment and online environments, such as the Blackboard Platform, for their course. The support may be helpful for students to enhance their learning and especially improve their target language proficiency.

In summary, the concept of learner autonomy has been briefly defined and its importance in education and its relationship with CALL have been shown. From the literature review, it can be seen clearly that learners using CALL to learn languages autonomously may be more effective.

2.4.3 Learning Strategies, Learner Autonomy and CALL

It is important in education for students to learn how to learn, suggested by Jerome Bruner more than half a century ago (Williams & Burden, 1997). Consequently, the effective use of language learning strategies is very helpful for language learners to enhance their language proficiency. Here the concept of learning strategies will be defined briefly and its relationship with learner

autonomy and CALL will be briefly introduced.

Learning strategies are defined as “specific actions, behaviors, steps, or techniques – such as seeking out conversation partners, or giving oneself encouragement to tackle a difficult language task – used by students to enhance their own learning” (Scarcella & Oxford, 1992: 63). In other words, (second language) learning strategies refer to specific techniques or behaviours or thought processes to be consciously used by learners in order to enhance their (second language) learning (Oxford, 2003a; Thornbury, 2006). Learning strategies can enable students to become more independent, autonomous, lifelong learners (Allwright, 1990; Little, 1991; O’Malley & Chamot, 1990).

There are various broad clarifications of learning strategies (Ellis, 1994; Oxford, 1990; Oxford, 2003a; Richards & Schmidt, 2010; Thornbury, 2006). Oxford (1990) outlines six major broad (second) language learning strategies:

- 1) Cognitive strategies refer to analyzing the target language, comparing the differences between the first language and second language, reorganizing information through reasoning, analysis and so on (Richards & Schmidt, 2010).
- 2) Metacognitive strategies include coordinating learning process, making an organized plan, and monitoring one’s progress (ibid).
- 3) Memory-related strategies help language learners to link one L2 item or concept with another, but do not necessarily involve deep understanding (Oxford, 2003a).
- 4) Compensatory strategies can help the learner to compensate missing knowledge. For instance, learners can guess meanings from the context in listening and reading when they encounter new words or phrases or expressions (ibid).
- 5) Affective strategies are used to give learners some encouragement and to deal with one’s anxiety in language learning (Thornbury, 2006).
- 6) Social strategies refer to learning with other people, including the native

speakers of the target language and their peers in classroom settings (Oxford, 1990).

In short, the above major language learning strategies, if they can be used appropriately and correctly, will play a vital role in second language learning processes.

Ulitsky (2000) studied the learning strategies used by language learners studying for a Master's Programme of language education, who had extensive experience of language learning and teaching in the USA and overseas, in a multimedia environment. Ulitsky argues that increased and effective use of language learning strategies could lead to higher motivation, enhanced actual or perceived language proficiency, and elevated self-esteem. As a consequence, controlling one's learning strategies strengthens one's autonomy. In other words, the effective use of language learning strategies could mean that learners not only had higher motivation and autonomy but also higher language proficiency. One of the most important research findings in her study indicated that the most effective general learning strategies consisted of organizing and planning for the conditions that help one's learning, regulating, and fine tuning learning, and dealing with frustrations and challenges. Meanwhile, the visual, aural, and textual format of a multimedia learning environment provided opportunities for learning about the target culture, but the computer learning environment alone lacked authenticity. It was also found that learners' active participation in conversations with speakers of the target language including its native speakers was seen as crucial to acquiring the language. The results from Ulitsky's study reflect the effective use of learning strategies, learner autonomy and multimedia learning environments, which support language learning more actively.

Additionally, Figura and Jarvis (2007) examined the extent to which specified cognitive, social, and metacognitive, strategies are used by language students enrolled on a summer course at a British Higher Education institution, when

working with computer-based materials, in self-study contexts outside of the language classroom, particularly in a self-access centre. It was found that computer-based materials assisted with learning and demonstrated the conscious application of a range of strategies. The participants showed reasonable levels of autonomy and appropriate use of cognitive strategies while they were learning in an electronic environment. However, their study also found that less than half of the students used social strategies in the target language. Perhaps, the students used their own native language more frequently than the target language. Consequently, this phenomenon is worth noting, so that language teachers should encourage their students to communicate with each other in the target language as much as possible, whether in class or outside class.

Although these studies were conducted in the USA and in the UK, successful language learning experiences are still of great reference value to language teachers and learners in Chinese contexts when they teach and learn foreign languages, such as English.

2.4.4 Summary

In Section 2.4, some key learning factors influencing second language learning such as motivation, learner autonomy and learning strategies were discussed, along with CALL. Here learner autonomy was considered as the most important factor for acquiring second language successfully. CALL has been emphasized as the second most important.

Successful research projects were also analysed so that future research in the field of TESOL and CALL can be enlightened for both language teachers and researchers.

2.5 Student-centred Teaching Approaches and Learner Autonomy

Student-centred approaches, or student-centred/learner-centred methods, are different from traditional methods, such as teacher-centred methods, where teachers mainly talk in class in most of the time and students seldom speak or do exercises. Student-centred methods mainly focus on student activities, such as group work and role-play, and their teachers instruct them how to do the learning activities rather than teach. A student-centred teaching approach is defined by Richards and Schmidt (2010) in terms of the following three respects:

(A) The active role of students is emphasized in learning. As student-centred teaching methods are based on constructivist views of learning (Westwood, 2008), generally speaking, students will learn knowledge and skills/strategies more actively with greater motivation, which might lead to better success. (B) Attempts to offer learners more control over what and how they learn. (C) Encourage learners to take more responsibility for their own learning. This teaching approach encourages learners to develop learner autonomy (Thornbury, 2006).

Teachers should realize the importance of their role when they implement their actions to guide their students to develop and promote their autonomy in language teaching practice, especially by using student-centred approach. The three main roles of teachers in autonomous language learning (Voller, 1997) are as follows: (A) The teacher as facilitator, where teachers help their students to promote and support their learning. (B) The teacher as counselor. Teachers advise and guide their students how to learn effectively and autonomously. (C) The teacher as a resource. Teachers should provide their students with information and knowledge in suitable ways so that their problems can be solved.

These three roles of the teacher in autonomous language learning have been defined clearly and are easier for language teachers to perform in their teaching practice. In classroom teaching practice, language teachers make an attempt to abide by the above principles to adopt the student-centred approaches and to help or act as a consultant. However, a teacher's knowledge is limited. As the internet has a large number of resources and information, it is necessary for learners to make full use of internet-based resources. Teachers play a significant role in guiding students to learn English autonomously out of class by using the internet fully and appropriately. Without the teacher's guidance, the students would find it very difficult to choose suitable resources from the tens of thousands of learning websites.

Lu et al (2010) examine the feasibility of the student-centred teaching model employed in an English audio-video speaking class within CALL environments at a Chinese university. The results indicate that this specific teaching model in general is both plausible and effective in improving a student's communicative language ability, especially speaking. Also, it shows that the combination of a student-centred teaching model and CALL environments in classroom teaching is more effective than a single teaching model.

2.6 Use of Podcasts and Learner Autonomy

In the above sections, the advantages and disadvantages of employing podcasts were discussed. In this section, the relationship between podcasts and learner autonomy will be discussed.

There are many podcasts for English language learning available on the internet, so for language teachers, the first thing that they should do is to guide and advise their students how to find suitable learning materials. As Erben et al

(2009) remind us, the majority of language learning podcasts are not created by professionals majoring in language learning. As these non-professionals may not apply best pedagogical practice in the generating of these podcasts, they suggest that language teachers should search for podcasts which can provide students with lots of input, meaningful language and real-world communication. Further, I feel that language teachers should guide them as to how to evaluate and select English language learning websites, which can help them to improve their basic language skills, such as listening and speaking more effectively. In this way, students will gradually cultivate their good habits of independent learning so that their autonomous learning abilities can be promoted. Additionally, in order to become more autonomous, learners need to be encouraged by their teachers and peers to be self-initiating, to solve problems independently and receive feedback that supports their autonomy (Alm, 2006). As Nowlan (2008) suggests, in efforts to promote a higher level of learner autonomy in Asia, it is important for language teachers to encourage and organize team activities and assignments that make students explore issues that could eventually stimulate a greater interest in autonomous learning. As English teachers, one of the most important things is to teach effective English language learning strategies and methods so that they may become autonomous learners. One of the good examples from the research projects in relation to learning strategies and the use of educational podcasts is Ashraf et al's empirical study (2011), indicating that educational podcasts can play a major role in the promotion of listening skills, especially in EFL contexts. On the whole, the effective use of language learning podcasts in addition to relevant and appropriate learning strategies and methods are helpful for learners to develop their basic language skills as well as their autonomous learning abilities.

2.7 Summary of the Literature

This chapter has reviewed some CALL theories and Second Language Learning

theories, such as behaviourism, constructivism and cognitive learning theory, in addition to sociocultural theory. It has also defined many relevant terms in relation to the above theories. More importantly, it has discussed how to apply CALL environments and internet learning resources appropriately to improve a learner's English proficiency. Additionally, the relationship between CALL, learning motivation and learner autonomy has been discussed as well. Furthermore, this chapter has highlighted the importance of a student-centred teaching approach in classroom teaching and learner autonomy, both in class and outside class for students. Furthermore, some practical teaching experiences have been presented by using CALL and podcasting to improve learners' English proficiency, especially their listening and speaking abilities. Here it should be stressed that all CALL activities conducted by learners out of class have been considered to be complementary to classroom activities (Beatty, 2003). I as a teacher and researcher should utilize the above theories in relation to CALL and second language acquisition theories and successful teaching experiences to guide my teaching practice, so that the quality of English language education may be improved.

Another important point is that the review of literature I have undertaken in this chapter has guided me to develop the research questions in this study. In the next section, I will pose the research questions of this action research project and explain each of them briefly in terms of the theories reviewed above.

2.8 Research Questions

The research questions (RQs) in this study are related to things that have been discussed in the literature. They also link to one of the primary purposes of the current research project, which is to address some unsolved problems in the English language learning in a Chinese context, such as 'deaf and dumb

English', with the use of modern technologies. The RQs were originally developed as the action research cycles took place and reflected quite practical aspects of those cycles such as the CALL resources that were used in each one. However as the project developed different theoretical issues emerged as of importance in each cycle and it is these issues that will be highlighted in the discussion of each question below. The theoretical perspectives were important in shaping the analysis that was done to answer each research question. In this section, I explain the theoretical ideas, also make behind these research questions focus on the answers.

RQ1: During Action Research (AR) Cycle One, to what extent do students improve their listening abilities using internet learning resources, such as the Business English podcasts, and how does this relate to learner autonomy? How effectively do students manage their English learning time with technology, under their English teacher's guidance?

As mentioned in Chapter 1, one of the two main problems in learning English is that of "deaf and dumb English", also called "limited oral and listening ability", meaning a learner can read and write but can neither understand nor speak English. From our life experiences, if we have not listened to the other people speaking from birth, we cannot speak. That is to say, based on first language acquisition experiences, without much more comprehensible input, such as listening, output such as speaking may probably not happen in second language learning (Krashen, 1982). The importance of this research question is derived from the Interactionist SLA perspectives (See Section 2.3.2.1, this chapter) because the interactionist theory and input processing theory in SLA, together with sociocultural theory, form the theoretical frameworks behind the design and investigation of CALL (Chapelle, 2009). Meanwhile, CALL not only offers language learners a great deal of practice in terms of grammar, vocabulary and pragmatics but also provides learning opportunities for comprehensible input and interaction in their language learning (ibid). Besides these CALL benefits,

some important features of multimedia CALL, based on interactionist SLA perspectives, are to provide opportunities for learners to notice their errors and correct their linguistic output in language learning, and to support modified interaction between the learner and the computer (Chapelle, 1998). “Interaction”, mentioned above, generally refers to the interaction between people or the interaction between the learner and the computer, which is indeed a crucial concept for CALL research (Chapelle, 2005). Therefore, interactionist SLA theory in CALL starts to lay good theoretical foundations for the potential benefits for such interaction between the learner and the computer (ibid).

Normally, it is difficult for Chinese university students to solve their English language learning problems such as the ‘deaf and dumb English’ as stated earlier because it is impossible for each of them to get opportunities to communicate with native English speakers in a Chinese context. However, as CALL possesses so many advantages in second language learning (See Section 2.2.2, this chapter), CALL resources and its environment have provided learners in China with a very useful and helpful way to enhance their English proficiency, especially their listening and speaking skills.

Also, it is worth mentioning that it is an important step to develop and promote the students’ learner autonomy during AR Cycle One. One of the most important things is that language teachers guide and encourage their students to become more autonomous by the use of CALL. Due to the Chinese educational systems and testing systems, students did not know how to learn autonomously and effectively during their primary schools and middle schools. Therefore, language teachers in higher education institutions should teach their students basic concepts and theories on autonomy, give them more advice on effective language learning methods and strategies so that their autonomous learning can be promoted. I will describe what I did during Cycle One to explore RQ1 in Chapter 4 and Section 7.2 (Chapter 7) summarizes the answers to this question.

RQ2: During AR Cycle Two, what is the impact on the students in terms of the improvement of their listening and speaking abilities when the English teacher instructs his students to use CALL environments (e.g., the BBC English learning website and the University Blackboard Platform) to learn English autonomously?

This research question is related to constructivism and gives even more explicit attention to the issue of learner autonomy. In fact, the application of CALL environments requires learners to learn English autonomously and actively. As stated earlier, from the above implications of online learning with the use of constructivism, learning should mainly be active, cooperative, meaningful and interactive. The key feature of constructivism is that all learning (whether physically active or passive) is active in a constructivist's sense (Winch & Gingell, 2008). In addition, during AR Cycle Two, the teacher-as-researcher tried to examine the levels of students' autonomy by using technology in their English language learning in an interpretative way although learner autonomy is very difficult to measure in a quantitative way. Some scholars on researching autonomy put forward different models on the levels or stages of autonomy (e.g., Nunan, 1997; Littlewood, 1997; Macaro, 1997) in the late 1990s (Benson, 2007). Recently, Oxford (2008) proposed a similar five-level model to implement learner autonomy (see Section 5.6.3 and Table 5.13, Chapter 5). As Oxford's model (2008) is clearer and more detailed, and it is easier to examine the levels of learner autonomy, it was adopted to measure the students' degrees of their autonomy in this study. Besides these theoretical frameworks during Cycle Two, the theoretical issues on interactionist SLA theory and input processing theory mentioned under RQ 1 was still applied in this cycle. I will describe what I did during Cycle Two to explore RQ2 in Chapter 5 and Section 7.3 (Chapter 7) summarizes the answers to this question.

RQ3: During Cycle Three, to what extent have the students made progress in listening skills by using English learning websites (e.g., mainly the

TOEFL podcast website) recommended by their English teacher?

During Cycle Three, a new teaching approach to significantly improve English listening comprehension from an intermediate level to an advanced level was explored. The particular focus of this question is therefore a new way of teaching that pays particular attention to higher levels of learning. The new teaching approach is based on the TOEFL audio files such as conversations and lectures from the TOEFL podcast website which are provided at a slower speed at the beginning. The podcast host then explains any difficult or important language points slowly and clearly. Finally, the conversations or lectures are repeated at a normal speed. It is hoped that such a step-by-step English listening teaching and learning mode will make learners reach an advanced level from an intermediate level within a very short time.

Nowadays, the computer and the internet are very popular and are applied in every field. However, the combination of technology and education is not a novel thing (Kwan et al, 2008). One of the most important purposes of their combination is to enhance learning and teaching in the field of education. Also, research on enhancing learning via modern technologies have been published in the past a few years (See Balacheff et al, 2009; Kwan et al, 2008). This study aims to confirm how to enhance learning and teaching via the advanced technologies in a Chinese context because these technologies are becoming more and more popular. Modern technology will change traditional learning styles. It is believed that the perfect marriage between technology and education can improve the quality of education. Besides, the theoretical frameworks applied in Cycle Three are the same as the theoretical ones mentioned under RQ 2. I will describe what I did during Cycle Two to explore RQ3 in Chapter 6 and Section 7.4 (Chapter 7) summarizes the answers to this question.

RQ4: During the entire action research project, how can the students make use of CALL environments and the Internet learning resources

autonomously to effectively enhance their listening and speaking abilities, under the guidance of their English teacher?

This research question is a central and overall question to this study. As internet learning resources are very abundant, to learn autonomously is more important than ever. Therefore, as far as language teachers are concerned, to encourage learner autonomy is very important as well. In the meantime, they should guide their students to use learning strategies correctly. They also should change their traditional teaching methods, such as the teacher-centred approach, to a more student-centred approach, which will motivate and encourage students to learn actively and autonomously. More importantly, the central focus of this action research project is to explore a new teaching model by combining the new advanced technology, effective teaching approaches and learner autonomy. If students enhance their learning outcomes successfully by using this effective teaching model, the aim of this project has been achieved. Section 7.5 (Chapter 7) explores RQ4 and gives the answers to this question.

In summary, among the 4 research questions, Questions 4 is the most important one in this study. Meanwhile, these questions, based on the corresponding literature, are matched with the purposes of this study as well. In Section 7.1, Chapter 7, there are more supplementary points to restate these research questions briefly.

Chapter 3 Research Methodology and Methods

3.1 Introduction

This chapter introduces the framework of the research design in relation to my research project on CALL (Computer Assisted Language Learning) and explains in detail the fundamental research paradigms used. It focuses on action research as a research methodology employed by this study, including locating action research in an interpretative research paradigm. Background information on the research participants and teaching context at a Chinese university is introduced. Additionally, research procedures of data collection and data analysis methods, in addition to the pilot study of this research project, are presented in this chapter. Finally, ethical issues in this study are discussed.

3.2 Research Paradigms

One of the primary purposes of this study is to enhance learning and to improve teaching by the use of technologies, such as the use of computers and the internet. As Kemmis and McTaggart (1992) point out, action research is an important research approach to improve teaching and learning. Therefore, action research as a research methodology is a very suitable methodology for this study.

According to theories on research paradigms, the interpretative research paradigm is emphasized in this research project because the paradigm is

particularly suitable for social research, including educational research (Bhattacharya, 2008). However, the other research paradigms in relation to this research project are to be introduced briefly. So these issues, including relevant basic concepts or terms, are discussed in the following sections.

3.2.1 Defining Research Methodologies and Methods

Research is classified into different types of research, such as qualitative research and quantitative research. Here the term “research” has been defined as follows:

“the systematic method consisting of enunciating the problem, formulating a hypothesis, collecting the facts or data, analysing the facts and reaching certain conclusions either in the form of solutions(s) towards the concerned problem or in certain generalisations for some theoretical formulation” (Kothari, 2004:1–2).

The primary purpose of research is to generate new knowledge or find the truth that is hidden and which has not been discovered yet (Wellington et al., 2005). Therefore, understanding the main aim of research and different types of research is very important to researchers before they undertake research. Regarding the classification of research, different researchers classify the various types of research differently. For example, one classification divides research into 3 big types: basic, applied and evaluative research (Schreiber & Asner-Self, 2011). However, more detailed types of research have been classified by Kothari (2004): descriptive vs. analytical research; applied vs. fundamental research; quantitative vs. qualitative research; conceptual vs. empirical research; and other types of research (e.g. one-time research or longitudinal research). Although so many types of research have been classified, one thing common to most research is the mixture of two or more of the above forms of research (Schreiber & Asner-Self, 2011). Consequently, according to the above classification and the primary purpose of the present study, this

research project is descriptive research, applied research, qualitative research and empirical research. Therefore, action research is a suitable research methodology to undertake this research project mainly because it is one of the most common-used forms of applied research in education, where practitioners as researchers engage in efforts to enhance their work (Schreiber & Asner-Self, 2011). (Action research as a research methodology is discussed in more detail below.)

Additionally, research methods and research methodology should be clearly distinguished in order that they cannot be confused when they are used. Simply put, research methodology refers to a general strategy conducted in the research process: for example, a general strategy may be a survey or an experiment either of which may use focus on measurement through the collection and analysis of quantitative data (Barron, 2006). Methodology also refers to “the theory of acquiring knowledge and the activity of considering, reflecting upon and justifying the best methods” (Wellington et al., 2005: 97). In contrast, research methods refer more specifically to the various procedures or techniques used in a research project to collect and analyse data for the construction of knowledge (Murray & Hughes, 2008; Wellington et al., 2005). Examples of method would be tests, questionnaires, interviews, observation or study of documents. Thus, researchers should not confuse these two terms when they design research projects, especially in terms of the choices of research methodology and methods, and it is important for researchers to adopt a suitable research methodology and research methods according to the purposes of the research project(s). Table 3.1 indicates the classification of research methodologies (on the left column) and methods (on the right column), suggested by Crotty (1998: 5). From the table, the distinction between research methodologies and research methods is very clear.

Table 3. 1 The classification of research methodology and methods (Crotty, 1998: 5)

<p>Note: When reading Table 3.1, the reader should be aware that there is no implied link between statements in a given row of the table: for example sampling is not the only method relevant to experimental research.</p>	
(Research) Methodology	(Research) Methods
<p>Experimental research Survey research Phenomenological research Grounded theory Heuristic inquiry Action research Discourse analysis Feminist standpoint research etc.</p>	<p>Sampling Measurement and scaling Questionnaire Observation (participant; non-participant) Interview Focus group Case study Life history Narrative Visual ethnographic methods Statistical analysis Data reduction Theme identification Comparative analysis Cognitive mapping Interpretative methods Document analysis Conversation analysis etc.</p>

Finally, a paradigm is a very complex concept, which is defined in different ways. Historically speaking, paradigm, from the Greek ‘paradigma’, meaning pattern, is a theoretical structure or framework of thought that acts as a template to be followed (Baillie & Miller, 2003). Bryman’s definition (1988) indicates how researchers’ beliefs affect what to study, how to do research and which findings to interpret via paradigms. Somekh and Lewin’s definition (2005) description of a research approach presents an integrative framework to understand knowledge, truth, values and realism. Another view is that paradigms determine how researchers consider both the phenomena to be studied and the research methods to be employed to study those phenomena (Donmoyer, 2008: 591). All these definitions are very helpful for researchers to fully understand different paradigms and employ various paradigms correctly. The research paradigms such as positivism and interpretivism (described below) are closely related to

philosophical positions or dimensions. As good research originates from a sound philosophical basis (Wellington et al., 2005), making sense of different research paradigms more deeply plays a very significant role in undertaking this research project.

3.2.2 The Scientific Research Paradigm (Positivism)

The term 'positivism' was first coined by the nineteenth-century French philosopher, Auguste Comte (Cohen et al, 2000; Crotty, 1998). Positivist philosophers hold the basic view that no knowledge can be obtained about the nature of things except by following the methods of the natural sciences (Brown, 1996).

'Positivism' has been used by philosophers and social scientists since Comte 'invented' it (Cohen et al, 2000). The following two important points regarding positivism may connect certain suppositions between natural science and social sciences in the following ways: "First, the methodological procedures of natural science may be directly applied to the social sciences. Second, the end-product of investigations by social scientists can be formulated in terms parallel to those of natural science" (Cohen et al, 2007: 10). The positivist views indicate that social science and natural science are helpful references to each other in terms of the methodological procedures and the end-product of investigations. Also, it is useful to present effective methods for the two big research areas.

Probably the central issue related to the Comte's positivism is empiricism. Empiricists hold the view that "the only source of knowledge is experience" (Paley, 2008: 646–7). Empiricism is one kind of theory of knowledge, which arises from sense experience. It is well worth mentioning that empiricism focuses on the importance of experience and evidence, particularly as derived from experiments. It also indicates that positivism is associated with empiricism

very closely (Crotty, 1998). As this study aims to explore the experiences of enhancing learning and teaching English by the use of CALL in China, it is vital to find experiences in the researcher's teaching practice and in the students' learning experiences, especially in their out of class study.

Additionally, positivism is said to be the methodological supportive foundation of survey research and experimental approaches (Williams, 2006). Of the two research approaches, the experimental approach has been regarded as a kind of objective research because positivists are said to believe in objective knowledge of an external reality which is rational and independent of the observer (Wellington, 2000). The other reason is that "the aim of the positivist researcher is to seek generalizations and 'hard' quantitative data" (Wellington, 2000:15). One of the positivist ideas is that true knowledge is based on the sense-perception of an objective knower, therefore, positivist knowledge is thought to be objective (Crotty, 1998). Furthermore, some of positivists hold the view that social science research, including educational research, should utilize scientific research methods (Atkinson & Hammersley, 1994). It seems that the scientific method of research method, based on positivist principles, may be considered as an objective research approach. However, it is not correct nor appropriate to limit research methods in social sciences to those used in natural sciences, because the social field is much more complicated than the natural field, reflecting the fact that the focus of the study (human behaviour) is influenced by the intentions and understanding of the research subjects. That is why social science researchers should seek for another valid and effective research approach/paradigm, which can solve the research problems in social research area appropriately.

3.2.3 The Interpretive Research Paradigm

Unlike positivism, the interpretive research paradigm (also called 'interpretivism')

focuses on understanding the world of social life. In fact, interpretive research is a social science framework and research practice designed to understand social reality by means of philosophy and methodology (Bhattacharya, 2008). It emphasizes that this understanding is constructed by individuals on the basis of their experiences and their social interactions, and that different individuals, with different backgrounds and positions of power can be expected to construct different understandings. It is not the case that one of these is correct and others wrong. It is the case that each individual's constructed understanding will affect his or her practice. Therefore, Cohen et al (2000) argue that "the central endeavour in the context of the interpretive paradigm is to understand the subjective world of human experience" (p22). From the above claims in terms of philosophy and methodology, the interpretive research paradigm requires researchers to make sense of not only the objective world of (human) social life but also the subjective worlds of human experience.

Additionally, positivist and interpretive paradigms are distinguished from each other in that they link the understanding of phenomena through different points of views: positivism focuses on objectivity, measurability, predictability, controllability and other natural laws of observed phenomena, while interpretive paradigms emphasize the understanding of meanings and interpreting human actions (Cohen et al, 2007). Berg (2001) meanwhile states that the interpretive approach/paradigm provides a means with which to discover the practical understanding of meanings and actions. He argues that researchers with a more general interpretative orientation are likely to organize or reduce data so as to reveal patterns of human activity, action and meaning.

Henn et al (2006) remind social science researchers not to copy mechanically the research methods undertaken in the natural sciences. They point out that the interpretive research paradigm mainly links up with qualitative methods such as in-depth interviews and observation studies. They also state that as the meanings and interpretations of the social world are difficult to measure in a

precise and scientifically rigorous way, the researcher must use more qualitative methods and personal involvement to gain an understanding of how people interpret the world around them, and how this informs their action. Similarly, Creswell (2007: 248) proposes another term, the interpretive qualitative research approach, which recognizes the self-reflective nature of qualitative research and emphasizes the role of the researcher as an interpreter of the data and an individual who represents information.

Furthermore, with regard to common research methods used in interpretive research, the majority listed in Bhattacharya (2008: 467) belong to qualitative research methods, for example: classic traditional interviews, case studies, focus groups, personal experience and so on. According to Hitchcock and Hughes (1995), action research most frequently uses qualitative methodologies and techniques. As a result, it is suitable to conduct this research project using action research as a research methodology and with interpretive research as the main research paradigm.

Finally, the integration of quantitative and qualitative research methods within an overall interpretive approach is discussed here. Generally speaking, the research project uses qualitative research methods within an interpretive paradigm. Creswell et al. (2006) strongly argue that interpretive qualitative research can be enhanced by mixed methods research, which is a single study (or a series of studies) combining qualitative and quantitative data and data analysis techniques. Postlethwaite's research (2007) presents a convincing example of a combination of qualitative and quantitative methods within a consistent interpretive approach because the integration of the two research approaches capitalized upon the advantages of both with supporting information from the quantitative work adding to the stories from the qualitative data. The research project that he conducted represents not only a mixing of qualitative and quantitative data but "... a mixing of methodologies within a common interpretive framework within which the quantitative findings serve as stimulus

for critical debate which draws on the qualitative data” (ibid, p. 495). Postlethwaite’s study (2007) is an example of Howe’s (2004) mixed methods interpretivism.

3.2.4 The Critical Research Paradigm

As mentioned above, positivist paradigms and interpretive paradigms are basically concerned with understanding phenomena from different points of views. Positivism aims for objectivity; measurability; predictability; controllability; patterning; the construction of laws and rules of behaviour; and the ascription of causality, in which observed phenomena are important. Interpretive paradigms aim to understand and interpret the world in the terms used by its actors, in which meanings and interpretations are more crucial (Cohen et al, 2007). However, critical research paradigms are very different from positivist paradigms and interpretive paradigms. According to Carspecken (2008), critical research is a kind of investigation that emphasizes an explanation of the problematization of a particular social phenomenon, and is attributed to two broadly conceived perspectives: the critical theory tradition and poststructuralism/postmodernism. As defined by Budd (2008), critical theory is:

“.....a foundational perspective from which analysis of social action, politics, science, and other human endeavours can proceed. Research drawing from critical theory has critique (assessment of the current state and the requirements to reach a desired state) at its center. Critique entails examination of both action and motivation; that is, it includes both what is done and why it is done. In application, it is the use of dialectic, reason, and ethics as means to study the conditions under which people live.”

(Budd, 2008: 174–5)

From the above definition of critical theory, as far as the application of ethics is concerned, one of the key notions in qualitative research is empowerment, as this is necessary if the “desired state” is to be properly defined and if it is to be achieved. One way in which its empowerment is expressed in research is in

the nature of the relationship which is developed between research participants and researchers. The ethics of qualitative research is

“to create an empowering space in which research participants share power with researchers. Empowering methodologies have the ability to promote social transformation by turning upside down the traditional hegemonic relationship between the researcher and the researched.” (Davis, 2008: 260).

This suggests that the required relationship between research participants and researchers differs completely from the traditional relationship. Just as Cohen et al (2007) point out, “empowerment concerns taking control over one’s life within a just, egalitarian, democratic society” (p 303). However, in reality, it is very difficult for both researchers and participants to be of equal status in terms of full participant empowerment when a qualitative research project is conducted (Davis, 2008). Therefore, despite the impossibility of the full empowerment of participants in the research project, the important role of participants should be respected by researchers.

3.3 Action Research

3.3.1 Defining Action Research

Action research is one of the most important research methodologies in social science research, especially in educational research. The term ‘action research’ was first coined by Professor Kurt Lewin in 1944. Since then, there have been a variety of definitions.

As defined by McNiff et al (1996), action research is a form of practitioner research to be used to help improve their professional practices in many various types of workplaces. They explain that practitioner research simply means that

the research is by individuals themselves into their own practices. Well-conducted action research in their view can result in an educator's own personal development, lead to better professional practice and make a contribution to the good order of society.

Burton and Bartlett's summary (2005) on the various definitions of action research indicates that educators are concerned about existing problems or issues in the field of education before they conduct action research. These existing problems or issues may not be bad things, but simply things that could be further improved or sustained in the light of changing circumstances, and it is helpful for the initial research to collect data that makes the situation perfectly clear. Then, a plan of action is designed in the light of such evidence, which is then put into place and the effects carefully monitored. As a result, the refined questions are likely to be posed and researched. In fact, these definitions show educators how to conduct action research projects in their own teaching practice. Furthermore, Kemmis and McTaggart (1992:10) explain the cycle of conducting action research and point out the difference from the people's everyday life: "to do action research is to plan, act, observe and reflect more carefully, more systematically, and more rigorously than one usually does in everyday life". They also argue that action research is more systematic and more rigorous research through teaching practice. Although it is not a scientific research methodology, it is helpful to help educators not only to improve what to do in their teaching practice but also to improve and understand the world by changing it.

Meanwhile, it is well worth mentioning that action research is concerned with how to improve educational practice and it is practitioners themselves who carry out the research in examining and developing their teaching (Burton & Bartlett, 2005). Similarly, Postlethwaite (2008) points out the important aims of action research are: 1) To improve practice through the investigation of actions taken by the researcher herself/himself. 2) To provide a framework for empowerment, moving us on to critical action research. 3) To promote professional collaboration.

4) To help to establish a group of staff as a professional evidence-based group.

One of the crucial points is that action research can enable practitioners/educators to develop their professional practice through their own actions within their teaching contexts. This professional development may be helpful in solving the problem of how to teach more effectively in practitioners' teaching practice.

Action research concentrates on improving educational practice, emphasizing educational practice and solutions to problems (Costello, 2003). Further, it is undertaken to understand, evaluate and then make changes. Another important point is that critical reflection embraces reviewing actions carried out and planning future actions.

Finally, one of the most important definitions of action research is that "it brings together theory and practical knowledge." (Costello, 2011: 7). In this case, it is useful to help teachers to make good sense of the significant role of action research in education. Building on this idea in my own research, I have made use of formal theory and research papers, and have also drawn on my own English language teaching experience in China to design my action research interventions.

In summary, from the above various definitions, action research is a very useful and a practical research methodology for educators and educational researchers. The primary reason is that conducting action research in their teaching practice plays a vital role in improving and reforming education, and promoting professional collaboration and development. Of all the purposes of action research, the most important one is to improve educational practice, especially to enhance teaching in practitioners' practice and through that to gain some new understanding of practice that is transferable to other situations.

Somekh (2008) argues that the outcomes of action research lead to the generation of theory and the improvement of practice. She also claims that one of the most significant contributions of action research as a methodology for building understanding of change and development is that “action research forms a bridge between practitioner understanding and the generation of theoretical knowledge to inform action” (Somekh, 2008: 6). McIntyre (2005) expands this notion by suggesting that research can inform new action that is then explored within action research. The theoretical/empirical base for action provides grounds for the transferability of findings. As a result, the combination of knowledge generation and the development of new practices can be theorized. That is one of the primary reasons why I have used action research in this research project as a research methodology.

3.3.2 Types of action research

There are a variety of types of action research depending on the different criteria of classification. There are four types of action research, based on the involvement of participants (Ferrance, 2000): individual teacher action research, collaborative action research, school-wide action research and district-wide action research. The following are briefly describes these.

A) Individual teacher action research usually focuses on a single issue. The teacher may be seeking solutions to problems of classroom management, instructional strategies, use of materials, or student learning. It has been clearly shown that it is easy to undertake individual action research. This kind of action research is also suitable to those who would like to conduct classroom research in order to obtain a higher degree in education.

B) Collaborative action research may be conducted by a group of several teachers and others interested in addressing a classroom or department issue.

This issue may involve many classrooms. These teachers may be supported by individuals outside of the school, such as a university or community partner.

C) School-wide action research focuses on issues common to all. The school may be looking to address its organizational and decision-making structures. Teams of staff from the school work together to narrow the question, gather, analyze the data, and decide on a plan of action.

D). District-wide action research focuses on issues which can be organizational, community-based, performance-based, or decision-making processes. A district may choose to address a problem common to several schools or one of organizational management.

There are different drawbacks to each of the four types of action research given above. School-wide action research and district-wide action research are not convenient to carry out. It seems that it is better for the collaborative teachers to be researchers at the same school or university to conduct action research. However, sometimes it is more difficult for a teacher as a researcher to find cooperative partners to work together. The present study belongs to the first type of action research: individual teacher action research.

3.3.3 Principles and Characteristics of Action Research

Action research possesses the characteristics of all good research approaches. However, it has its own unique characteristics as well, which is different from that of the other research approaches. In this section, the principles and characteristics will be discussed.

Cohen et al (2000: 228–9) summarize the principles and characteristics of action research, which are from Hult & Lennung (1980); Kemmis & McTaggart

(1992); Mckernan (1991). The main points are as follows:

- “1) Action research solves practical problems in addition to expanding scientific knowledge.
- 2) Action research seeks to enhance the quality of human actions.
- 3) Action research is an approach to improving education by changing it and learning from the consequences of changes.
- 4) Action research develops through the self-reflective spiral: a spiral of cycles of planning, acting (implementing plans), observing (systematically) reflecting... and then replanning, further implementation, observing and reflecting.”

Additionally, Norton (2009: 54–56) summarizes the characteristics of action research, based on the seven major characteristics of action research, distilled by Kember (2000) from Carr and Kemmis' (1986) original description as follows:

A) Social practice: Norton (2009: 54) emphasizes that education is a social practice. To apply positivism is not appropriate in educational practice because positivism emerged from the natural sciences, such as the physical sciences. B) Aimed towards improvement: this point of view has been mentioned above many times, but in Norton's (2009:55) view, this characteristic of action research distinguishes it from other research approaches or research methodologies. This shows that action research focuses on the improvement of educational practice. C) Cyclical: it should be noted here that action research should not be conducted as a simple series of four steps: planning, action, observing and reflection. Action research is interpretive and it needs to be thought of in terms of further refinements in following studies (ibid). D) Systematic enquiry: this requires researchers to be very careful about their research designs and analyses of their findings. E) Reflective: action researchers must be clearly reflective about their own practice and the implications of the research in order that they can improve their practice further more. F) Participative: Norton disagrees with the view that action research is sometimes called participative action research (PAR), but she uses the same acronym to mean Pedagogical Action Research (PAR), which sounds reasonable. G). Determined by the practitioners: this characteristic is fundamental to pedagogical action research (Kember, 2000). Generally speaking, action research projects must be decided by practitioners in their

practice. Sometimes they need to cooperate with external researchers.

Ferrance (2000:14) also summarizes the advantages as a form of teacher professional development research and reflection that allows teachers to grow and gain confidence in their work. Action research projects influence thinking skills, a sense of efficacy, a willingness to share and communicate, and attitudes towards the process of change. Through action research, teachers learn about themselves, their students, their colleagues, and can determine ways to continually improve.

In fact, these advantages are similar to the principles and characteristics of action research stated above, but they happen to be the nature of action research. If practitioners/researchers understand this nature of action research, it is of great significance for them to conduct any practical research project in their teaching practice.

I have summed up some of the principles and characteristics of action research in addition to some of the advantages of action research. In fact, as Hitchcock and Hughes (1995: 27) point out, “the principal features of an action research are change (action) or collaboration between researchers and researched. Action researchers are concerned to improve a situation through active intervention and in collaboration with the parties involved”. In short, the two key words to summarize the main features of action research are ‘change’ (action) and ‘improvement’ (a situation or educational practice). Next, I will discuss the disadvantages and criticisms of action research as a research methodology.

3.3.4 Criticisms of Action Research

Although there are a number of advantages of action research mentioned above, its disadvantages cannot be ignored: the quotes below are from Denscombe

(2007: 131) and the contents of the brackets are my comments:

- 1) “The necessary involvement of the practitioner limits the scope and scale of research. The ‘work-site’ approach affects the representativeness of the findings and the extent to which generalizations can be made on the basis of the results”.

(AR shares this characteristic with all interpretive research that sees context as an essential element of the research problem. It could be argued that it is a limitation of scientific paradigm research that it claims to make decontextualised generalisations. In my view, Denscombe here describes a characteristic of action research, rather than a limitation of this methodology. Additionally, the research participants are ‘fixed’ and the practitioner(s) as a researcher(s) cannot select their ‘ideal’ participants freely as they expect, which may affect the reliability of the findings of the research projects to a certain extent, but theorized action can lead to new understandings as well as evidence of new practice and thus can generate transferable insights.)

- 2) “The nature of the research is constrained by what is permissible and ethical within the workplace setting”.

(This is again a characteristic of action research. Any research is constrained by what is permissible and ethical. So this is just a point of view to make it on. I suppose she says this particular workplace setting constrained, but described that. I do not see this problem.)

- 3) “Ownership of the research process becomes contestable within the framework of the partnership relationship between practitioner and researcher”.

(I do not completely agree with this view. Although competition of the ownership of the research process is not avoided, sometimes the partnership relationship between practitioner and researcher can be coherent. When the researcher is the practitioner him or herself, there is not a problem about ownership.)

- 4). “Action research tends to involve an extra burden of work for the practitioners,

particularly at the early stages before any benefits feed back into improved effectiveness”.

(I disagree with this. It is true that conducting action research needs much more effort than regular teaching, especially at the early stages. The key point is that practitioners ought to be developing practice anyway; action research is simply a rigorous way of doing that, which should be part of the professional ethic. Therefore, in order to improve the effectiveness of action and professional development, action researchers should redouble their efforts than normal).

Besides the disadvantages of action research mentioned above, it has been criticized by scholars such as Hitchcock and Hughes (1995). The following quotes are from Hitchcock and Hughes (1995:30) and the contents of the brackets are my comments.

A) “Action research needs to clarify the distinction between the nature of ‘action’ and ‘research’. The two terms are not interchangeable. If this is not carefully done then all the old confusions surrounding the apparent distinctions between practice and theory are likely to re-emerge”.

(This criticism sounds reasonable, but in fact Cohen et al (2007) have pointed out that the combination of action and research means that the action is a form of disciplined inquiry, in which a personal attempt is made to understand, improve and reform practice. Therefore, this shows that the combination of action and research plays a vital role in understanding, improving and reform practice in the field of education.)

B) “Reflection is a current vogue term used widely and often loosely. There is certainly greater need for clarity and precision in the use of this term in teacher education and research more broadly. The distinction between reflection and description is often not fully understood. Reflection can degenerate into anecdotal description”.

(This criticism is well worth careful consideration. In particular, when a practitioner as a researcher writes a research journal or diary about his/her teaching process, he/she should pay attention to the distinction between the

description of the action research processes and the reflection of the findings of the action research, which is very helpful for practitioners as researchers to find new research results in order to change and improve educational practice.)

Finally, Haggarty and Postlethwaite (2003) argue that although most teachers can benefit from collaborative action research, a limitation of this approach is that it is often seen as a deficit model and this is unhelpful to some teachers. They explained some of the reasons of the negative consequences identified by Brown and McIntyre (1993): firstly, teachers may feel that they lack valuable expertise and skillfulness. Secondly, teachers are discouraged from considering their own teaching analytically as they may see this as a depressing experience.

A slightly different issue is that, in the UK context of high stakes inspection from OfSTED, teachers are not willing to be observed in classroom teaching by the other teachers because of the fear that this observation will be hypercritical. Similarly, in the Chinese context, teachers are afraid of, not only being criticized in terms of teaching methods, but also being criticized in terms of their level of specialist knowledge by other teachers. Besides these shortcomings, they make some suggestions to solve the above problems. One of the things necessary for teachers to do is to work “towards a self-critical process of professional development” (Brown & McIntyre, 1993: 115). This valuable suggestion is helpful for teachers as researchers in conducting classroom action research in their teaching practice.

In short, from the above analysis, though there are some disadvantages of action research and some potential criticism from various scholars from different points of view, the following of the most important points about action research have been clearly shown: (A) “Action research enables practitioners to explore relationships between educational theory and practice”. (B). “Action research can have a beneficial impact both on school improvement and on the professional development of teachers” (Costello, 2011: 28). (C) Action research

can lead to theory generation and the improvement of practice (Somekh, 2008). Compared with the crucial importance of action research, its disadvantages are minor.

3.3.5 Locating Action Research in the Interpretative Paradigm

As mentioned earlier, action research as a research methodology is used in this study. Here it is necessary to explore the relationship between action research and the research paradigms and the location of action research among research paradigms. Hitchcock and Hughes (1995) point out the importance of placing action research within the broad scheme and continuum of research paradigms. They argue that action research emphasizes practice, participation/collaboration, reflection, interpretation and so on. Interpretation is an important aspect because “interpretation is a clarification of meaning. Understanding is the process of interpreting, knowing, and comprehending the meaning that is felt, intended, and expressed by another.” (Denzin, 1989:120). As Cohen et al (2000) point out, “the central endeavour in the context of the interpretive paradigm is to understand the subjective world of human experience” (p. 22).

Interpretive research therefore requires researchers to clarify the meanings of social life but also to make sense of the subjective world of human experience. Also, as action research most frequently uses qualitative methodologies and techniques and so on, it suits qualitative and interpretative research designs (Hitchcock & Hughes, 1995). Action research is closely associated with the interpretative research paradigm. Therefore, it is suitable to locate action research as a research methodology in the interpretative research design.

The focus of the inquiry in the present study is to explore how modern technologies such as computers and the internet support learners to improve

their English listening and speaking skills effectively in the Chinese context, so that learning problems, such as ‘deaf and dumb English’ and ‘inefficient learning strategies’, can be resolved. According to the action research theories mentioned above, such as Costello (2011) and Somekh (2008), first of all, I used learning theories (especially second language acquisition theories) to guide my teaching practice in order to enhance the quality of teaching English in the classroom, my students’ English proficiency, and my professional development. In addition, through this action research project, the research outcomes may lead to the generation of practical educational theories so that they can be referred to by other language teachers in China or other countries in similar teaching and learning contexts in their teaching practice. Furthermore, as mentioned above, Postlethwaite’s study (2007) presents a credible example on the integration of qualitative and quantitative methods within a consistent interpretivist approach because the combination of the two research approaches can reap the benefits of both. Supporting information from the quantitative work can be added to the stories from the qualitative data. It seems both quantitative data and qualitative data can be explained by the use of an interpretive approach, which suggests the crucial importance of interpretivism.

On the whole, what is to be explored in the present study happens to correspond with the exploration of action research. Therefore, undoubtedly, action research as a research methodology and interpretive paradigm as one of main research approaches are suitable to this present study.

3.4 The Research Participants

The participants in this research project consisted of non-English major college students who passed the College English Test (CET) (Band 6) in China or who nearly reached Band 6. They specialized in the fields of computer science, such as information security and computer software engineering. Although there were

not big gap between their scores in the test paper, there were great differences between their oral communicative abilities. How to improve their spoken English was a big issue in this study. In the following parts, I provide background information on College English Tests (Bands 4 and 6) in China and basic information on the participants.

3.4.1 College English Tests (Bands 4 and 6) in China

The College English Test (CET) is a national large-scale standard examination to measure non-English major college students' and post-graduates' English proficiency in China. The CET consists of the two different levels: Band 4 and Band 6. The latter is higher than the former, according to the test purpose and the test design. The certificate-holders of Band 4 should reach the English level of non-English major Bachelor degree students, which is the basic requirement in the teaching syllabus for college English teaching in China. Certificate-holders of Band 6 should reach the English level of non-English major postgraduates. The written test of both CET Bands 4 and 6 consist of listening, reading and writing sections. The spoken test, separated from the written one at present, is optional, and requires candidates to get a certain number of points from the written test. The oral test is mainly to measure a student's general oral communicative ability.

As far as the level of English proficiency is concerned, CET Band 6 is an intermediate level English proficiency test in China. The score for listening comprehension accounts for 20% of the entire test paper. The purpose of the listening comprehension section of CET is to measure a candidate's ability to understand and interpret spoken English. They should understand listening materials on familiar topics presented once at a speech speed of 130–150 words per minute (wpm) (for CET Band 4) and 150–170 wpm (for CET Band 6) (Jin & Yang, 2006). Besides this, in the listening section, CET candidates should

be able to:

- “__grasp the main idea(s) and important details;
- __ make accurate inferences;
- __ recognise the communicative function(s) of utterances;
- __ make generalisations; identify the speaker’s point of view, attitude, etc.”

(Jin & Yang, 2006:29)

From the requirements of the testing syllabus, listening ability is at a high level for Chinese non-English major college students. In fact, according to the investigations of my students with the certificates-holders of CET Band 6, some responses about their listening abilities were negative. In actual communication, they felt that there were some listening problems, such as misunderstanding what native speakers had said. All this showed that the students’ English listening abilities need to be improved further.

Another important communicative ability is speaking, which is the weakest of the four language skills (listening, speaking, reading and writing) among Chinese students. Although there is a spoken test in CET, it is separate, and is restricted to candidates with written test scores of 85%. Therefore, every year, only a small number of students are qualified to sit the oral test.

According to testing theories, test “washback” refers to the effect on learning and teaching, particularly classroom teaching (Fulcher & Davidson, 2007). Washback can be either negative or positive washback. Positive washback will push learning and teaching in a way that results in the majority of the students emphasizing speaking practice too much. Therefore, it is very important and necessary that speaking skills should be enhanced for future studies and job-hunting.

In summary, in this section, the College English Test (Bands 4 and 6) and the listening and speaking levels were briefly described. It must be pointed out that

listening and speaking skills should be improved in order for the further studies and the future job-hunting. Meanwhile, both teachers and students should focus on the training of oral communicative abilities, such as listening and speaking.

3.4.2 Background Information on the Participants

The participants in this study were the students in the second semester of the second year of a four-year bachelor degree programme at one of the leading universities in the northeast of China. The total number of the participants was 102 students, who majored in computer sciences, such as information security and software engineering. The reasons for choosing these students as research participants are as follows:

Firstly, their English levels were basically the same. As stated above, the majority of students passed the College English Test (CET) Band 6, an intermediate level of English language proficiency in China. Although some of them could not pass the test, their English level was near CET Band 6. Thus, the same level was very helpful to me not only to conduct my classroom teaching but also to accomplish my research project smoothly.

Secondly, the classrooms where I taught were fully equipped with modern technologies in addition to traditional equipment. There is a computer connected to the internet at a teacher's table, a data projector, and a big projection screen with 4 loudspeakers on the wall in each classroom. It is very convenient for teachers to use the rich authentic web resources on English language learning to teach the students English in class, which will make the students interested in learning it. Besides these, there is a big blackboard, one of the traditional pieces of teaching equipment in each classroom. When a teacher needs to add some key words/points to his/her teaching plan/handouts by using Power Point, he/she can write them down in the blackboard as well. This is the good combination of

the modern and the traditional.

Thirdly, the students desired to improve their English proficiency, especially communicative abilities such as their listening ability and speaking ability. In other words, they had a very high motivation to learn the foreign language. The two main reasons were as follows: 1) After graduation, some planned to work for foreign-enterprises in China. As English is one of the most important working languages in these companies, they wanted to improve their listening and speaking skills via the course "Business English". 2) Others planned to study further, particularly in Western countries, such as the UK and the USA. Hence, the students were preparing for International English tests such as the IELTS, TOEFL and GRE Tests. Their strong motivations in addition to the computer-based environment were helpful to them in improving their overall language proficiency.

In sum, the students (also research participants in this study) with the same or similar levels of English and a strong motivation to learn, along with the full modern teaching equipment, were helpful for me to complete the research project smoothly and successfully.

3.5 The Framework of Research Design in This Study

Based on Crotty (1998: 5) (See Table 3.1 in this chapter) and Norton (2009), I designed my own framework of research design in this study (See Table 3.2 in detail). Now I will give some reasons why I designed the research project in this way. As I have given some reasons by the use of action research and individual action research respectively in Sections 3.3.1 and 3.3.2 in this chapter, I just focus on presenting rationale of the other issues such as the choices of the research methods and data analysis in this section.

Table 3. 2 The Framework of Research Design in this study

Research methodology	Action research				
Type of Research and teaching	Individual Action Research				
Data Collection Methods	Questionnaire	Interview	Learning diaries or students assignments	(Classroom) Observation (research journal)	Measurement and Scaling (Pre-testing and Post-testing)
Data Analysis Methods	Thematic analysis (Theme identification and data reduction)				Content analysis
General data analysis methods	Interpretative methods				Statistical analysis

3.5.1 The Rationale of the Choices of Data Collection Methods

3.5.1.1 Questionnaire

As far as survey research in education research is concerned, the questionnaire is one of the most common forms of data collection. Brown (2001: 6) defines questionnaires as “any written instruments that present respondents with a series of questions or statements to which they are to react either by writing out their answers or selecting from among existing answers”. This definition describes the nature of the questionnaire clearly. The primary purpose of the questionnaires is to gather information from research participants’ respondents so that researchers can analyze the information collected in order to answer the research questions. The design of the questionnaire is also related to the aims of the research project and the research questions. Therefore, when I designed the questions of the questionnaires, I abided with the guide of questionnaire construction proposed by Sellitz et al. (1976) (See Cohen et al (2007: 320) in detail).

The following are the rationale of the choices of the questionnaire instrument in this study:

Firstly, researchers can directly or indirectly design the questions of the questionnaire, which are related to the research questions, so that they can more easily analyze the data and answer the research questions. In my action research project, I obeyed this principle to design the questionnaires at the end of each cycle and collected valid and reliable data in order to analyze the data and answer the corresponding research questions.

In addition, with respect of the advantages and disadvantages of the questionnaire, the questionnaire is more advantageous than other research methods to collect data from other perspectives. The main advantages of questionnaires (Dörnyei, 2003) are as follows: first of all, exceptional efficiency in terms of a researcher's time, effort and finance. Also, much more information can be obtained within a shorter time frame, in comparison with interviews with the same number of people. Another one of the main advantages of the questionnaires is the cost-effectiveness. These advantages of the questionnaires have been used in my research project. For instance, I also posted the questionnaires on the "Blackboard Platform" in order that my students could complete them after class. When they finished them, they could email their answers to me. I think that this method has saved my time and saved a lot of paper, which means money savings and a reduced environmental impact.

On the whole, using questionnaires was a valid and effective research method in my research project.

3.5.1.2 Interviews

As with questionnaires, the interview as a research method is another of the most common and popular research methods in survey research. As defined by

Davies (2006: 157), an interview in survey research is “a method of data collection, information or opinion gathering that specifically involves asking a series of questions”. Typically, an interview represents a meeting or dialogue between people where personal and social interaction occurs. However, developments in computer and information technology have resulted in other formats of interview, such as internet interviews. As the follow-up interviews after the questionnaires investigation were conducted in this study, the questions of the interviews were the same as or similar to those of the questionnaires.

The following are the rationale of the choices of the interview instrument in this study:

Firstly, traditionally, the interviewers adopted the face-to-face interview or the telephone interview. Nowadays, with the development of the modern technologies, such as the computer and the internet, interviewers can use Skype/MSN/email to conduct interview research online. It is in fact often more convenient for both interviewer and interviewee to have the interview more or less at anytime, anywhere.

Secondly, interviews can complement the weaknesses of questionnaire. The main disadvantage of questionnaire is that respondents usually give very simple and superficial answers, mainly because they are unwilling to spend more time than necessary in answering the questionnaires (Dörnyei, 2003). Such superficial data is difficult for researchers to interpret complicated phenomena that occur in social science research, such as educational research. Therefore, interviews can clarify something unclear surveyed in the questionnaire. In line with this suggestion, in this study, I used follow-up interviews to clarify some uncompleted or unclear answers in the questionnaires.

Thirdly, according to the interviews classified by Norton (2009), Semi-structured interviews follow an interview schedule with predetermined questions but are

more flexible than a structured interview in that researchers use probes designed to elicit further information when necessary. The purpose of a semi-structured interview is to understand the respondent's point of view. Therefore researchers use open-ended questions to enable the interviewee to talk more freely (Norton, 2009: 99). One of the purposes of my research project is to explore the research participants' learning experiences by using CALL to enhance their English language learning practice. Before doing that, one of the important things that I needed to do was to understand the points of view of the participants on how to improve their English language learning by using CALL. As the purpose of a semi-structured interview is basically the same as my research aims, this type of interview was also one that I used in this study as well. Additionally, unstructured interviews are for research studies where a researcher's focus is to gain insights about the respondents' world and lived experience (Norton, 2009: 100). The purpose of this type of interview is basically the same as my research aim, as mentioned above.

Finally, many advantages of interviews can make the research project run smoothly. For example, the major advantages of interviews are listed by Leonard (2003: 168–171): (A) Flexibility. Interviewers and interviewees interact flexibly, such as changing the order of questions. (B). Probes. Perhaps the interviewer may get more detailed answers from the interviewee. (C) Clarification. Any ambiguous answers by the interviewee may be clarified during the interview. (D) Confirmation. The interviewer's repetition can confirm what is being said and the accuracy of their own interpretation of what is being said. (E) Non-verbal communication. The validity of the respondent's answers may be assessed from his or her body language by the interviewers.

3.5.1.3 Research journals or learning diaries

The following are the rationale of the choices of research journals or learning

diaries in this study:

Firstly, using research journals is “one of the most effective research tools to mine the rich personal experiences and emotions of participants’ inner lives” (Smith-Sullivan, 2008: 214). It is also one of main purposes of this study, as stated earlier.

Another advantage of using journals is that “researchers can use detailed journals or diaries to record and reflect their own behaviors, attitudes, feelings, and thought processes to provide a multilayered facet to their academic studies” (ibid). In this study, I kept my own research journals which I completed every time after my classroom teaching.

Meanwhile, I required my students (my research participants) to keep their own learning diaries. These diaries are also called “the Self-completion diaries”, which have a number of advantages over other data collection methods (Corti, 2003): Firstly, diaries can provide more reliable data than other survey methods, such as the interview method. Secondly, diaries can help to overcome the problems in relation to sensitive information collected by personal interview. Finally, they provide a rich source of information on respondents’ behaviour and experiences on a daily basis in order to supplement interview data.

In summary, one of the easiest and the simplest ways to conduct observation in action research is to use researchers’ journals and research participants’ learning diaries. Thus, the data collected by using diaries can be very valid and reliable.

3.5.1.4 Observational research

Observation is one of the four steps in undertaking action research. However,

observational research is one of the most important research methods in both natural science and social science. I used Naturalistic observation according to Norton's (2009) classifications on the observational research. The primary reason is: When students do not know that someone else is observing their lessons, they are likely to perform much more naturally, which means researchers are able to obtain more reliable data. Also, I used research journals to collect data. Regarding the reasons of the use of research journals, I have explained them in the previous section (see Section 3.5.1.3).

3.5.1.5 Measurement and Scaling (Pre-testing and Post-testing)

In this project I used repeated measures to collect quantitative data, proposed by Norton (2009), because it is easier to compare the difference between the two test results (the pre-test and the post-test in each Action Research Cycle). Repeated measures design refers to a "research design in which measures of behavior are obtained from the same individuals under different conditions." (Levin, 1999: 84) and requires measuring the same participants twice (Norton, 2009: 105).

In this action research project, I used the pre-test and post-test to measure the same participants' English listening proficiency twice in each cycle in order to see how much progress they had made in terms of their listening proficiency. One of the most important rationales as to why action research is very powerful in using pre-testing and post-testing is that statistically significant research results may present a convincing argument for the effectiveness of an intervention to practice (Norton, 2009). The qualitative methods above can then clarify that the changes in score were, in the view of the participants, attributable to the intervention, and can begin to explore why they thought the intervention had the effect that it did.

3.5.2 The Rationale of the Choices of Common Data Analysis Methods

In pedagogical action research studies, both quantitative analysis and qualitative analysis are useful for researchers. Quantitative analysis is suitable to be used in the following research methods: an experiment; an attitude scale or questionnaire; an observation study which involves counting; one that produces any information that is quantifiable (age ranges, number of years teaching etc.) (Norton, 2009).

An action research study could be seen as a quasi-experiment and so quantitative methods can be useful to reveal changes (e.g. in students' attitudes or attainment) that might happen as a result of the actions taken. Qualitative data can then be used to explore the perceptions of students which can begin to explain why these effects were achieved.

In this study, there were some questionnaires to be analysed statistically. Also, there were some data in relation to the quasi-experimental design, which needed to be analyzed with SPSS (Statistical Package for the Social Sciences), which was used to find the mean scores, standard deviation and the figure of significance of the pre-test and post-test results of all the participants in each class in each cycle. Regarding the outputs to be worked out, these will be shown in detail in Chapter 7. It is also helpful to use descriptive statistics to describe the students involved in the study.

Unlike quantitative analysis, qualitative analysis is useful in research studies, including action research projects in the following respects (Norton, 2009): a richer understanding of the perspective of the research participant is sought (e.g., using interviews); more in-depth information is required (e.g., the richer detailed data gathered from open-ended questions in questionnaire responses); there

are already existing sources, such as diaries, assignments and so on. In this study, qualitative analysis played an important role in analyzing the data collected because there was much more qualitative data than quantitative data. The main methods of qualitative data analysis are a thematic analysis and a content analysis and these were used in this study. The definitions of thematic analysis and content analysis and the rationale of their choices are presented as follows:

3.5.2.1 Thematic analysis (Theme identification and data reduction)

Ayres (2008: 867) argues about relationship between thematic analysis and thematic coding:

“Thematic analysis is a data reduction and analysis strategy by which qualitative data are segmented, categorized, summarized, and reconstructed in a way that captures the important concepts within the data set. Thematic analysis is primarily a descriptive strategy that facilitates the search for patterns of experience within a qualitative data set; the product of a thematic analysis is a description of those patterns and the overarching design that unites them. Thematic coding is the strategy by which data are segmented and categorized for thematic analysis”.

According to Ayres’ definition, thematic coding is equal to “theme identification”, proposed by Crotty (1998). Obviously, thematic analysis consists of theme identification and data reduction, which are very important research methods.

Ayres (2008) also put forward an important issue that should be paid attention to when researchers conduct a thematic analysis: “Throughout the analysis, the investigator considers the relevance of each theme to the research question and to the data set as a whole, thus keeping the developing analysis integrated.” (p.868). I used thematic analysis to mainly analyze questionnaire, interviews, participants’ learning diaries or assignments in this study because this kind of

data analysis could be useful and helpful for me to answer the research questions.

3.5.2.2 Content Analysis

Another important analytic method in conducting both quantitative and qualitative research is content analysis, which has been used in my research project as well. This is defined as a strict and systematic set of procedures of summarizing and reporting the main contents of data collected (Cohen et al, 2007; Flick, 1998; Mayring, 2004). It is also defined as “the intellectual process of categorizing qualitative textual data into clusters of similar entities, or conceptual categories, to identify consistent patterns and relationships between variables or themes” (Julien, 2008:120). Content analysis is a commonly used method to analyze a wide coverage of original data, including interview transcripts, recorded observations, responses to open-ended questionnaires, journals/diaries and so on. Additionally, Julien (2008) claims that quantitative content analysis is helpful in answering ‘what’ questions while qualitative content analysis can be helpful in answering ‘why’ questions, and analyzing perceptions.

Content analysis is thus a very simple, practical and helpful analytical tool for teachers conducting action research projects, who have reflected on their perceptions in their teaching practice.

3.5.3 The Rationale of the Choices of General Data Analysis Methods

General data analysis methods mainly used in this study were interpretative method and statistical analysis method. The rationale of the choices of these research methods are presented as follows:

3.5.3.1 Interpretative Method

Section 3.3.5 in this chapter has explored the relationship between action research, and the research paradigms and the location of action research among research paradigms. It is concluded that interpretive paradigm as one of the main research approaches are very appropriate to this research project. Please see more in detail in that section.

3.5.3.2 Statistical analysis methods

Firstly, using statistical analysis method is more valid and reliable in analyzing the collected data, especially the quantitative data.

Secondly, it is much easier for researchers to analyze the data by the use of the computer software such as the use of SPSS (e.g., to carry out normality checks, and related t-tests) in order that the research findings can be interpreted appropriately and correctly. In particular, having confirmed that the data were normally distributed, I carried out related t-tests to check what improvement the students had made in the pre-test and the post-test and to demonstrate whether these changes could be accounted for simply by chance. Where statistically significant changes were demonstrated, chance was unlikely to be the explanation for the changes and there was therefore evidence that the students had enhanced their English listening in that AR (Action Research) Cycle.

Finally, the analysis results by using statistical analysis methods can reflect the objectivity or the nature of the research project, which indicates the validity and reliability of the research findings so that new theories can be generated.

3.6 Procedures of Data Collection and Data Analysis in This Study

As mentioned above, research methods (or research tools) in this study consisted of questionnaire, interviews, learning diaries and research journal, classroom observation, pre-testing and post-testing and so on. The following are about the pilot study of the research project, and the action research processes, including the procedures of data collection and data analysis in this action research project.

3.6.1 The Pilot Study of the Research Project

Before I conducted this research project formally, I had taught general English in a private college. Teaching there offered me a good opportunity to do the pilot study of this PhD research project. One of the most important things in undertaking the research project was to design the questionnaire appropriately according to the purposes of this study and its research questions. Have completed designing the first draft questionnaires, I sent them to my supervisors and asked them for advice. They gave me so many constructive suggestions on how to revise the questionnaires very well. Additionally, I sent the early draft questionnaires to one of my schoolmates who had obtained PhD degree in education at the University of Exeter and she also gave me some good advice on how to revise them. Later I had revised the questionnaires for several times before the final questionnaires were completed. After they were translated into Chinese from English, I distributed them to about 150 students of the three classes I taught in the private college. From the feedback that I had got, I revised the layout and content of the questionnaires again so that they could be ensured to be more valid and reliable in the formal investigations when the project was undertaken. Similarly, the follow-up interviews had been conducted among the

20 students. Finally, I conducted the pre-testing and the post-testing in order to compare the progress of the students' listening comprehension in their English study.

On the whole, the pilot study gave me more confidence in conducting this study. In the meantime, it made me experience the research processes essentially. From the pilot study, I also saw some shortcomings of my research design. Therefore, before the project was undertaken, I had revised the research design again. This shows that the pilot study plays an important role in conducting the research project.

3.6.2 The Action Research Processes

In the second semester of the 2009-2010 academic year, there were 19 weeks of teaching activities (2 teaching hours per week in each class). I spent 18 weeks on action research, which were divided into three periods (the last week was spent on the summary of the course and general review). The research procedure of this action research project, including the procedures of data collection and data analysis, is next described.

3.6.2.1 Plan: Planning the action

According to action research theory, firstly a teacher as a researcher should identify the research problem(s) and then plan carefully the action that he or she will take. During the first phase in AR Cycle One (Weeks 1 to 6) in this study, I discussed the research problems/issues related to the research project with my supervisors, other researchers, my working colleagues and so on. Besides this, in this study, the three processes were taken during the first phase in order to discover what the actual problems were when the students were learning English.

A) Pre-Questionnaire

The students were investigated twice by questionnaires in Action Research Cycle One. The pre-questionnaire was arranged together with a consent form at the start of their English course so that I could obtain information about the students' background and their previous learning experiences of technology, such as the computer and the internet.

B) Follow-up interview

In order to clarify the open-ended questions in the questionnaire, I conducted a follow-up interview after the questionnaire. The questions in the follow-up interviews were basically the same as those of the previous questionnaire, so that the researcher could obtain further data.

C) Testing the students' listening and speaking ability

Before the course started, I expected to identify the learners' strengths and weaknesses in certain aspects. Such a test is called a diagnostic test in testing theories (Hughes, 2003). The main aim of the test is to find out the problems in their English learning, especially problems in their listening and speaking. According to the students' level of English, I used the TOEIC (Test of English for International Communication) listening test to measure the students' listening comprehension in Action Research Cycle One.

After the questionnaire, the interview and tests were completed, the results showed that the majority of them felt that their listening and speaking had been very weak. Additionally, some of them felt that their writing skills were very weak, and which should be improved as well. The problems that they had encountered were very common and were almost as I had predicted before. Then, I made a

plan to solve the students' problems that they had encountered in their English study. The plan included some methods on how to effectively teach students in the classroom and some advice on how to learn English by using advanced technologies outside class autonomously. The plan would be implemented in my teaching action, which is described below. Similarly, in AR Cycles Two and Three, I used the IELTS and TOEFL Tests to measure the students' listening abilities respectively at the beginning and at the end of each cycle (See Tables 3.3 to 3.5). All the three cycles of this study are described in detail in Chapters 4 to 6.

3.6.2.2 Act: putting the plan into action

In this research phase, as both teacher and researcher, I implemented the plans made previously. In a language classroom, I used the computer and the internet to teach the students English. The other important thing was that I guided them to learn Business English (or general English) by using CALL autonomously after class in each cycle. For example, in Cycle One, I told the students to access learning websites, such as www.businessenglishpod.com. Then, they were required to download some podcasts that they were interested in and listen to them in their spare time. All the teaching actions conducted in three cycles of this study are described in detail in Chapters 4 to 6 (Also, see Tables 3.3 to 3.5).

3.6.2.3 Observe: observing the results of the plan

In this step, researchers collect data and analyze them. Besides the above methods for data collection, another way to collect data is classroom observation, which is being used in language classroom teaching. After class, I wrote in the research journal what had happened in the classroom in detail so as to collect the data for later analysis. Keeping a teaching/research journal is one of the most important techniques that teachers as researchers have used to get access to student perceptions and the teacher's own understanding of them (Kincheloe,

2003). My reflections from my own observations, interpretations and speculations about the significant events in my class that had happened are helpful for me to change my future teaching. This shows that keeping a research journal plays a vital role in collecting data during the procedure of action research. In addition, at the end of each cycle, in order to check the students' progress, another test (the post-test), whose difficulty was the same or similar to the previous one (the pre-test), was conducted. I measured the students' listening proficiency in order to compare the post-test results with the pre-test results to find how much they had achieved in their English study. Furthermore, post-questionnaire and follow-up interviews were undertaken at the end of each cycle. When all the data collected were synthesized, the interpretative and statistical data analyses were conducted so that new research findings could be found and existing learning problems in the cycle could be identified, in order to prepare for the next cycle. All the observations conducted in the three cycles of this study are described in detail in Chapters 4 to 6 (Also, see Tables 3.3 to 3.5).

3.6.2.4 Reflect: reflecting and planning for further action

During this phase, I needed to evaluate and reflect the above three research steps. I reflected and interpreted what had happened in the students' English study, both in class and outside class, in order to change my teaching style in the next cycle through the new understanding of the nature of the problem(s) identified. All the reflections conducted in the three cycles of this study are described in detail in Chapters 4 to 6 respectively.

In sum, for this action research project, the above circular process was undertaken three times (See Figure 3.1: The Action Research Three Cycles, adapted from Costello, (2011: 9)). Tables 3.3 to 3.5 indicate the summary of the teaching and research procedures of this study, including the procedures of data collection and data analysis in 3 AR Cycles.

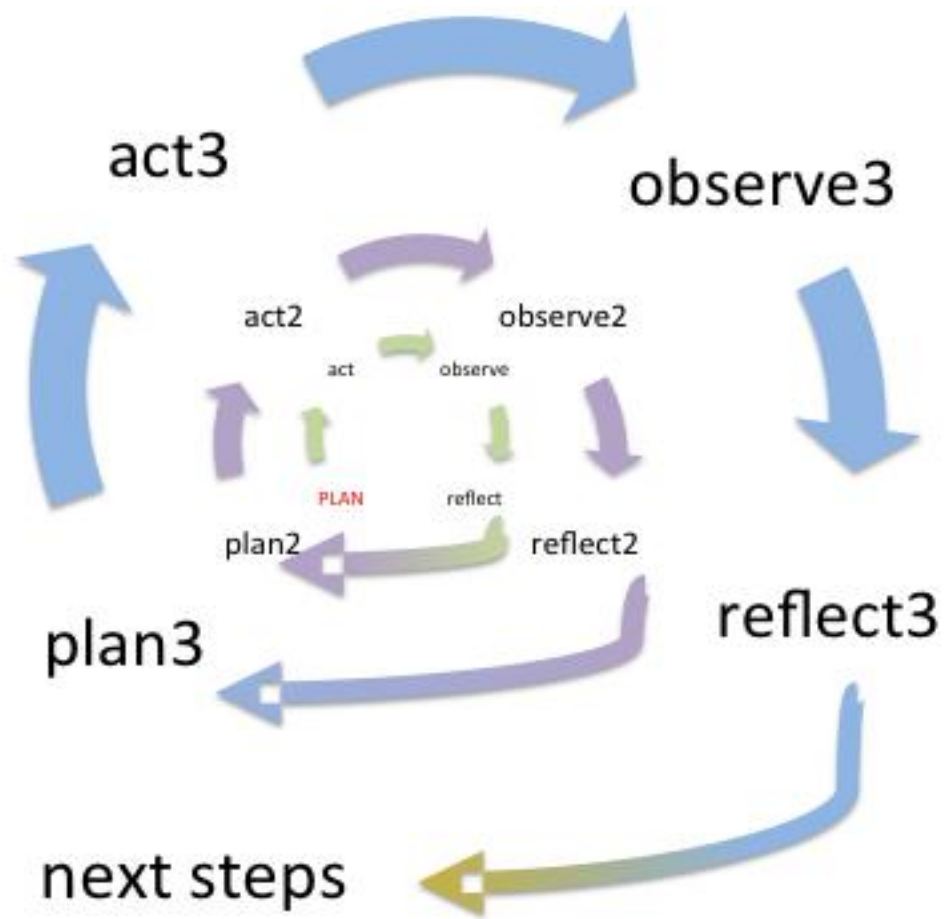


Figure 3. 1 The Action Research Three Cycles

Table 3. 3 The Procedures of Data Collection and Data Analysis in AR Cycle One

Steps of AR Cycle One	Action Research Cycle One (Note: 6-week teaching time (Weeks 1 to 6), totally 12-hour teaching)
Step1: the Identifications of the Problems	<u>Learning Problems identified (1): (from the Pre-questionnaire)</u> Vocabulary (easily forgotten); Listening (just <i>understand a speaker at a slow speed</i> (about 120 words/minute (Note: normal speed is more than 160 words/minute));
Step2: Planning	1. research plan and lesson planning determined 2. Recommended websites: www.businessenglishpod.com www.bbc.co.uk/learningenglish
Step 3: Action	1). Taught Ss learning strategies on how to memorize effectively and advised them to solve Vocabulary out of class. 2). Focused on listening and speaking in class. Listened to the materials from the coursebook (listening + dictation training) and discussed the relevant topics in groups from the coursebook as well. 3). Encouraged the students to learn English autonomously out of class, e.g., listening to Business English podcasts from the recommended websites. 4). Guided the students to participate in English listening and speaking contest.
Step 4: Observation	<u>Data Sources to answer Research Question 1:</u> Classroom Observation; Questionnaire 1; Follow-up interviews; The researcher’s journal and the students’ learning diaries; <u>Pre-testing:</u> (used TOEIC listening Test at the beginning of AR Cycle 1to measure the students’ listening level in order that the teacher can adopt effective ways to enhance their language proficiency); <u>Post-testing:</u> (used TOEIC listening test at the end of AR Cycle One to see what great progress the students have made about their listening proficiency in AR One and decided how to teach them effectively in the next cycle according to the test results). <u>Data Analysis Methods:</u> Thematic analysis; content analysis; interpretative approaches; statistical analysis
Step 5: Reflection	Some findings and Problems found in AR Cycle 1. Also, I reflected from what I had done and what had happened in teaching practice.
Research Questions	<u>RQ1:</u> During Action Research (AR) Cycle One, to what extent do students improve their listening abilities using internet learning resources, such as the Business English podcasts, and how does this relate to learner autonomy? How effectively do students manage their English learning time with technology, under their English teacher’s guidance?

Table 3. 4 The Procedures of Data Collection and Data Analysis in AR Cycle Two

Steps of AR Cycle Two	Action Research Cycle Two (Note: 6-week teaching time (Weeks 7 to 12), totally 12-hour teaching)
Step 1: the Identifications of the Problems	<u>Learning Problems identified (2): (from Questionnaire 1 in AR Cycle One)</u> Listening to native speakers' normal speed such as TOEIC (esp. listening passage) was still difficult. The students required to practise speaking English more in classroom teaching; They were not interested in Business English, but in general English; They needed interesting things such as video files in class.
Step 2: Planning	1. Research plan and lesson planning determined 2. The teacher's recommended learning websites (mainly BBC learning English) and learning resources posted in the blackboard academic suite of the University.
Step 3: Action	1. Guided the students to go to certain websites such as BBC learning English and the Blackboard in the university to choose more learning materials for listening. 2. Watched IELTS tutoring video by Australian IELTS experts and trained the students to enhance listening speed. 3. Watched the video named "Effective Presentations" (Oxford University Press, 1997), and let them discuss something in relation to the video in groups. 4. The students made oral presentations, whose resources they had chosen from the Internet, by the use of Power point. After each presentation, the classmates offered him or her comments and suggestions on it. 5. Guided the students' out-of-class activities such as English presentations contest about Shanghai Expo 2010. 6. Guided five students, who had been selected to study in a college in the UK as exchange students, on how to communicate with the British people.
Step 4: Observation	<u>Data Sources to answer Research Question 2:</u> Classroom observation; Questionnaire 2; Follow-up interviews; The researcher's journal; <u>Pre-testing:</u> (used IELTS listening Test at the beginning of AR Cycle 2 to measure the students' listening level in order that the teacher can adopt effective ways to enhance their language proficiency). <u>Post-testing:</u> (used IELTS listening test at the end of AR Cycle 2 to see what great progress the students have made about their listening proficiency in AR Cycle 2 and decided how to teach them effectively in the next cycle according to the test results). <u>Data Analysis Methods:</u> Thematic analysis; content analysis; interpretative approaches; statistical analysis.
Step 5: Reflection	Some findings and Problems found in Action Research Cycle 2. Also, I reflected from what I had done and what had happened in teaching practice.
Research Questions	RQ2: During AR Cycle Two, what is the impact on the students in terms of the improvement of their listening and speaking abilities when the English teacher instructs his students to use CALL environments (e.g., the BBC English learning website and the University Blackboard Platform) to learn English autonomously?

Table 3. 5 The Procedures of Data Collection and Data Analysis in AR Cycle Three

Steps of AR Cycle Three	Action Research Cycle Three (Note: 6-week teaching time (Weeks 13 to 18), totally 12-hour teaching)
Step 1: the Identifications of the Problems	<u>Learning Problems identified (3): (from Questionnaire in AR Cycle Two)</u> Listening difficulty (different accents, including American accents/unfamiliar topics or a bit longer materials); Learning efficiency is very low
Step 2: Planning	1. research plan and lesson planning determined 2. TOEFL podcast website
Step 3: Action	1. Did more interesting things: Did some quiz and games on the World Cup and listened to BBC news on the World cup; Let students discuss about the prediction which team would win the World cup in 2010 in groups. 2. Used TOEFL podcast website by using new teaching approaches to enhance the students' advanced listening proficiency. 3. From the podcasts, introduced some British and American cultures. 4. Guided the students to use some effective learning strategies again. 5. Still asked some students to give oral presentations, esp. the exchanged students from the UK gave excellent ones.
Step 4: Observation	<u>Data Sources to answer Research Question 3:</u> Classroom observation; Questionnaire 3; Follow-up interview; Researcher's journal. Pre-test and post-test (Used TOEFL listening test). <u>Data Sources to answer Research Question 4:</u> Students' final assignments, the researcher's journal and the students' test results from 3 AR cycles' pre-test and post-tests and so on. <u>Data Analysis Methods:</u> Thematic analysis; content analysis; interpretative approaches; statistical analysis.
Step 5: Reflection	Some significant findings and little problem. But the Teacher gets confidence; The students make greater achievements than before. Although there are no courses from the 3 rd year on, the students still would like to continue to improve their English proficiency by using the modern technology autonomously.
Research Questions	<u>RQ3:</u> During Cycle Three, to what extent have the students made progress in listening skills by using English learning websites (e.g., mainly the TOEFL podcast website) recommended by their English teacher? <u>RQ4:</u> During the entire action research project, how can the students make use of CALL environments and the Internet learning resources autonomously to effectively enhance their listening and speaking abilities, under the guidance of their English teacher?

3.7 Ethical Considerations in this research project

Ethical procedures play a vital role in all research (Stringer, 2007) and before

researchers conduct research, they should seriously consider these issues. Also, I, as a researcher and teacher in this action research project, must obtain the certificate of ethical research approval form before this study was undertaken so that all ethical issues that would be considered seriously and carefully can be approved by my supervisor and the research ethics committee of the Graduate School of Education at the University of Exeter (see Appendix VI: Certificate of ethical research approval). In the meantime, the certificate of ethical research approval can be considered as a passport for a researcher to conduct his or her research project. Therefore, it plays an important role in conducting a research, especially a social science research project. The following principles of ethical issues relating to this research are discussed in detail, and are adapted from Cohen et al (2000/2007); Mcauley (2003); McNiff et al (1996); Stringer (2007).

3.7.1 Informed Consent

This is the first fundamental principle of ethics in conducting research. Participants are to participate in research voluntarily without any coercion. Sufficient information should be conveyed to potential participants for an informed decision about whether or not to participate, on the goals of the research as well as any risks and benefits of participation (Kalof et al, 2008; Norton, 2009). Before I conducted this current study, I explained its purposes to my students clearly and in detail. They were told of their rights in participating in the research; that they could take part in the research project voluntarily; and that they could withdraw at any time or at any research instrument (whether questionnaires or interviews). Although there were no risks by participating in this study, the participants were told about the drawbacks and benefits of participation. For example, the drawbacks: they would spend some time in answering questionnaires; writing learning diaries; taking pre-test/post-test, or being interviewed. However, they were offered more opportunities to practise

English in order to improve their comprehensive abilities.

I also explained to them the following main points about ethical issues in research, as listed by Stringer (2007:55): “Any information (data) will be stored safely so that it cannot be viewed by others; None of the information that identifies them will be made public or revealed to others without explicit and written consent”. After that, the students who wanted to voluntarily participate in the research project had to fill in informed consent forms before the questionnaires, the interviews, experimental research were conducted.

3.7.2 Anonymity and confidentiality

As the protection of the participants' identity is one of the most vital aspects of social research (Mcauley, 2003), it is incumbent upon researchers to protect their research participants' privacy and other personal information, such as contact details. How to protect a participant's information and identity is a very important issue for researchers. Therefore, before it is discussed, the two concepts of anonymity and confidentiality, in terms of ethical considerations, should be defined (Norton, 2009). “Anonymity” means that no link between an individual's data and their contact information should be established, except where researchers need to obtain follow-up information provided by some participants (Kalof et al, 2008).

The principles of “Confidentiality” have been defined clearly by (Marczyk et al, 2005: 244) as follows:

“The right to confidentiality is embodied in the principles of respect for persons, beneficence, and justice. Generally, confidentiality involves both an individual's right to have control over the use or access of his or her personal information as well as the right to have the information that he or she shares with the research team kept private. The researcher is responsible not only for maintaining the confidentiality of all information protected by law, but also for information that might affect the privacy and dignity of research participants”.

Based on these fundamental principles in research ethics, when I conducted the current research, in the foreword of the questionnaire of this study, I told my research participants about the purposes of the research and the questionnaires, and I also formally promised them that all their personal data and their answers would be confidential. Also, before the interviews started, I guaranteed the interviewees that all their answers and their personal data would be strictly kept confidential. Meanwhile, I guaranteed that if my research related to the participants is published, I will use pseudonyms in the publications. Only by this means can the research participants' rights be protected, so that they can be safeguarded from any harm.

3.8 Summary of Chapter 3

Chapter 3 has defined a number of terms in relation to research approaches, such as quantitative research and qualitative research, along with research paradigms such as positivism, which have been distinguished from other similar terms. In order that this research project could be undertaken, the theoretical foundations of action research as a general research methodology employed in this study have been presented, along with the brief discussion of some basic philosophical theories, because good research derives from a sound philosophical basis (Wellington et al., 2005). This chapter also emphasizes the principles and characteristics of action research, and on the location of action research in the interpretative research paradigm. More detailed discussions were presented about the framework of the research design in this study, research procedures, choice of research instrumentation and data analysis methods, and the course design, including the researcher's teaching plan. It is believed that all this lays a good foundation for this study to be successfully completed.

Chapter 4 Action Research Cycle One

4.1 Introduction

As stated in Chapter 3, this action research project consists of three cycles. Each action research cycle is explained and interpreted in an independent chapter. The present chapter mainly describes my practice of teaching and action, and the research process in Action Research Cycle One, so that I can explore some findings in relation to the research questions. Since this study was a teacher-as-researcher individual action research, the entire research process was conceived of as a continuous cycle: planning, action, observation and reflection. In Chapter 4, the aims of the course, and the coursebook adopted are introduced briefly. Also, the learning website used in classroom teaching and for the students' self-study outside class is described in detail. The students' learning problems in learning English were identified results from the questionnaires and follow-up interviews. Then, I set about to address the problems of my teaching practice. Through class observation and actual research, some findings relating to the research questions were discovered. Finally, from my reflections and the students' suggestions, my teaching style was modified for Cycle Two.

4.2 A Brief Introduction to the Course

The course that I taught from March to July 2010 was "Cambridge Advanced Business English" in one of the leading universities in Northeastern China. The university offered the course for students who had passed CET 6 (College

English Test Band 6), which is one of national English language proficiency tests for non-English majors in China, or for those who nearly reached CET 6 Level in English. The following sections cover the aims of the course, the textbook, and the learning website that was used, both in class and for the students' self-study out of class, during the first cycle of the action research project.

4.2.1 The Aims of the Course

Having considered the fact that the majority of the students specializing in computer science had passed CET 6, the university authorities decided that a new course, called *Advanced Business English*, would be introduced. One of the primary reasons was that the course would enable students to better develop their English skills for their future careers or for further study, thereby offering them a competitive advantage. As English is an international language, it is used in different areas globally, such as science or technology. If a graduate has English skills, he or she can more easily find employment with companies with foreign capital in China, or overseas, than those who lack English skills. Therefore, the central aim of this course was to enhance the students' English proficiency, especially listening and speaking skills, both of which are very weak for the majority of Chinese learners. The following aims are specific to this course:

A) In recent years, English proficiency has played an increasingly important part in finding employment at companies with foreign capital in China or overseas, as the job markets are increasingly more competitive all over the world. The course aimed to lay solid foundations for students seeking to employment in these companies. Students should master basic communication techniques in Business English, such as listening and speaking skills, including basic vocabulary and key terms. Additionally, the students should develop various skills in Business English, including negotiating skills.

B) The course also aimed to lay a solid foundation for those who planned to study abroad, after their graduation from this university. Nowadays, more and more young college graduates in China choose to study for a Master's degree or a PhD degree in English-speaking countries, such as the UK and the USA, because the quality of higher education in these two countries are better than those of many other countries. In order to satisfy the students' aims for further study abroad, besides the emphasis on listening and speaking skills, international English language proficiency tests such as IELTS and TOEFL would be briefly introduced.

C) The course mainly aimed to develop the students' learner autonomy in order to enhance their English proficiency with the use of modern technologies, such as the computer and the internet. The course attempted to solve existing problems in learning English, such as the 'deaf and dumb English' and 'inefficient learning strategies', as mentioned in a previous chapter. In this case, the aim happened to fit in with the purpose of this research project.

In short, the primary purposes of this course were to lay solid foundations for the students' future employment prospects and further study abroad, and to promote their learner autonomy in order to improve their English oral communicative abilities with the use of modern technologies.

4.2.2 The Textbook Used

As the aims of this course had been determined, I began to consider carefully what teaching materials would be used in classroom. Generally speaking, choosing a suitable coursebook is an important consideration for teachers. A key issue in terms of the choice of coursebooks for language teachers is familiarity with the criteria for evaluating materials in language learning and teaching

before making a decision. Cunningsworth (1995) proposes four criteria for evaluating coursebooks as follows: Firstly, coursebooks should conform to learners' needs as well as the purposes and objectives of the language learning course. Secondly, coursebooks chosen will help learners use the target language effectively for their own purposes. Thirdly, coursebooks should make the learning process easier. Finally, coursebooks should act as a clear role to support learning.

The above four criteria for evaluating books play an important part in selecting a suitable coursebook for the students, as far as a language teacher is concerned. In my view, besides these four criteria, the learning materials should motivate learners to learn the target language autonomously. Also, it is better that the materials should be authentic. Furthermore, the degree of difficulty of the coursebook should match the level of the learners' language proficiency.

According to the above criteria and principles for materials evaluation and selection, the main teaching resource for classroom use was adapted from the textbook called "*Business Benchmark Advanced*" (Student's Book), written by Guy Brook-Hart (2007a) and published by Cambridge University Press in 2007. The teacher's book (Brook-Hart, 2007b) was written by the same author and published by the same publisher as well. The following are the main characteristics of students' textbook (See Table 4.1):

Table 4. 1 Main characteristics of *Business Benchmark Advanced* (students' book)

Coursebook: Business Benchmark (Advanced); Author: Guy Brook-Hart; Publisher: Cambridge University Press; Publishing time: 2007	
The language level of learners	Learners who have passed an intermediate level of English proficiency test.
The purpose of the coursebook	For students who want to study Business English; Or: For learners who want to pass Cambridge BEC (Business English Certificate) Test.
Language skills to be practised	Listening, speaking, reading and writing
Other language components	Vocabulary; grammar workshop and the summary of the main grammar points
The source of the materials	From authentic materials
The situation of learners' self-study	Very helpful for learners' self-study

1). The student's textbook is for advanced students who want to study Business English or those who want to pass the Cambridge BEC (Business English Certificate) Test. As the majority of my students had passed CET (College English Test) Band 6, roughly an intermediate level English proficiency test in China, as mentioned earlier, it was believed that they would not have difficulties in reading the materials. However, higher listening and speaking skills in addition to writing skills would be too challenging for them. As a result, classroom teaching mainly focused on developing the students' communicative abilities.

2). The textbook is very useful and helpful to develop learner autonomy. It consists of twenty-four units, covering important vocabulary, grammar, the four basic language skills (listening, speaking, reading and writing). These units are organised in groups of four around a theme. For instance, the themes cover management, competitive advantage, advertising and sales, finance and so on. As time for classroom teaching was very limited (two teaching hours in each class per week), I just chose two typical units from each of the above themes. As for the other units, I required the students to learn them autonomously out of class. The textbook is accompanied by three audio CDs, which contains a variety of recorded material, including interviews with business people and

Cambridge BULATS (Business Language Testing Service) listening tasks. Furthermore, students can go to the textbook website (<http://www.cambridge.org/businessbenchmark>) to obtain additional resources and information. Finally, the student's book not only provides the answers to some of the exercises but also includes transcripts of the recordings so that students can check their answers and listening comprehension in their out of class self-study. Therefore, obviously, the student's textbook is very suitable for their autonomous learning after class.

3). Most of the coursebook consist of various types of authentic materials. The listening material is authentic, e.g. interviews with business people. Vandergrift's research (2006) on second language listening indicates that learners who have listened to authentic oral materials show greater overall listening comprehension compared to those who have not. Therefore, it is helpful to improve students' listening comprehension and their speaking skills by using authentic materials as listening resources. Additionally, the reading materials are largely authentic Business English articles selected from some famous journals such as the Economist, or from the English websites relating to Business English. Some of my students told me that these authentic materials were helpful to motivate them to learn English actively with great interest.

The primary reasons why the coursebook was so important in the course 'Business English' are as follows: Firstly, the textbook provides students with authentic language learning materials on Business English, which offer them more opportunities to practise the four basic language skills and help to improve their oral communicative abilities. Also, the textbook saves both teachers' and learners' precious time in finding more suitable teaching and learning resources from other places.

Secondly, the textbook gives directions on the course to the students, which makes them understand the curriculum objectives and the level they are

expected to reach. As O'Neill (1982) suggests, learners who do not learn from textbooks may deviate from a useful medium of orientation and study outside the classroom. Arguably, by using textbooks, learners are able to gain confidence in learning courses.

Thirdly, the textbook can provide students with rich complementary learning materials for their self-study out of class, which are useful and helpful in developing autonomous learning in students. Flowerdew and Miller (2005: xi) claim that "textbooks are normally viewed as presenting established bodies of knowledge to uninitiated students". Therefore, it also shows that the chosen textbook provides systematic knowledge on Business English for students who had no knowledge or experience about it. Finally, the textbook plays a vital and positive part in the daily job of teaching English and in the periods of change in teaching and learning English (Hutchinson & Torres, 1994). Therefore, the textbook cannot be substituted by other learning materials, such as learning resources from the internet.

In summary, the student's textbook provides a variety of language skills which satisfy the various students' language learning needs. Additionally, it is helpful for students to develop learner autonomy and to enhance their English language proficiency, especially their oral communicative abilities. Finally, it is worth mentioning that using the coursebook in the classroom is helpful to improve the quality of teaching and to easily conduct this research project in practical teaching. On the whole, the selected textbook is one of the most suitable teaching resources of the existing coursebooks for the Advanced Business English course.

4.2.3 The Business English Website Used in Class and outside Class

The website used in classroom teaching and for the students' self-study out of class in Action Research Cycle One, is a learning website related to Business English (<http://www.businessenglishpod.com>, accessed, 1 February 2010; see Figure 4.1). This section introduces the main contents of the website and explains the reasons why it was used as a teaching resource and for supplementary materials for the students' self-study out of class.



Figure 4. 1 The Business English Podcast Website

(A) The Business English Podcast Website

The home page of the business English Podcast website includes the following columns: Business English, e-Books, Members, Vocabulary and so on. The main contents are in two columns, Business English and Vocabulary. The first column Business English, for example, has various web pages available, including all the podcasts covering essential Business English skills for Meetings; Presentations; Telephoning; Job Interviews; Negotiations; Socializing;

Management; Communication; Sales; Advanced; Intermediate; and so on. Additionally, all the above podcasts can be downloaded freely so that language learners can listen to them by digital media players such as MP3 and MP4, conveniently at anytime, anywhere (see Figure 4.2).



Figure 4. 2 Management lessons page on the Business English Podcast

(B). The Principal Reasons for Choosing the Website as Supplementary Materials for the Textbook

In this section, the primary reasons why this website was used for supplementary materials to the textbook for listening and speaking practice by the students out of class are given.

Firstly, the main contents of the Business English website correspond to those of the textbook. In the above descriptions of the website and the coursebook, it is very clear that they have the same themes, such as management and sales. However, the contents of the website mainly focus on practical skills, such as telephoning and negotiating, in the daily business communicative abilities. In other words, the website contains more practical Business English contents than the coursebook. Also, the listening materials on the website can be used for

listening materials by students out of class so that more listening practice can help them improve their listening abilities.

Secondly, the speed of the podcasts on the website is a medium speed. However, the speed of the listening material with the textbook is much faster than that of the website. Therefore, the speaking speed of the website is more suitable for our students than that of the accompanying textbook audio materials.

Thirdly, all the podcasts are authentic materials because both the podcast presenters and the speakers in the dialogues are native speakers of English. As a result, learners would be interested in using the podcasts to practise their listening and speaking skills in order to enhance their oral communicative abilities.

Finally, it is useful and helpful in developing autonomous learning in students as well. In particular, there is study notes, such as audio transcript and explanations downloaded, which are very helpful for self-study out of class. Additionally, there is some online practice to check listening comprehension.

In summary, the primary reasons why the Business English website was used as supplementary materials for the coursebook in listening and speaking for self-study by the students out of class were to develop the students' learner autonomy and to enhance their listening and speaking skills. As a result, the Business English website made a good supplement to the students' coursebook and my classroom teaching. Therefore, it can be clearly seen that the Business English website and the textbook interact with each other mainly because they complement each other in terms of content and language skills practice.

No textbook should be seen as an encyclopedia and this is true for websites. It was however believed that the combination of the textbook and the relevant

learning website could help learners study Business English systematically.

4.3 Action Research Stage One: Planning

As the previous chapter stated, planning is the first stage of action research. As Burns (2010) points out, at this stage the researcher identifies a problem or issue and develops a plan of action in order to bring about improvements in a specific area of the research context. Meanwhile, the researcher should predict the following issues before he/she conducts research: i) the kind of investigation is possible within the realities and constraints of his/her teaching situation; ii) the potential improvements he/she thinks are possible (ibid).

4.3.1 Identification of the Main Problems in Learning English

In this section, I mainly discuss the students' learning problems, such as listening and speaking skills, which they had encountered in their English study and detailed in their questionnaire and the follow-up interviews, before I conducted the action research. In the questionnaire, the principal problems with vocabulary, listening and speaking were investigated. Table 4.2 shows the survey results of the students' main learning problems in English study, followed by the data analysis.

Table 4. 2 The students' main learning problems in English study

Note 1: Number (N) of returned questionnaires: Class One (N1=43 from 46); Class Two (N2=53 from 56).				
No. of the Questions: (Note 2: in Questions 1–4, if necessary, you can choose more than ONE choice.)	Choice	<i>I sometimes forget the words after I have learned them if I do not review them.</i>	<i>I can remember the Chinese meanings of the words, but I can't use them appropriately and correctly in different contexts.</i>	<i>I can memorize the words for a few hours, but after that I will forget them completely when I see them next time.</i>
Q1. My trouble on English vocabulary learning is that___:	Class One	70%	30%	30%
	Class Two	84%	49%	38%
Q2. My problem in English listening is___:	Choice	<i>When listening to a dialogue or lecture, I understand the meanings of just a few words, but I cannot understand anything about the whole dialogue or lecture clearly.</i>	<i>I can understand English spoken by Chinese speakers, but I cannot understand English spoken by native speakers.</i>	<i>I can better understand a speaker at a slower speed than a speaker at a normal speed.</i>
	Class One	20%	5%	75%
	Class Two	15%	5%	80%
Q3. My problem(s) in English speaking is (are)_____:	Choice	<i>I do not like to speak English because I am afraid of being laughed at for my poor pronunciation.</i>	<i>Though I can speak most of the words correctly, I can't speak the sentences correctly.</i>	<i>I can just speak some simple daily conversation, but I cannot speak about other topics, such as politics and economy.</i>
	Class One	5%	10%	95%
	Class Two	27%	38%	73%
Q4. General comment(s) on my listening and speaking abilities is (are)_____:	Choice	<i>Both listening and speaking abilities are just so-so.</i>	<i>My Listening ability is good, but speaking is bad.</i>	<i>Listening ability is bad, but speaking is good.</i>
	Class One	78%	20%	2%
	Class Two	80%	18%	2%

In Question 1, from Table 4.2, the main problem for both of the classes was that “I sometimes forget the words after I have learned them if I do not review them” (Class One: 70%; Class Two: 84%). That is a common problem not only in one’s foreign language learning but also in one’s native language learning. Regarding

the relationship between remembering and forgetting, Petty (2009) argues that forgetting and remembering are automatic and repetition is the only good way to ensure something is remembered. In order to make sure that any knowledge is recalled, learners are required to use it frequently. From our learning experience as learners, repetition and frequent use of knowledge play an important part in our language learning. Therefore, as long as learners keep reviewing the learned materials frequently, they can maintain the materials longer than normal. Undoubtedly, learners should avoid repeating knowledge mechanically. They should focus on understanding in the repetitive learning process. In this situation, this kind of problem requires teachers to guide their students in the use of retention and language learning strategies correctly in their language learning practice so that they can enhance their learning efficiency.

In Question 2, it is very clear that the main problem in listening for both of the classes was that more of the students could understand a speaker only at a slower speed more than a speaker at a normal speed (Class One: 75%; Class Two: 80%). Most of the students understood English spoken at around 130 words per minute (wpm) according to their current level (e.g., CET6 (College English Test– Band 6)), but the normal speaking speed of native speakers of English can be more than 160 wpm on average. Tauroza and Allison (1990) found in their study on the rates of British English speech rates that the average for different categories of speech differ, for example, radio programmes (160 wpm); conversation (210 wpm); interviews (190 wpm); lectures (140 wpm). However, the normal speech rate, taking an average of the last four mentioned categories, was 175 wpm. Also, Table 4.2 demonstrates that the students in Class Two were weaker in all the listening problems listed in the questionnaire than those of Class One. Therefore, it was very important for me to concentrate on listening practice in my teaching in the first place.

In Question 3, the common speaking problem of the two classes was: “I can just talk about some simple daily conversation, but I cannot talk about the other

topics such as politics and economy deeply”. The proportion of Class One was higher than that of Class Two (Class One: 95%; Class Two: 73%). However, the students of Class Two had more serious problems than those of Class One. The main reason is that nearly 30% of them did not like to speak English because of being afraid of being laughed at their poor pronunciation and that nearly 40% of them could not speak English sentences correctly. However, just a small number of the students in Class One had the same problems as those in Class Two.

According to Table 4.2, the common problem with both listening and speaking in the two classes was that “both listening and speaking abilities are just so-so”. Additionally, the table clearly shows that a similar proportion, 75% and 80% in the two classes, reported problems, indicating that oral communicative ability was very weak among the students.

The other main problems in English study have been listed by the students as below in Table 4.3:

Table 4. 3 The other specific problems in English study

Themes of the learning problems	The typical specific problems in English study	“S” represents “Student” and the figure stands for the order of the students’ list in each class
The insufficiency of vocabulary	<i>“My vocabulary isn’t large enough. When listening to quickly spoken materials, I can’t understand the central meaning. Also, I can’t use the vocabulary that I have learned in the conversations skillfully.”</i>	S6, Class One; Similarly S37/S42, Class One;
The incorrect use of vocabulary	<i>“I don’t know how to use the words that I remembered correctly in terms of speaking and writing.”</i>	S5, Class One; Similarly, S41/S43/S19/S54/S17/S7/S8, Class Two;
The problem of listening comprehension	<i>“I can hardly understand some of the ways that native English speakers speak.”</i>	S22, Class One;
	<i>“I can hardly understand some of the complex sentences with some unknown words.”</i>	S13, Class One; Similarly: S25, Class One; S7, Class Two.
The problem of listening and remembrance	<i>“While listening to a short passage, I can understand the meaning of every sentence, but when the listening passage is finished, I cannot remember the meaning of the whole passage clearly.”</i>	S5, Class One;
The problem of oral English	<i>“I hope to improve oral English, but the environment lacks language communication in English.”</i>	S9, Class One; Similarly: S5/S13, Class One; S4/S33, Class Two.
	<i>“I can’t speak English fluently. I can’t speak it with correct intonations, either.”</i>	S7, Class One;

From the above feedback from the students’ comments, there were three main learning problems in English: listening, speaking and remembering vocabulary. It is clear that one of the thornier issues was listening, which would also become one of the most difficult learning problems to be addressed in my teaching practice.

Besides the questionnaire, I had tested the students’ listening proficiency with the TOEIC Listening Test before I conducted the action research project. As mentioned in the previous chapter, the TOEIC Listening Test is a valid assessment of English-language listening skills for the workplace because listening skills are essential for effective face-to-face communication, meetings, videoconferencing, teleconferencing, podcasts and telephone conversations,

which are all very useful in the workplace. The listening test consisted of 100 multiple choice questions to check the candidate's listening abilities and test the level of spoken English indirectly. The primary purpose of the pre-test was to diagnose the students' strengths and weaknesses in listening proficiency, also called diagnostic tests (Hughes, 2003). The test result indicated that only about 10% of the students in Class One reached scored 60% correct or more, but no one passed that level in Class Two. Therefore, the test result confirmed that the students' listening level was one of the weakest points in the four basic language skills.

In summary, there were three main problem areas in learning English for the students before the course began: vocabulary, listening and speaking. Regarding vocabulary, the students felt that the words that they had recited were easily forgettable without frequent revision. Even if some of the words had been retained, they could not be used correctly. Additionally, the other main problems were listening and speaking skills, which were the weakest of the four language skills. Finally, in order to address the above learning problems, it is very important for teachers to help and encourage their students to develop their learner autonomy in classroom teaching. From Li's teaching experience (Li, 2009), the way that she has coped with the above issue was to encourage her students to promote their learner autonomy successfully. Therefore, teacher encouragement played a very crucial role in developing and promoting student autonomous learning. Here the most important thing is that teachers should encourage students to make full use of modern technologies, such as the internet and digital media players, to improve their listening and speaking skills. It may also be in classroom teaching that I could use computers to teach the students under the guidance of the theories of Second Language Acquisition (SLA) and Computer Assisted Language Learning (CALL), and so on. In this way, language learning and teaching could be improved in practice.

4.3.2 Planning the Research in Practical Teaching

Before I designed the course, I had investigated the students' expectations/needs about the Business English course. In education, Business English is an ESP (English for Special Purposes) Course. In this case, it was necessary to firstly analyze the students' needs, because needs analysis is "the process of specifying the learners' language needs in advance of designing a course for them, especially an ESP (English for special purposes) course" (Thornbury, 2006: 142). In other words, needs analysis means "sets of procedures for determining language content and teaching procedures for specified groups of learners" (Nunan, 2004: 215). Therefore, needs analysis is the first step in course design, especially in ESP course design, in order that course teachers assess what their learners' particular language needs (Thornbury, 2006). Meanwhile, one of the most important tasks is that setting goals and objectives in educational contexts (Nunan & Lamb, 2001; Reinders, 2011). Therefore, needs analysis are helpful not only for the teacher to understand his/her students' weaknesses and strengths in advance of beginning with the course, but also for students to know their final goals that they should reach.

Table 4. 4 The students' needs analysis survey on the teaching before the course

Class	Focus on Listening	Focus on Speaking	Focus on Reading	Focus on Writing
Class One	67%	65%	24%	45%
Class Two	69%	68%	32%	41%

Note 1: Number (N) of returned questionnaires: Class One (N1=43 from 46); Class Two (N2=53 from 56).
Note 2: in the following choices, if necessary, you can choose more than ONE choice.

The following expectations/needs listed below were proposed by the students:

Table 4.4 suggests that accounting for nearly 70% of the students in both of the two classes, was that the course should focus on listening, including tips on improving listening skills and focus on practising oral English in different contexts,

including communicative abilities in Business English. The other main expectations/needs from their responses of the questionnaires and the follow-up interviews were as follows: to watch more videos of dialogues in Business English (including TV programmes and movies); to learn more contents beyond the textbooks, and not just to focus on campus life; to have more English contests; to learn more vocabulary in Business English; to present abundant teaching content in class; to teach English learning strategies; and to introduce British culture and American culture.

The above students' expectations/needs chimed in with their main learning problems in the pre-investigation questionnaire result. Therefore, the emphasis on classroom teaching would still be on listening and speaking practice.

Table 4.5 shows the teaching plan in Action Research Cycle One from March to April 2010. The general teaching plan consisted of classroom activities, recommended Business English learning website materials for students' autonomous out of class learning and so on.

Table 4. 5 The teaching plan in Action Research Cycle One

	Coursebook (Brook-Hart, 2007a) (Units):	Listening (in classroom activities) (Note: Listening (A) from the Business English website. Listening (B) from the coursebook).	Speaking (in class Activities) (Note: from the coursebook)	Vocabulary/ Writing/ Reading (Outside class activities, previewing the coursebook)
1	Unit 1: Corporate Culture	(A) Job Interviews: Previous Experience (Part 1) (B) My company's culture (Aspects of corporate culture).	Talking point: Aspects of corporate culture (Group Discussion).	Vocabulary: Company culture; Board; bottom line; revenues, etc. Reading: <i>Who is responsible for corporate culture?</i>
2	Unit 2: Leaders and managers	(A) Job Interviews: Previous Experience (Part 2) (B) Rachel Babington, Disney Channel, on leaders and managers;	Talking about good leaders; getting the most from staff; producing a more effective workforce;	Vocabulary: Leadership skills: founder, etc.; Reading: Richard Branson, leader of Virgin
3	Unit 3: Internal communications	(A) Opening and Managing Meetings (Part 1) (B) Advice for communication effectively with colleagues	The best way of communicative different things.	Vocabulary: abbreviations Reading: Internal messages (memo, email, note, notice) Homework: write an email to the English teacher.
4	Unit 5: Customer relationships	(A) Opening and Managing Meetings (Part 2) (B) Boris Shulov on Customer relationship Management	Discussing customer-supplier relationships	Vocabulary: Helpdesk, etc. Reading: Skim the extracts on Page 31 fairly quickly.
<p>Note (1) Teaching Time: March to April 2010; Units 1 to 5 (Unit 4 for students' self-study outside class). (2) Recommended internet-based resources in relation to the course (outside class self-study activities): www.businessenglishpod.com/</p>				

4.4 Action Research Stage Two: Action

The plan described above was at this stage was put into action. As Norton (2009) suggests, before the action is conducted, teachers as researchers should know the fundamental aim of pedagogical action research, which is to research some

aspects of a teacher's teaching or assessment practice, some elements of the students' learning experience or academic performance, and so on. The following teaching activities were my teaching practice in this research project, according to the purposes of this study, including the students' expectations/needs of their studies:

1). I offered effective learning strategies for the “Cambridge Advanced Business English” course from my many years' teaching and learning experience.

Generally speaking, language learning strategies are considered to behaviours or actions used by learners to make their language learning more successful, self-directed and enjoyable (Oxford, 1989). In my view, a good and effective learning strategy was any that leads to a learner's improvement and success in learning

As the primary purposes of this course were to make the students master basic communication techniques in Business English and to focus on improving their listening and speaking skills, in order to lay a solid foundation for their future employment and for their further study abroad, it was important for me, as a teacher and researcher, to offer advice on learning methods and strategies. Some of the advice on how to benefit from the course was:

(A) Read the textbook (Brook-Hart, 2007a) after class as it was believed that it would help the students improve their English proficiency comprehensively.

(B) Focus on reading the material in each unit and recite the vocabulary before coming to class. These previewing activities would be very helpful to develop student learner autonomy after class.

(C) Access the Business English Podcast website relevant to the course

(www.businessenglishpod.com). Download podcasts and listen to two or more audio files each week. It was better for the students to listen to the podcast(s) for at least half an hour each day.

(D) Practise speaking English frequently with their classmates, or use the internet voice tools such as Skype to communicate with other people, including native speakers of English, online in English.

(E) The most important thing was to enhance listening and speaking skills by using computers, the internet or digital media players, autonomously.

In short, it was hoped that the above advice would enable the students to improve their learning abilities and promote learner autonomy.

2). Group work in classroom teaching

Group work is one of the most common teaching methods in language classroom, especially in a student-centred teaching approach classroom. One of the most important advantages of group work is that each member in a group can equally be offered opportunities to use the target language so that their oral communicative abilities (especially listening and speaking skills) can be improved. Meanwhile, the learner can share his/her own ideas or learning experiences to others. Cooperative learning can be promoted through group work, which can enable learners to enhance their learning maximally (Johnson et al, 1998). More importantly, their learner autonomy and learner motivation can be promoted by this teaching activity because students can make their own decisions when working together without teachers' control and constraint so that their learning interests can be increased (Harmer, 2001; Ur, 1996).

According to the requirements of group work (ideally, 3 to 5 people in each group) (Thornbury, 2006), I designed two topics for group work or discussion very

carefully in each classroom teaching. Sometimes, I gave hints on the topics for the students to discuss. For example, I gave them key words or useful phrases, and sentences relevant to the topic so that they could reduce the degree of difficulty in the discussion. In most of the cases, I encouraged the students, especially those with weaker speaking abilities, to talk more about the topics that they were discussing, so that my encouragement could increase their confidence in speaking English. After the group discussion ended, I often asked one or two of each group as (a) representative(s) to report their results to the whole class or answer the discussion questions.

Despite the above advantages of group work, the biggest disadvantage is that sometimes, if the teacher(s) cannot manage the class effectively, a small number of the students use their native language to communicate with their group members. In order to avoid such a problem, I often tried my best to adopt effective measures to prevent my students from speaking Chinese in their group work, so that their oral English skills could be practised.

3). Some learning concepts such as cooperative learning and brainstorming

In my teaching practice, I also taught my students some learning concepts such as cooperative learning and brainstorming so that they could develop and improve their ability to address the learning problems that they had encountered.

Group work, also called cooperative learning, is one of the best researched of all teaching strategies (Wong, 2001). Previous research shows that students who have the opportunity to work collaboratively learn faster and more efficiently, have greater retention, and feel more positive about the learning experience (Johnson et al, 1991). Additionally, group work not only increases a student's active participation but also encourages social skill development, enhances communication, increases independence, and facilitates effective learning by the

sharing of ideas and learning from one another (Westwood, 2008). This shows that the advantages of cooperative learning, such as group work, play an important part in effective learning. Further, cooperative learning is considered to be one of student-centered approaches in language teaching, as well (Haager et al, 2010). Therefore, group work became one of the most common teaching activities when I employed student-centred teaching approaches.

Another learning concept called brainstorming was also introduced into my classroom language teaching, especially in terms of teaching speaking and writing. Brainstorming is a creative group technique designed to generate a large number of ideas for the solution of a problem. The method was originally used in business activities, and later adopted in the field of education. In language teaching, brainstorming has been regarded as a way of generating a series of ideas in a group activity through learners' free and relatively unstructured discussion on an assigned topic (Richards & Schmidt, 2010). Sometimes, when students discuss a difficult issue or problem in relation to their course, they are required to use brainstorming, which is considered an effective way of solving the problem. In brainstorming activity, learners should mainly list as many ideas as possible, uncritically, at the beginning. Later, the evaluated ideas can lead to a very varied collection of ideas. Finally, brainstorming represents a more focussed way of gathering ideas and may act as an information schema or self-questioning scale for future work (Nation & Newton, 2009).

When many more ideas in relation to the topic have been obtained, speakers can talk about it more easily by using more examples to support the main points. Perhaps this is another advantage of brainstorming in teaching speaking. For example, I gave the students majoring in computer science a topic related closely to their majors to be discussed. The topic was adapted from one of the TOEFL independent essay topics (for more details in teaching, please see Appendix I: One example of teaching speaking by the use of brainstorming). The speaking activity using brainstorming confirmed the advantages mentioned.

Similarly, brainstorming can be applied to the teaching of writing so that learners' writing creative abilities can be improved.

4). Focus on listening and speaking practice in classroom teaching

As stated earlier, the students' listening and speaking abilities were very weak. As a result, speaking and listening practice were emphasized in classroom teaching. Generally speaking, I often required the students to do some warm-up exercises at the beginning of each class, such as role-play and games. Also, they were required to do vocabulary and expression exercises in relation to the topics to be discussed, before the group work was conducted, so that the practice could help them discuss the topic(s) more easily. Meanwhile, I guided them in using cooperative learning and brainstorming in their group work. Then, I asked some students from the different groups to answer the questions briefly and clearly.

Regarding listening teaching strategies, usually two typical types of listening learning processing are adopted, such as the top-down processing, and the bottom-up processing (Flowerdew & Miller, 2005; Nation & Newton, 2009; Richards & Schmidt, 2010; Rost, 2006). Sometimes a third type called the interactive listening processing model is employed (Flowerdew & Miller, 2005).

In the bottom-up processing, comprehension starts with the basic sounds, words, clauses, sentences and texts until the meaning is gained, which is viewed as a process of decoding (Richards, 2008). Thus, listeners gradually make sense of these basic sentences which combine to create ideas and concepts and relationships between them.

The top-down processing emphasizes the use of listeners' previous knowledge, including background information and knowledge, in listening practice so that listeners can understand the meaning more deeply (Rost, 2006). Based on this

principle, I often told my students some background information before the listening practice so that their listening comprehension could be improved.

The interactive model combines the above two models: the bottom-up model and the top-down model (Flowerdew & Miller, 2005). Generally speaking, the beginners usually employ the bottom-up processing first, then the top-down processing. Intermediate and advanced language learners can develop their listening abilities according to the difficulty index of listening materials by selecting one of the above three models. However, the relationship between the bottom-up processing and the top-down-processing is very complex (Field, 2004). It seems that different level learners use different listening strategies by selecting one listening learning processing model or integrating the both common processing models, dependent upon the difficulty index materials that they hear. In addition, if the above teaching strategies are appropriate for use in classroom teaching, they will influence autonomous learning outside of the classroom (Flowerdew & Miller, 2005). Therefore, it is very important for language teachers to select an appropriate teaching strategy in their listening teaching.

In my teaching practice, I often used the above teaching strategies to teach listening. Usually, I played the computer audio file three times. For the first time, I had the students grasp the main ideas or points, without worrying about the details of the listening material. In fact, this was similar to the top-down model mentioned above. For the second time, I asked them to note down the main points or key words or phrases in the listening material so that they could understand the main ideas of the material more deeply. This was the 'interactive model' described above. For the third time, I asked them to check their listening comprehension through the exercises on the textbook. Finally, I asked them to answer the questions in relation to the listening exercises. Then, I told them the answers to the exercises so that they could check to see whether they comprehended them correctly or not.

Sometimes I used dictation to train the students' listening because dictation is useful for practising listening, pronunciation and spelling simultaneously (Maxom, 2009). For example, in Unit 5 of the coursebook (Brook-Hart, 2007a: 30), as the interview for the listening practice is longer than the others that the students listened to before, I divided it into 3 parts. Each of the parts was listened to two or three times. The comprehension exercises related to each part followed. Finally, I asked them to write down each sentence of this part as dictation while I played each of the audio files two or three times on the computer. As time in class was very pressing, I gave the students have the first part of the dictation. Regarding the other parts, they were required to practise listening after class in order to develop autonomous learning. After the dictation, they could check the tape scripts at the back of the coursebook. Although dictation, as a type of integrative test, used to be regarded as only a means of measuring learners' skills in listening comprehension (Heaton, 1988), when considered as a good learning technique, it helps learners to improve their language proficiency, especially grammar, vocabulary, reading and listening comprehension (Rahimi, 2008). On the whole, dictation exercises as teaching activities are very helpful for learners to enhance their language integrative abilities, especially listening abilities in English language learning.

5). Student-centred approach and learner autonomy by using the modern technologies

In Chapter Two (literature review), the relationship between the student-centred approach and learner autonomy was discussed. In my practical teaching, I acted in the three teaching roles in autonomous language learning: the teacher as facilitator; the teacher as counselor; the teacher as resource, following Voller (1997). Some teaching activities in relation to the student-centred approach, such as group work and role play, were conducted. Meanwhile, it has been pointed out that another important role of the foreign language teacher in the

modern technology era is how to guide their students to learn a foreign language autonomously out of class by using the advanced technologies, such as the computer and the internet, fully and appropriately. Therefore, in my teaching practice, one of the main things that I did in classroom teaching, as mentioned above, was to offer my students some learning strategies, not just imparting knowledge to them. As some students pointed out, without my guidance, it would have been very difficult to choose some suitable ones from tens of thousands of learning websites for them to learn the language effectively. This indicates the importance of the teacher's correct guidance in the use of the internet in language learning.

4.5 Action Research Stage Three: Observation

This section mainly discusses the data collected by various research instruments such as questionnaires and interviews, and the findings which were constructed from the analysis of these data. An example of this analysis is the nature of the students' perceptions of using their computers or digital media players to listen to the podcasts from the Business English learning website: an activity that I strongly recommended.

4.5.1 Data Collection and Data Coding

In this stage, the data were collected from the students' responses from the questionnaire; interviews; the students' test results; and my research journal. My discussion in relation to the learning websites and reflections by me and my students are given in Section 4.6 in detail. The students' perceptions and reflections on the English learning websites such as the Business English website were collected via the questionnaire, especially the mainly open-ended

questions, and follow-up interviews. Of the 102 questionnaires distributed, 91 were completed a nearly 90% completion rate. The questionnaire consisted of eight questions, most of which were objective, but there were a few questions which needed the participants to elaborate on their thinking. Table 4.6 below shows the students' use of the Business English podcast website, in relation to data coding or categorizing.

In terms of data coding, Stringer (2007) introduces two major processes, which present the means to distill the data that arise from the ongoing processes of investigation. Firstly, a categorizing and coding procedure consists of units of meaning (experience/perception) within the data and a set of categories to typify/summarize the experiences of participants. Secondly, the data analysis process selects key experiences in order to illuminate the nature of those experiences. Stringer (2007) emphasizes that researchers may use either or both of the above techniques of data analysis in order to seek to acquire clarity and understanding by distilling and organizing the information that they have gathered. The following descriptions are to explain Table 4.6 and the data coding.

Table 4. 6 Questions investigating students' use of the Business English podcast website

Questions	Themes
1. How did you listen to this podcast?	Investigates technology use (MP3/4 and computers).
2. When did you listen to this Business English podcast?	Investigates at what time the students listened to the podcast by using the technology.
3. How did you study the topics on this podcast?	Investigates listening learning strategies from this podcast.
4. How long did you listen to a topic from this podcast?	Investigates the length of the time each topic from this podcast was listened to.
5. To what extent do you think that the audio files on this podcast are difficult?	Investigates perceptions towards the degree of difficulty of the audio files on this podcast.
6. To what extent do you think that the audio files on this podcast helped you improve your English listening and speaking?	Investigates perceptions towards the degree of improvement in their English listening and speaking by the audio files on this podcast.
7. To what extent do you think that the website on (business) English podcasts helped you learn English autonomously, out of class?	Investigates perceptions towards the degree to which student motivation and learner autonomy was encouraged by the Business English podcast website.

Questions 1, 2 and 3 inquired into the students' learning approaches, including learning strategies. Question 4 checked the time students spent listening to each topic from the podcast. This could also reveal their learning efficiency in the use of digital media players or computers, as well. Where the amount of learning can be measured (e.g. if students are learning new vocabulary) it is possible to combine this measure with the time taken to calculate a measure of 'learning efficiency'. Question 5 examined the students' perceptions towards the degree of the difficulty of the audio files on this podcast. It also checked their listening comprehension (or input skills) about listening files from the website. Questions 6 and 7 surveyed student perceptions towards their output skills, such as speaking and writing skills. Question 7 also examined student perceptions towards the degree that the Business English podcast website motivated them to learn and their autonomous learning.

4.5.2. Data Analysis and Findings

As mentioned in Chapter 3, in pedagogical action research studies, both quantitative analysis and qualitative analysis are useful for researchers. Regarding quantitative data analysis, the data in relation to questionnaires and the experimental design were analyzed statistically. The main methods of qualitative data analysis were a thematic analysis and a content analysis.

The following findings were found in Action Research (AR) Cycle One by using the above research methods and analytic methods:

4.5.2.1 Availability of Modern Technologies as Learning Tools

Before I began to teach the students the Business English course, I knew the availability of the new technologies as learning tools for all the students. As

mentioned above, the recorder is now regarded as an outdated learning tool with just a small number of students still using it. The majority of students were using new advanced technologies, such as digital media players and the computer. According to a survey among the students before beginning with the course, 100% of them owned the computers/the laptops and a mobile phone, and 95% of them owned a digital media player. Additionally, students had access to the internet in each dormitory where they lived during the semester.

Although technology is not one of the most dominant determinant factors to improve learning and teaching, modern technologies play an important role in assisting learning. Therefore, 100% availability of new advanced technologies such as the computer and the internet played a significant part in helping the learners support their language learning.

Table 4. 7 The statistical results of investigating the Business English podcast website (I)

Note: 1).The address of the Business English website that the teacher strongly recommended is as follows: www.businessenglishpod.com 2). The number (N) of the returned questionnaires: Class One (N1=41 from 46); Class Two (N2=50 from 56)					
Q1. How did you listen to this podcast?	Save to an MP3/4 player and listen later.	Save to a laptop/a computer and listen later.	Listen realtime without saving.	Other (specify)	
Class One	17%	63%	20%	0	
Class Two	38%	32%	23%	7%	
Q2. When did you listen to this Business English podcast?	My free time (e.g., lunch and supper break). Or: before sleep.	After class or during my self-study time	when I take a bus or train	At the weekend	The others (specify)
Class One	27%	21%	8%	34%	10%
Class Two	22%	25%	10%	33%	10%
Q3. How long did you listen to a topic from this podcast?	T<0.5 h (T=Time Span) (h=hour)	0.5 h ≤T<1 h	1 h ≤T<1.5 h	2h≤T<2.5 h	T>2.5 h
Class One	34%	62%	0	4%	0
Class Two	25%	45%	25%	3%	2%
Q4. How did you study the topics on this podcast?	Read the article or story first, and then listen to it.	Read and listen to the article simultaneously online.	Download audio files to a MP3/4 player and I will listen to it when convenient in my spare time. Then, I will check listening comprehension.	Other (specify)	
Class One	0	27%	67%	6%	
Class Two	9%	24%	64%	3%	

4.5.2.2 The Wise Management of Learning Time

Question 2 in Table 4.7 asked when the students listened to the Business English podcast. It mainly examined how the students managed their learning time using advanced technologies. The result suggests that around two thirds of the students in both classes spent their spare time such as lunch break, taking buses and weekend time practising their English listening. From their language

learning experiences, in some cases, the success of language learning may depend upon the length of learning time, especially in terms of listening practice, which needs more time than the other skills because the improvement of listening skills needs to be imperceptibly influenced by the external learning environment, such as frequent listening practice over a long period.

However, it was impossible for the computer science-major students to spend much more time in learning English than other courses. One of the primary reasons was that the university curriculum consists of many courses in addition to the Business English course that they should take in one semester. If a student fails the final examinations, the student has to retake it in the coming semester. If the student fails more than two courses, he or she has to leave the university. In order to balance all the courses, students must use their time more appropriately and effectively to ensure that they pass all their courses.

English language learning differs from other subjects such as mathematics. From common knowledge, it is impossible for learners to solve such mathematics problems or learn other technology courses while eating or taking a bus or a train. But they can listen to English by using digital media players or other modern technologies. As a result, only in this way could the students save much more time in their study. Therefore, managing learning time wisely plays a significant role in helping language learners to improve language proficiency. More importantly, effective time management can help learners to support their learning and make greater achievements in their studies (Schunk, 2012).

4.5.2.3 The Importance of Learning Strategies

Question 4 in Table 4.7 checked the students' learning strategies in their learning process. It seems that reading and listening simultaneously online could be better than reading first and then listening, because it can provide some kind of support to make the listening easier (Nation & Newton, 2009); it can also aid

listening comprehension inside and outside the classroom (Lems et al, 2010: 59). However, it is difficult to say that such a way of learning can help learners to improve their listening abilities much in their learning process.

A third alternative was to download the audio file to a digital media player and then the learner could listen to it when convenient, with the student checking listening comprehension later. This is better than the other ways because it helps train learners to enhance their listening abilities gradually by listening to the podcast. In fact, learners can find more listening materials by using the internet resources such as this kind podcast in order to extend their listening, called extensive listening in language teaching. The main purposes of extensive listening are for pleasure and for the improvement of the learner's general language level (Harmer, 2001). In particular, it is helpful in improving their comprehensive listening level. As digital media players are very convenient to carry, it is very flexible for listeners to practise their extensive listening at anytime, anywhere. As around two thirds of the students in each class selected this third alternative (Table 4.7), and as long as learners employ correct learning strategies as well as autonomy and then make full use of the new modern technologies, it was believed that their language proficiency would be improved gradually.

4.5.2.4 The Improvements of Listening and Speaking

Table 4.8 (below) shows that although the difficulty index of the audio files in the podcast was more difficult for Class Two, it still has a "normal" distribution, because the difficulty was moderate for the majority of the students in each class. As far as a learner with a certain level of achievement motivation is concerned, he/she will undertake more challenging learning tasks from time to time (Slade & Rush, 1991) in order to realize his/her learning objectives. As these listening materials on the Business English website were moderately difficult, the podcast

materials were appropriate for the majority of the students in the two classes as supplementary extensive listening materials out of class.

Table 4. 8 The statistical results of investigating the Business English podcast website (II)

Note: 1).The address of the Business English website: www.businessenglishpod.com					
2). Although my students majoring in computer science were really good at mathematics, I still clearly explained statistical terms such as “Difficulty Index” to them before I conducted the questionnaire, so that they could understand the terms on the questionnaires.					
Q5. To what extent do you think that the audio files on this podcast are difficult?	0<D<0.2 (D means difficulty index)	0.2≤D<0.4	0.4≤D<0.6	0.6≤D<0.8	0.8≤D<1
Class One (N=41)	8%	30%	38%	17%	7%
Class Two (N=50)	9%	15%	34%	33%	9%
Q6. To what extent do you think that the audio files on this podcast helped you to improve your English listening and speaking?	0<R<20% (R represents RATE)	20%≤R<40%	40%≤R<60%	60%≤R<80%	80%≤R<100%
Class One (N=41)	7%	38%	33%	20%	2%
Class Two (N=50)	8%	32%	35%	22%	3%
Q7. To what extent do you think that the Business English website podcasts helped you learn English autonomously out of class?	0<R<20% (R represents RATE)	20%≤R<40%	40%≤R<60%	60%≤R<80%	80%≤R<100%
Class One (N=41)	6%	39%	32%	13%	10%
Class Two (N=50)	8%	36%	31%	15%	10%

With respect to the improvement of listening and speaking skills, from Table 4.8, it is significant that around one third of the students in each class thought that they had improved the two basic language skills at rates between 20% and 40% or between 40% and 60%. Also, more than one fifth of the students in each class thought that they had improved these skills by at least 60%. On the whole, around more than two thirds of the students in each class enhanced their listening and speaking skills by at least 40%, indicating that they had made full use of the podcast learning websites for extensive listening and speaking practice by themselves. That was one of the more significant achievements

during Action Research Cycle One.

The following comments about the improvements of listening and speaking skills by using the computer and internet resources are from some follow-up interviews and learning diaries (see Table 4.9):

Table 4. 9 Comments on improving of listening and speaking skills by using CALL

Themes	Typical positive comments (Note: “S” represents “Student” and the figure stands for the order of the students’ list in each class).	Author’s comments
Comments on the course	<p><i>“The teacher introduced perfect learning materials to us, from which we have learned a lot. I have learned some issues in Business English such as corporate culture and internal communications since this semester has begun. Also, I have learned some terms used in business English.” (S8, Class One).</i></p> <p><i>“I know more about IELTS and TOEIC, which is of great significance to us, who want to go abroad for further study.” (S12, Class One).</i></p>	<p>The students reflected the achievements from the classroom teaching and they felt satisfied with the course. As a result, their comments on the course were positive.</p>
The development of learner autonomy	<p><i>“I have really achieved very much in learning English over the past month or more. I have formed the habit of going to the learning websites to learn English autonomously”. (S12, Class One).</i></p>	<p>The student fostered his autonomous learning by using the internet out of class.</p>
Good ways to improve listening abilities	<p><i>“In the past month or more, my listening level has increased and my vocabulary has been enlarged. In class listening, the practice was efficient and self-study was also helpful to support my English language learning after class. What has been achieved owes much to watching English movies and listening to English podcasts.” (S22, Class Two; Similarly: S26, Class Two).</i></p>	<p>Similar to the two student’s learning experience, the other students also liked to learn English by watching English movies/videos. From their reflections, watching English movies/videos was a very pleasant way to help learners to support their language learning.</p>
Significant progress in listening and speaking skills over the past 6 weeks	<p><i>“Over the past six weeks, my spoken English has become more fluent and I can talk with my foreign friends without difficulty. Also, my listening skills have been improved. At present, I can watch English-language TV news online and understand the main points, which was unthinkable before.” (S38, Class One).</i></p>	<p>The student has achieved a lot in such a short time. Amazingly, one of the greatest achievements was to understand the main points of the English-language TV news, because comprehending TV news is much more difficult than other listening materials.</p>

The contents from Table 4.9 are typical positive comments on the improvement of listening and speaking skills with the use of modern technologies, such as the computer and the internet. Among them, it is well worth mentioning that Student 38 (Class One) made greater progress in both listening and speaking abilities in such a short time (6 weeks). One of the most important achievements that he

had made was that he could understand the TV news in English. Generally speaking, it is easier for second language learners to understand daily conversation in English, but it is much more difficult for them to understand the news over the radio and on TV. The main reasons are as follows: First, when English learners talk to native speakers of English, sometimes native speakers speak plain English more slowly than would be usual so that they can be understood more easily (Richards and Schmidt, 2002). Additionally, native speakers sometimes use gestures to express themselves, which makes it easier for them to be understood. However, radio and TV presenters generally use no hand gestures or facial expressions and just read the news release at a normal speed. Sometimes, the vocabulary and grammar used in the news release are more complicated and difficult than those in daily conversation. Therefore, the news English is much more difficult for English learners to understand. That is why an English language learner has reached the higher level of the language if he/she can understand the news English.

4.5.2.5 The Development of Learner Autonomy

Question 7 in Table 4.8 shows that more than one third of the students in both classes thought that the website suggested was between 20% and 40% helpful in learning English autonomously out of class. Nearly one third of the students in both classes believed it to be between 40% and 60% helpful in developing learner autonomy. On the whole, more than half of the students felt that the website was at least 40% helpful in fostering autonomous learning.

Here it should be pointed out that all the students could participate in learning English actively and autonomously out of class. It can be clearly seen from Table 4.8 that there is a significance difference between the learners in developing autonomous learning, probably because the degree of making effort varied. The following comments about the development of learner autonomy in relation to the suggested websites or other learning websites are from some of the

students' follow-up interviews and learning diaries, which demonstrate that the learning resources supported them in their English language learning.

Student 7 (Class One): “The first lesson that my teacher taught was to encourage us to learn English autonomously. This idea struck me and made me realise the importance of autonomy. After class, I went to some English learning websites including the teacher's recommendations' to obtain some perfect English listening materials. At present, I have found that my English proficiency has improved gradually due to the above learning materials. Now I feel very happy that I appreciate my teacher's guidance.”

The student could not make full use of his time to learn English very well in the past one year and a half in the university, although he had passed College English Test (CET) Band 6. When he entered the second semester in the second year, he realized that he should seize the last semester to improve his English because he would have no further English lessons from the third year on in the university. Thus, learner autonomy and the teacher's guidance motivated him to learn English very actively. As a result, he had made greater achievement than before.

Student 22 (Class One): “I also do large quantities of autonomous learning after class in the following ways: I have applied as a user on the Business English podcast website. When I am free, I read the news and information on it. Additionally, at the weekend, I log onto MSN and talk with my English friends, who do help me a lot with my listening abilities, my speaking English skills and writing level. Meanwhile, by communicating with them, I have experienced the big gaps of different cultures”.

As far as I know, the student studied very hard. He was always the first one who arrived at the classroom. In the second semester of the second year, he was preparing for TOEFL and the GRE Test so that he could study either in the USA or in the UK for Master and PhD degrees after graduation. As he had a very clear aim for learning English, his motivation and autonomy for learning were very high, as well. As a result, his autonomy was fostered increasingly, which was helpful in supporting his language learning.

The following comment about oral imitation is from Class Two:

Student 13 (Class Two): “I always watch English movies and listen to the English podcasts in order to improve my English proficiency like my other classmates. Unlike their learning styles, I often imitate the actors/actresses to speak English in order to improve my oral English”.

Oral imitation is one of the most essential language learning methods. As there is no natural environment to communicate with others in English in a real situation in China, learners have to imitate native speakers orally by watching movies/news online or listening to podcasts on a digital media player in order to practise their speaking skills. This method is not very ideal in practising speaking because there are no interactive activities between the learner and the computer or digital media player, but in some ways it may help to correct learners' pronunciation. It is also helpful in developing autonomous learning in his/her English study. In today's IT age, the use of the internet and computers does improve language learners' speaking skills via continuous imitation and practice (e.g., the use of a web-based interactive speaking improvement system for EFL learners) (Hsu, 2010). Therefore, imitation using advanced technologies as assistant tools is an effective way to practise speaking skills in language learning.

In summary, the students mainly used modern technologies to learn English autonomously out of class in order to improve their English listening and speaking skills, and promote autonomous learning throughout Action Research Cycle One.

4.6 Action Research Stage Four: Reflections

In this section, I discuss what I did, what happened and what was learned from Action Research Cycle One.

First, I gave them advice on how to benefit from the course. The advice included

to preview and review the coursebook; access the Business English website www.businessenglishpod.com and download some podcasts related to the topics in Business English onto their computers or digital media players, and then listen to one or two audio files each week; practise speaking English with their classmates as much as possible; that the most important thing that they should do is to enhance their listening and speaking skills with a computer, the internet, or digital media player, autonomously and foster their learner autonomy in language learning practice. From the students' learning experiences, they made greater progress in their English study, especially in their listening and speaking skills, which was mainly because of their efforts on autonomous learning out of class, including the teacher's guidance on the effective use of modern technologies in language learning. As far as language teachers are concerned, one of their important roles is to help learners form good language habits in language learning (Williams & Burden, 1997). Therefore, I deeply feel that a teacher's guidance plays a vital part in providing students support in their language learning.

Besides the above advice, in classroom teaching practice, I taught some tips in improving listening and speaking skills tips. For example, using dictation and note-taking trained the students' listening skills in listening practice. One of the main reasons is that dictation is a technique that requires students to write down what has been heard accurately from a passage read aloud with some pauses (Richards & Schmidt, 2002). Additionally, taking dictation is helpful for language learners to emphasize on the language form of phrase and clause level constructions, and provide feedback on the accuracy of their perception (Nation & Newton, 2009). Dictation is widely used testing technique and it can be considered to be a good language learning method to enhance learners' language proficiency (Rahimi, 2008). In his experimental study, Rahimi (2008) confirmed that taking dictation improved his students' language proficiency in terms of grammar, vocabulary, reading and listening comprehension.

Unlike dictation, note-taking requires language learners to write down key words/phrases or the more important information while they are listening so that they can understand the main points. As Mee (1991) argues, the primary reason for the importance of note-taking is that it can enhance both learners' listening ability and their learning ability from the spoken word, including their memory abilities. Therefore, the two techniques are fundamental teaching methods to improve their listening abilities. Furthermore, I used group discussion and other teaching activities to encourage the students to cooperate learning with others and also employed the brainstorming technique to develop the students' imagination and their creativity.

One of the main reasons for using cooperative learning is to improve a learner's creative thinking by sharing a number of good ideas between partners (Johnson & Johnson, 1994). For the same reason, Rao's study (2007) suggests that using a brainstorming strategy in writing courses can effectively enhance students' writing skills.

As mentioned in Chapter 3, the classrooms where I taught are fully equipped with the modern technology, such as the networked computers, in addition to traditional equipment. So if necessary, a teacher could still write something up on the blackboard. In addition, there were four loudspeakers in the top corners of the front wall and the back wall of each classroom so that students could hear clearly everywhere in it. From my many years' teaching experience, I deeply feel that this teaching equipment is ideal as far as language teaching is concerned, and when I taught the first class, I was excited that I could make full use of this equipment so that I could improve my teaching quality and my students' learning outcomes in class.

From some of the student feedback at the end of Action Research Cycle One, they felt that they had learnt a lot of things about English in a short period of time (6 weeks). They thought that watching English-language movies was one of the

most effective ways to enhance listening and speaking skills, was fun and gave them a greater understanding of English language learning and Western cultures. Additionally, TOEIC and IELTS practice tests in the classroom widened their horizons. They also felt that practising such advanced level tests was a good way to improve their listening level because the higher level listening tests were challenging their current English proficiency, which might stimulate them to learn it autonomously.

According to the students' survey results as well as the pre-test and post-test of TOEIC Listening (see Chapter 7 in detail), it was obvious that the students had made some progress at various degrees in their listening ability. From my teaching experience in Cycle One, I greatly appreciated modern technologies playing an important part in English language learning and teaching. Without computers or internet access or digital media players, it would have been impossible for the students to have made such progress in such a short time. Finally, I strongly felt that the key roles of teachers include guiding learners in the use of effective learning strategies, encouraging them to learn English autonomously, and so on. All these confirm that any attempt to enhance student achievement must be dependent upon the development of effective teaching behavior (Brophy, 1986).

In summary, from the above teaching activities and the students' feedback from the questionnaire and follow-up interviews, and as a language teacher for many years' teaching experience, I deeply feel that conducting the correct and appropriate teaching approaches and techniques play a leading role in improving learners' language proficiency with the effective use of modern technologies, such as the computer and the internet.

4.7 Learning Problems at the End of Cycle One

Although some notable achievements were made in terms of my teaching and the students' learning in AR Cycle One, there were still some problems with both my teaching and the students' learning, which should be changed in Cycle Two. In this section, the students' learning problems at the end of Cycle One are discussed.

The survey results indicate that the most difficult problem was still listening, which was a very common learning problem to all the students. The second most difficult problem was speaking. This is followed by writing and problems remembering vocabulary. The statements about the students' specific learning problems with typical types at Table 4.10 are from the students' learning diaries, in addition to my comments on them.

Table 4. 10 The students' specific learning problems at the end of Cycle One

Themes of the learning problems	The typical specific problems in English study (from students' learning diaries)	Author's comments
Difficulty grasping main points of listening passages	"The listening practice in class is a little hard to me, so sometimes I can rarely understand the meaning of the passage."	A common learning problem that may be solved by more listening practice out of class.
Difficulty talking about complicated topics/contents	"I can only handle simple situations in oral English. If I talk about a very complex topic, sometimes I can say nothing about it."	One of the solutions may be to do more listening and extensive reading practice in relevant topics/subjects out of class in order to get more input.
The lack of confidence in oral English	"I feel nervous whenever I speak English in class because I am lack of courage to stand up to talk about what has been discussed. Meanwhile, as a shy girl student, I seldom ask my teachers for help if I have any problems in English study."	Facing such a shy student, I usually give the student more encouragement in learning English so that the student can build up more confidence to improve the language level.
Inaccurate English pronunciation with a Chinese accent	"My pronunciation is not very accurate probably because I dislike speaking English. As some classmates laugh at my spoken English with the Chinese accent, I do not have enough confidence to speak it very well."	I suggested that the student should use the English learning websites, such as the BBC website, in relation to pronunciation tips to correct pronunciation by imitating native English speakers more.

Table 4.10 indicates that the students' weak points in learning English were mainly listening and speaking skills. Generally speaking, weak listening may lead to weak speaking in second language learning because one's listening ability can have a great influence on speaking ability, as referred back to Chapter 2 (input and output learning theories).

Meanwhile, it is overwhelmingly believed that developing listening skills plays a crucial role in developing a learner's overall second language skills (Berne, 1998). Therefore, the most important thing for second language learners to do in their language learning is to develop their listening first so that their overall language skills can be improved.

When some students asked me how to solve these learning problems, I gave

them different suggestions facing different problems respectively so that they could improve their English proficiency more effectively. However, it was very difficult to solve the above learning problems thoroughly in the short-term time. In spite of that, I would change my teaching style in Action Research Cycle Two.

4.8 Changes in Teaching Styles next Cycle

As stated in the previous section, the students' biggest problem in their English language learning was still listening. For example, for the majority of students, listening to a native speaker's normal spoken speed, such as in the TOEIC Test (especially listening passages), was still very difficult. Meanwhile, based on class observation and my own reflections on my teaching practice in Cycle One, the following teaching problems should be changed in Cycle Two:

Firstly, the class was somehow not active or lively. As the students preferred to watch videos rather than to listen to audio files/podcasts, some suggested that watching videos about Business English or other interesting things would make for a better teaching style in class. This may make the students more motivated in learning English so that their learning could be supported.

Secondly, besides the emphasis on listening in classroom teaching, speaking practice should be emphasized. The students required me to offer them more opportunities to practise speaking English in classroom teaching. Indeed, the interaction between listening and speaking would be helpful to improve the students' listening and speaking skills.

Thirdly, the students were not interested in Business English, but in general English. They suggested that the teaching content should not be restricted to the coursebook, but include more interesting content, such as content about British and American cultures, that could be added either in or out of class. That was a

very good suggestion, because if a student has higher level of general English, it is much easier for him or her to understand English for Special Purposes (ESP), such as Business English. In fact, as long as special terms, vocabulary and expressions in ESP are understood, ESP is easier to understand than general English.

Finally, in classroom teaching, the teacher should give more guidance to the weaker students in speaking English than the others, especially in group discussion, because some students, who did not know how to express themselves in English, were found to use Chinese in class. It was suggested that the teacher should join in the discussion with more groups, especially 'silent groups', in order to guide them in how to discuss and express themselves in English effectively. The students' criticism of my classroom teaching was very reasonable. So I should change the role of a teacher from a traditional teaching style to a new role as a helper, advisor and guide.

The above four points should be reflected in my later teaching practice. Therefore, I, as a teacher and researcher, wanted to try to adopt effective teaching approaches to improve not only the students' learning outcomes but also to promote my teaching practice. In other words, what I should do was to change my teaching practice, based on the students' expectations and needs, in order to support their language learning in Action Research Cycle Two.

4.9 Summary of Chapter 4

In Chapter 4, I described the procedures used in the first action research cycle in detail. According to the fundamental theory of action research, I have strictly abided by the four stages of the action research processes: planning, action, observation and reflection. In order to address the students' learning problems, I mainly adopted student-centred teaching approaches in the classroom and I

gave them advice on learning for the 'Cambridge Advanced Business English' course, and taught some learning strategies for listening and remembering vocabulary. In the meantime, I introduced some important learning concepts, such as cooperative learning, brainstorming and learner autonomy. Above all, I focused on guiding them in improving their English language proficiency by using modern technologies, such as computers and the internet, independently out of class. As stated above, at the end of AR Cycle One, according to the students' survey results and their pre-test and post-test results, the majority of the students made greater progress in their communicative abilities, especially listening ability, than at the beginning of the course. Meanwhile, from my class observation, their speaking abilities had been improved by various degrees. Although I should need to change my teaching style, progress by the students in English language learning made me very confident to conduct AR Cycle Two.

Chapter 5 Action Research Cycle Two

5.1 Introduction

This chapter explores the improvement of the listening comprehension with the combination of CALL environments, the learners' active performance in class and their autonomous learning out of class. According to the reflections and the problems in Action Research Cycle One, there are four main things that I reformed for Cycle Two.

1) As the students still found it difficult to listen to English spoken at the speed used in the TOEIC Test (especially listening passages), listening practice should be emphasized in class teaching.

2) The classroom teaching should be more active and more interesting. As the students felt it boring only to listen to podcasts or audio files in class, I would adopt various teaching activities, such as watching some well-known short videos/films and listening to their favourite songs in English, which should make my students more motivated to practise listening and speaking English. In order to make the lessons more active, I selected some humorous and interesting videos, such as *Effective Presentations*, as teaching resources in class. Generally speaking, before the students viewed part of the video, I gave some background knowledge or information to the students first and then assigned tasks, such as the comprehension questions related to the video, and the descriptions of the video. After watching the video, the students discussed the assigned tasks in advance. Then, some of them were required to give a talk or do role-play in class. From the students' feedback, watching videos made the

lessons more interesting and active in addition to the improvement of their oral communicative abilities such as listening comprehension and speaking skills, which concurs with Canning-Wilson's study (2000). From other similar studies, authentic video programmes make classroom learning experiences more active and interesting (Sherman, 2003) and lead to stronger motivation for learning and increased self-confidence (Herron et al, 2002; Sherman, 2003). Perhaps, these factors may be considered to be very important to succeed in language learning.

3) Besides the emphasis on listening in classroom teaching, speaking should be focused on. The students wanted me to give them more opportunities to practise speaking English in classroom teaching.

4) The teaching content should be wide-ranging because the students were not interested in Business English, but in general English. They advised me to teach not only the content of the coursebook '*Business Benchmark Advanced*', but also more interesting content about British and American cultures in class. Therefore, I should mainly solve the main problems in my teaching practice in Cycle Two. Meanwhile, the students' needs on the course should be met as well.

5.2 Teaching Materials and Learning Materials

In Action Research Cycle Two, the teaching materials in classroom use were adapted from the coursebook '*Business Benchmark Advanced*' and content from the BBC learning English website. Supplementary learning materials for out of class self-study were selected carefully from the BBC website and the Blackboard Platform of the University course learning website. This section mainly introduces the sources of the materials from the BBC website and the University Blackboard Platform.

5.2.1 Introducing the BBC Learning English Website

The second website in this course used in classroom teaching and for the students' self-study in Cycle Two was the BBC learning English website (<http://www.bbc.co.uk/worldservice/learningenglish/>), which was closely related to both Business English and general English. The primary reasons for selecting this learning website are related to the four issues highlighted above:

First, the abundant listening materials are suitable for learners at different levels. For instance, the '6 minute English' Programme can be used to train learners with intermediate proficiency to listen to a long passage. Although the majority of students were at the intermediate level, their ability to listen to a longer lecture was very weak. Therefore, these learning resources were very helpful for them to improve their listening ability.

Secondly, plentiful video and audio files are available from the website. The students could select suitable learning files according to their interests to practise both listening and speaking skills. In the meantime, their stronger motivation for learning could be promoted by the use of video materials (Herron et al, 2002; Sherman, 2003). Additionally, some resources could be used in classroom teaching, which could make the students more interested and more active than before. For example, the 'Talk about English' programme is interesting for learners and is very helpful for learners to practise speaking skills.

Thirdly, there are both Business English and General English content in the site. This matched with the purpose of this course and the students' requirements for both Business English and General English.

Finally, many video and audio files include relevant scripts to be downloaded freely. These are useful for students' self-study outside class. Meanwhile, it was

hoped that learners' autonomous learning could be promoted from them.

On the whole, it was believed that the BBC learning English website would be one of the most important tools to solve the above learning issues that my students had encountered.

This section also introduces the main teaching and learning resources from the website and explains the reasons why they were used as teaching materials in class and as supplementary materials in listening and speaking for the students' self-study out of class.

There are many types of programmes on the BBC learning English website. From the options available, I strongly recommended students to look at the 'General & Business English' (<http://www.bbc.co.uk/worldservice/learningenglish/general/>, See Figure 5.1) menu. Also, it is a very useful teaching resource for classroom teaching. The selected programmes as teaching and learning materials are discussed below, based on the students' needs surveyed at the end of Action Research Cycle One (See Table 5.1).

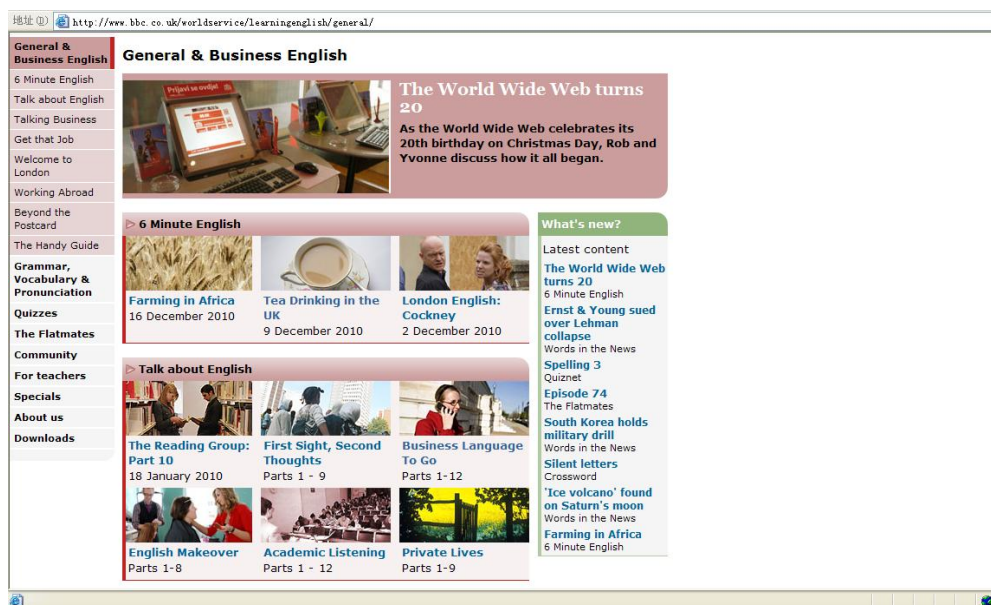


Figure 5. 1 General & Business English web page on the BBC learning English website

Table 5. 1 Teaching and learning materials from the BBC learning English website

Main types	The BBC programmes and the characteristics	Reasons for the choices
General English	<p><u>6 Minute English</u> consists of two English people’s conversation within 6 minutes. The topics include science, technology, history, geography, society, culture, politics, economics, sports, and so on. Generally, one person asks the other a question in relation to the topic. The answer is given at the end of the conversation.</p>	<p>In most of cases, they usually use common daily words. But if they use some technical terms, they will give an explanation. Finally, they will read aloud some new words in the conversation. Thus, through this programme, learners not only add to their knowledge from the classroom but also improve their listening and speaking abilities. Meanwhile, they can develop their listening skills to address the difficulty of longer passages.</p>
General & Business English	<p><u>Talk about English</u> is composed of 9 different series of programmes, three of which were selected as learning resources. <u>Academic Listening</u> presents lots of listening materials in the academic fields for students who study at English-speaking universities and learners who want to improve their listening skills. <u>Better Speaking</u> is all about how a learner can become a fluent, confident speaker of English. <u>Business Language to Go</u> is all about chunks of language as used in business contexts. The series was first broadcast in 2001, presented by some business language experts.</p>	<p>1) BBC language specialists not only guide learners how to learn English very effectively, but also help them how to learn from the programmes autonomously. 2) Whether the students planned to study abroad or not, they would be offered more opportunities to practise English listening and speaking skills from the series of programmes such as <i>Academic Listening</i> and <i>Better Speaking</i> , which would be beneficial to the promotion of their communicative abilities. 3) <i>Business Language to Go</i> is an excellent programme for learners to use Business English correctly in business contexts, so it is helpful for them to understand Business English more deeply.</p>
Business English	<p><u>Talking Business</u> is a Business English course, which presents learners useful language and phrases to improve their spoken communication skills in English in various business situations. It consists of 4 modules: <i>Telephone, Meetings, Presentations and Negotiations</i>. Each module is made up of different sections in relation to the topic of its module. For example, in <i>Module 1: Telephone</i>, there are 5 sections: <i>Connecting, Messages, Wrong number, appointments and Flights</i>, which are very common subjects in business contexts.</p>	<p>1) As this programme provides all the audio files, the scripts and explanations, it is useful and helpful for learners’ self-study. 2) The above learning materials could help learners master Business English besides general English basic language skills. It is provides convenient materials for self-study, which can help them promote autonomous learning. Learners will therefore be offered more opportunities to practise both listening and speaking skills and develop autonomous learning.</p>

In summary, the main features of the main programmes on the BBC English learning website have been described. Additionally, the learning website offers

learners many opportunities to practise listening and speaking. The website also has a wealth of audio/video programmes and the relevant scripts that can be downloaded. Furthermore, the English learning website is suitable for various learners from elementary level to advanced level. On the whole, it seemed that the website could address the problems put forward by the students in Cycle One of this study.

5.2.2 Description of the University ‘Blackboard’ Academic Suite

The university owns the Blackboard Academic Suite (also called a blackboard learning system), similar to WebCT (Course Tools) at the University of Exeter. This is a comprehensive, flexible and virtual learning environment, and a complete course management system, developed by Blackboard Inc. (Southworth et al, 2006).

This section mainly introduces the key functions of the Blackboard Academic Suite (also called Blackboard Platform) and its learning content for the students.

5.2.2.1 Functions of the Blackboard Academic Suite

Table 5.2 indicates the key functions of the Blackboard Academic Suite (See Southworth et al, 2006).

Table 5. 2 Key function of the Blackboard Platform learning system

Area	Tab(s)	The key functions/features
Communication Area	<i>Announcement Tab</i>	Teachers and students can read posted announcements.
	<i>Chat</i>	Students online are allowed to chat in real time with the others in their class section.
	<i>Discussions</i>	Students and teachers are permitted to create a discussion thread and reply to ones already created.
	<i>Blackboard Mail</i>	Students and teachers are allowed to email one another. This feature supports mass emailing to students in a course as well.
Course Content Area	<i>Course Content</i>	Teachers can upload articles, e-books, assignments, video/audio files and so on in relation to the course contents for students to browse/download.
	<i>Calendar</i>	Teachers can post due dates for assignments and tests.
	<i>Assessments Tab</i>	Posted quizzes and exams allow students to access them online anywhere. Additionally, students' assignments and homework are permitted to be submitted online. Their teachers can assess their written work and give them their marks and/or feedback on their assignments.
Media Library		Video, audio files and the other media can be uploaded here.

The above fundamental functions of Blackboard Platform are commonly used on the course learning system. Bradford et al (2007) summarize a few of the benefits from the above functions of the Blackboard learning system, including: “1) increased availability; 2) quick feedback; 3) improved communication; 4) tracking; and 5) skill building” (p303). Among these benefits of the course learning system, the most useful and helpful function for learners is easy availability to course materials and readings. Besides this, another important function is the improved communication, because the Blackboard learning system offers an interactive communication platform between teachers and students. Additionally, in order to make up for the deficiency of classroom teaching, some supplementary learning materials posted on the Blackboard platform need to meet the requirements of students, according to the purpose of this course, and were selected by their teacher carefully. Finally, all the materials on the Blackboard Platform were useful to students' self-study out of class because e-learning platforms, such as 'Blackboard', “can support the learner-centred mode of learning” (Cheung et al, 2009: 103). As it is very helpful

for learners to support their learning and foster their learner autonomy under the Blackboard Platform Learning System, it is obvious that using such a learning system can make student learning active and interesting. Although there are many advantages in the use of Blackboard Platform in Second/Foreign Language Education at higher education level, one of the drawbacks is to reduce learners' opportunities for interpersonal interaction, which is fundamental for effective learning (Hasegawa, 2010). This is something of which language teachers need to be aware in their teaching practice.

5.2.2.2 Learning Content in the Blackboard Academic Suite

In order to help students' autonomous learning and increase their extensive listening outside class, I posted the following listening audio files along with the relevant e-books so that they could listen to them on the university's Blackboard Academic Suite, which I now describe.

A) Sweeney (2004a; 2004b). *Communicating in Business* (2nd Edition) (Student's Book, Teacher's Book, plus Audio CD).

Communicating in Business is a short Business English coursebook for intermediate level students who need to improve their communicative ability when socializing, telephoning, presenting, taking part in meetings and negotiating. Students analyze the requirements of the relevant communicative situation and are then given controlled practice to develop confidence, fluency, range and effectiveness. In the *Communicating in Business Teacher's Book*, tape scripts, some answers to the exercises, background knowledge and the Audio CD were provided. As this book was easier than the textbook used in classroom teaching (Brook-Hart, 2007a), it was very suitable for the students as supplementary material out of class.

B) BBC Business English Programme, such as interviews and presentations, the

audio files and transcripts were available from the Blackboard Platform.

C) International English proficiency practice tests, such as TOEIC, IELTS and TOEFL Tests, were uploaded so that the students could be offered more opportunities to practise advanced English listening.

D) Other listening materials, such as literature (e.g. Jane Eyre), history (e.g. A History of Britain) (Level 3), and humorous stories were available.

In summary, the wealth of listening resources on the Blackboard Platform created an “English world” (or an “English Language Learning Environment”) online for students to help improve their English proficiency, especially listening and speaking skills.

5.3 Action Research Stage One: Planning

This section outlines teaching plans for classroom activities by using some teaching materials from the BBC learning website and other internet resources downloaded. Then, I explain the reasons for these classroom teaching activities.

5.3.1 The Lesson Planning

In Action Research Cycle Two, the teaching lesson planning (see Table 5.3) was designed based on the teaching resources mainly from the BBC learning English website and the coursebook. Additionally, student-centred approaches were adopted in classroom teaching as well. Out of class, the students focused on learning autonomously by using the BBC learning website or the other learning websites.

Table 5. 3 The teaching lesson planning in Action Research Cycle Two

	Teaching content	Language skills	The Teacher's Guidance
1	<p>1) Comment on the students' homework; summarize writing effective business letters.</p> <p>2) Watch the video <i>The IELTS Tutor</i> (Jacklin & Jacklin, 2006)</p>	<p>1) Train the students to write a business letter formally.</p> <p>2) Focus on improving the students' listening skills and learning strategies.</p>	<p>1) Guide the students to write effective practical letters.</p> <p>2) Teach them learning strategies. Guide them to learn effectively and autonomously.</p>
2	<p>1) Unit 9 (the coursebook): Students read a passage about advertising.</p> <p>2) Group discussion on advertising.</p> <p>3) Listen to the BBC website: <i>Negotiations: difficult clients</i>.</p>	<p>1) Help students understand the relationship between advertisement and customers.</p> <p>2) Encourage them to use brainstorming to develop their creativity.</p> <p>3) Improve their listening and help them learn how to address complaints from customers.</p>	<p>Guide the students to develop their communicative skills comprehensively.</p>
3	<p>1) Listen to BBC website: <i>how to make oral presentations</i>.</p> <p>2) Watch the video <i>effective presentations</i> (Comfort,1997)(I)</p> <p>3) Group discussion</p>	<p>Develop the students' listening and speaking skills.</p>	<p>Guide them to learn autonomously. (Out of class, listen to the BBC learning website and prepare a class presentation).</p>
4	<p>1) Listen to <i>Talking Business</i> from the BBC website (Module 3: <i>Presentations</i>).</p> <p>2) Watch the video <i>effective presentations</i> (ibid)(II).</p> <p>3) Group discussion.</p> <p>4) Students give presentations on familiar topics.</p>	<p>1) Continue to focus on practising the students' listening and speaking skills.</p> <p>2) Train them to give effective oral presentations.</p>	<p>Guide them to learn autonomously. (Out of class, they are required to listen to the BBC learning website and prepare a class presentation).</p>
5	<p>1) Listen to <i>Talk about English</i> from the BBC Website (Business Language to Go: <i>Presentations</i>)</p> <p>2) Watch the video <i>effective presentations</i> (ibid)(III).</p> <p>3) Group discussion.</p> <p>4) Students give presentations.</p>	<p>1) Continue to focus on practising the students' listening and speaking skills.</p> <p>2) Train them to give effective oral presentations.</p>	<p>Guide them to keep on developing learner autonomy from the BBC learning website and the Blackboard Platform.</p>

5.3.2 Explanation for the Classroom Teaching Activities

The above lesson planning showed that the outstanding teaching features in the period of Action Research Cycle Two were to focus on listening skills in addition to speaking skills; to use a student-centred approach in classroom teaching, along with cooperative learning and brainstorming learning concepts; emphasize developing the student learner autonomy outside class.

5.4 Action Research Stage Two: Action

In Action Research Cycle Two, the BBC Learning English website, the University Blackboard Platform and the other CALL environments were used to attempt to address the students' learning problems exposed in Action Research Cycle One. In classroom teaching practice, the student-centred approach was still used. Student autonomous language learning would be developed further than in the previous stage and classroom language skill practice continued to emphasize listening and speaking skills, especially presentations.

5.4.1 Reading, Listening and Speaking Interactive Activities

During Action Research Cycle Two, the main listening materials were from the coursebook, the internet (mainly BBC Learning English Website) and other video materials, such as effective presentations (Comfort, 1997). At the beginning of this cycle, I mainly guided the students in using effective learning strategies and strongly recommended the BBC learning English website, which was considered to be a helpful learning website because this learning website was suitable for different levels of learners, as mentioned above. Additionally, some of the learning materials on the website matched with those of the students' textbook (*'Business Benchmark Advanced'*). Therefore, the website learning resources were useful for teaching materials and learning materials inside and outside class.

The following example on interactive teaching activities that included reading, listening and speaking is as follows:

In classroom teaching, the listening activities consisted of four stages: warm-up exercises, pre-listening, listening and post-listening. In the meantime, some reading activities and speaking were added, meaning that reading, listening and speaking skills were integrated so that language comprehension skills could be improved.

In the warm-up exercise, the students read the passage “the effectiveness of advertising” from Unit 9 of the coursebook and then discussed a question in pairs or in groups: “Does the writer believe that advertising is becoming more or less effective? Why?” By reading and discussing, they knew the author’s opinion on the effectiveness of advertising and background knowledge, which might lay foundations for the better understanding of the listening materials. Roller and Matambo’s study (1992) indicates that learners, who have obtained background information or knowledge before listening to a passage, understood the passage better than those who had not. This demonstrates that background knowledge plays a crucial part in listening comprehension. At the pre-listening stage, the students read notes from the coursebook and decided which type of information they would need for each gap. Also, before listening, they were given a list of some new words and expressions which they might not have learned before on the screen displayed to them. Additionally, the software Kingsoft Powerword was used to read aloud the new words and expressions, followed by the students’ reading and imitation of native speakers’ Standard English pronunciation. Thus, when they were listening to some new words and expressions, they could identify their meanings immediately so that they could understand the passage better. The students were also required to note down the main points of the passage while listening. The audio file was played twice. As the listening material was related to the previous reading material, the

students felt it easier to understand the main points. During the post-listening stage, the students were asked to work in pairs or groups to discuss the answers of the listening practice. Then, after playing the audio file a third time, I asked some of the students to give the answers. Finally, I gave the correct answers and commented on what they had done in doing the listening practice so that they could check their listening comprehension.

The next teaching step was to give the students a topic in relation to advertising to discuss in small groups (see Appendix II: The speaking topic on advertising and its sample speaking outline). In the teaching activity, the students were required to use brainstorming during the preparation, which I explained to them again briefly. The main aim of using this technique was to encourage them to develop their creativity in their studies. It was also useful in developing autonomous learning. A few minutes later, I asked some of the students to talk about it. Each of them could say something in relation to the topic, in addition to giving some supporting details, including some appropriate examples, which made me satisfied with their performance in their speaking practice.

Generally speaking, the teaching of the four English fundamental skills (listening, speaking, reading and writing) is separated. Usually, the two main teaching types of English lessons are listening-speaking lessons and reading-writing lessons. The above interactive teaching activities between reading, listening and speaking are seldom conducted in English language teaching in the Chinese context. However, such interactive teaching activities may develop these three basic language skills respectively and in the meantime may improve communicative language abilities, especially listening and speaking abilities.

According to second language acquisition theories, learners have difficulty generating high quality output without sufficient comprehensible input in language learning (see Section 2.3.2.3 Interactionist SLA perspectives, Chapter 2). Therefore, the amount of comprehensible input such as reading and listening

can influence the production of output greatly in some ways. In the above interactive teaching activities, the passage to read was closely related to the listening material that the students would hear subsequently. In fact, the reading material provided the students with background knowledge to the following listening practice. As background knowledge has a great significant impact on ESL (English as a Second Language) learners' listening comprehension (Markham & Latham, 1987), the students should not find it very difficult to comprehend the material. Once the vocabulary, phrases and contents in relation to the topic have been learnt, the students should find it easier in the group discussion that follows. On the whole, the purposes of the above interactive teaching activities were to make a greater attempt to improve oral communication in English and to develop autonomous learning.

5.4.2 Giving Oral Presentations in Class

1) Guiding the students on how to give an effective oral presentation

Giving oral presentations in English is very important and necessary in the fields of Business English and Academic English, especially to learners of English as a second or foreign language. It is also a very difficult thing for them to do successfully and effectively. Therefore, a teacher's guidance plays a key role in offering tips on effective presentations.

First, I had them listen to audio files on how to prepare a presentation from the BBC learning English programme named "Talk Business" on its learning website (at <http://www.bbc.co.uk/worldservice/learningenglish/business/talkingbusiness/>). While listening, the students were required to note down useful phrases or expressions in giving presentations so that they could use them in their future presentations. Then, the students discussed the useful language or expressions used in presentations.

Additionally, I taught them useful and practical methods on how to keep their audience interested and how to effectively communicate with an audience. For example, the use of confident and relaxed body language; planning the presentation clearly; logical organization; and to make the presentation interesting, relevant, clear, brief and fluent.

In the lessons that followed, I had the students watch a video on effective presentation (Comfort, 1997). For example, I asked them to watch Unit One “What is the point?” very carefully in order that they could find the mistakes that the speaker made when she was giving a presentation. They were required to watch it twice and then discuss the presentation’s mistakes in small groups. From their discussion, they could basically find the mistakes that the speaker had made. The main purpose of the teaching activity was to make the students understand and learn tips on how to prepare an effective presentation.

2). Giving oral presentations

In order to prepare for a presentation in both academia and business, the students were given an assignment to do outside of class so that they could make sense of the significance of presentations. The detailed requirements of the assignment (See Appendix III) were posted on the Blackboard Platform.

In classroom teaching, besides listening teaching and practice, I made time for some students to give class presentations in both classes in order that they could improve their speaking skills. The topics and contents of presentations were decided according to their interests or their majors, such as ‘A History of the Olympic Games’ and ‘Future Software’.

Before the presentations began, I asked the students in the audience to observe their classmates’ presentations carefully and when a presentation was complete, they were required to comment on it according to the checklist on the

assessment for an effective presentation listed by Comfort (1997: 56) (See Appendix IV). Then, the students gave comments from different angles on each presentation. From the majority of the students' comments, a couple of the presentations were considered as best ones. For example, a presentation called "Self-employment" fitted in with the above requirements on an effective presentation that I mentioned above.

I summarized the presentations after the students commented on them and I tried to give more positive comments on them in order to encourage my students to speak more in class. I also pointed out problems with them and gave them suggestions to solve them. For example, the pronunciation of some words was incorrect. I suggested that they should use online dictionaries or English dictionary software to imitate English native speakers' pronunciation and should watch more English TV programmes from the BBC on the internet.

However, although there were still some problems on the presentations, the students' performance was better than I had expected. Through such an interactive teaching activity, the students were trained in both listening and speaking skills.

5.4.3 Guidance in Autonomous Learning

Generally speaking, a learner's interests and motivation in language learning are closely related to the development of learner autonomy, because if a learner is not interested or motivated in learning a foreign language, he or she is less able to learn the language autonomously. The investigation at the beginning of the course showed that around 90% of the students in Class One and nearly 80% of the students in Class Two were interested in learning English although they majored in computer science. In my view, a greater interest in learning something is helpful to increase student learning motivation. Keller (1984)

recognizes “interest” as one of the main essential features of motivation (cited in Ellis (1994: 515)). Additionally, a great deal of statistical evidence provided by numerous studies indicates motivation as one of the predictors of success in Second/Foreign Language Learning (Bot et al, 2005; Gass & Selinker, 2008). Furthermore, from my teaching experience, it is very clear that if a student has no motivation in learning a foreign language, even if the student has excellent teachers, good learning equipment and learning environment, it is very difficult for the student to learn the language very well. Therefore, motivation is one of the most important and essential conditions for learning a foreign language.

Moreover, motivation and learner autonomy are closely linked with each other (see Chapter 2, Section 2.4.1 Motivation, learner autonomy and CALL). Spratt et al (2002: 262) find that “motivation may lead to autonomy or be a precondition for it”. The implications of their study made me realize the great importance of developing students’ learning motivation firstly in my teaching practice in advance of the promotion of their autonomous learning abilities.

5.4.4 Guidance to Learning Strategies

In the classroom teaching practice of AR Cycle Two, I gave the students some advice on the following learning strategies in terms of vocabulary memory, listening and speaking training.

(1)Vocabulary Retention

From the students’ responses, one of the most difficult things in learning English was that new words and expressions which they learnt some days ago were easily forgotten, if they could not review them or look at them later. In this case, I taught learning methods to help remember vocabulary. According to psychological theories and second language learning theories, such as

Hermann Ebbinghaus's "forgetting curve" (Bower, 2000) and learning strategies (see Chapter 2, Sections 2.3.6.2 (The contribution of cognitive psychology: the importance of learning strategies) and 2.4.3 (Learning strategies, learner autonomy and CALL)), and also see Gu (2003); Oxford & Crookall (1990)), I suggested that the four aspects of the learning methods should be used in learning practice.

(A) Keep on reviewing the words that have been learned. For example, if a learner's objective is to remember 30 words every day, the student tries to remember 10 words in the morning, at noon and in the evening. However, before beginning to learn another 10 words at noon, he or she should review the 10 words learnt in the morning. Similarly, the 10 words learnt at noon should be reviewed, before starting to learn last 10 words. Before sleep, it is better to then review the 30 words learnt that day. The next morning, after getting up, the 30 words from the previous day should be reviewed before repeating the procedure with another 30 words. On the fourth day, it is better to review the words from the previous three and learn no new words.

(B) Remember vocabulary in use. For example, learners can use the new words and expressions to make sentences or make up a short story or a short dialogue. They can use role-play methods to practise telling the story and performing the dialogue.

(C) Use memory association. As far as the students' English language proficiency was concerned, they mastered around 6,000 commonly used English words, expressions and idioms. However, they might meet some more difficult words in their reading and listening practice. It is much more difficult to memorize these words because they are not frequently used in daily conversation. In this situation, if learners use the usual learning methods, it will not work very well. I therefore recommended memory association. For example, if a learner wants to remember a difficult word such as "dapple," he or she can try

to find a very familiar word, such as “apple” from “dapple”. D can be regarded as a “dot”, a tiny spot or point. So the word “dapple” can be remembered by associating an apple with a dot, as in “a small or tiny spot on an apple”. Such word association is based on one or more words that have been stored in the learner’s memory linked with the new word(s) in terms of meanings or concepts. Its theoretical foundation is that “as long as these associations are meaningful to the learner, they will strengthen the learner's existing schemata and at the same time make the new word more accessible” (Oxford & Crookall, 1990: 16). In this way, vocabulary can be more memorable and easily recalled, so it is worth recommending to other learners, especially advanced learners, who struggle remembering more difficult vocabulary.

(D) Use software to recite vocabulary and expressions. There are games and the other interesting ways to help learners memorize vocabulary. On the Chinese market, there are vocabulary memory software such as “Happy Vocabulary Memory” and “My Favourite Vocabulary Memory”. I suggested that the students should use one of the above software to recite the new words so that they could enhance their efficiency in reciting vocabulary.

In terms of the effective use of vocabulary learning strategies, Gu (2003) reviews a great deal of empirical research on vocabulary learning strategies in a second/foreign language and finally concludes that “the choice, use, and effectiveness of vocabulary learning strategies very much depend on the task (e.g., breadth versus depth), the learner (e.g., cognitive and cultural styles of learning, motivation), and the context (e.g., L1, L2, or FL contexts)”. Her conclusion sounds reasonable, but I suggested to my students that they should combine the above learning strategies that I had recommended, based on their individual different cases in the Chinese education context.

(2) Giving the students advice on how to improve their listening and speaking skills

(A) I asked the students to make full use of internet-based resources and the other CALL environments, such as the Blackboard Platform. I recommended the BBC learning website to practise listening skills as well as speaking skills. As the learning website contains abundant English learning resources, which are suitable for various learners from elementary to advanced, a learner can select suitable learning contents. Additionally, learning materials posted on the Blackboard Platform were selected carefully and strictly relevant to the purpose of the course, the students' English language proficiency and their English learning needs. Obviously, these learning materials were more suitable for students than the others.

(B) The combination of intensive listening and extensive listening helps improve listening skills. Intensive listening refers to continuously listening to a spoken text or conversation until learners can understand the details. From my teaching experience, I strongly feel that dictation is one of the better techniques in teaching intensive listening, as is detailed about the discussion in Chapter 4. As stated in the chapter, one of the most important experimental studies conducted by Rahimi (2008) confirmed that taking dictation improved his students' language proficiency in terms of grammar, vocabulary, reading and listening comprehension. Also, Nation and Newton (2009: 59) argue that dictation can "help language learning by making learners focus on the language form of phrase and clause level constructions, and by providing feedback on the accuracy of their perception".

Dictation needs learners to listen to the same listening text for at least a few times, and to write down more details. Through such training, learners can understand more details about what they have heard so that they can understand more information than with other techniques. Additionally, both bottom-up and top-down processing models were used in intensive listening teaching, such as with Cycle One of this study. Besides the textbook, the

listening materials mentioned above can be selected as intensive listening materials or dictation materials for learning out of class autonomously, according to a student's language proficiency.

Similar to the definition of extensive reading (Richards & Schmidt, 2010), as its name suggests, extensive listening means listening in quantity and it is intended to obtain a general comprehension of listening materials in order to develop good listening skills. From my teaching practice, the combination of intensive listening and extensive listening helped learners improve their listening abilities and listening levels.

(C) To offer students tips on speaking skills. For example, I asked my students to imitate audio files from the BBC learning website, whose speakers speak Standard British English, so that their pronunciation and intonation could be corrected from any inaccuracy. Their classmates were encouraged to talk with each other in English in their spare time. They were encouraged to communicate with their friends, including native speakers of English, online via video phone talking tools, such as Skype. Additionally, they were inspired to go to English-speaking areas of the city or the university to practise their oral English. All these activities were aimed to improve their speaking skills.

(3) Guiding some students to participate in oral English contests at the university

The topic of the presentation was the Shanghai Expo 2010, the central issue of current affairs in May 2010. About twenty of my students took part in this activity and I guided them on how to give effective presentations. As one of the assessment committee members in the oral English contest, I observed them perform very well, which made me very satisfied. To my joy, the majority of the participants won prizes in the presentation. Additionally, I guided five students who had been selected as exchange students to a British university for two

weeks about cross-culture communication and British culture and customs before they went to the UK. They had been required to give oral presentations after their return to China.

5.5 Action Research Stage Three: Observation

5.5.1 Data Collection and Data Coding

As with Action Research Cycle One, the observation data in Action Research Cycle Two consisted of an analysis of the students' feedback on the use of CALL from their questionnaire; follow-up interviews and learning diaries; and my own research journal.

The students' reflections on the English learning websites, such as the BBC learning English website, were collected via a questionnaire, mainly through open-ended questions, and follow-up interviews. Of the 102 questionnaires distributed, 89 were completed an 87% completion rate. The questionnaire consisted of 13 questions, some of which were objective, but other questions needed the participants to be specific. These chosen questions were dependent upon the practical considerations in questionnaire design, as proposed by Cohen et al (2007: 342), in order to mainly ensure that the data collected could answer the research questions in this study. Table 5.4 shows the investigation of the students' use of CALL, in relation to data coding or categorizing (Table 5.4 shows 11 of the questions. The other two questions will be discussed at the end of this chapter). Additionally, the interview questions were structured in a similar or the same way as the questionnaire, especially the open-ended questions.

Table 5. 4 Questions investigating the learners' feedback of using CALL environments

Questions	Type of Questions	Theme
1. What kind of podcasts did you like downloading and listening the most (including listening online) from CALL environments such as the internet and the Blackboard Academic Suite of the University?	Multiple Choice Question (MC-Q)	Categories of students' favourite materials from CALL
2. What kinds of English-language films did you like downloading and watching the most (including watching online)?	MC-Q	
3. What kinds of the other videos did you like downloading and watching the most (including watching online)?	MC-Q	
4. What materials did you like the most on <i>The Course Learning Website of the University (Blackboard Academic Suite)</i> ?	MC-Q	
5. Which English language learning website(s) did you like accessing the most?	MC-Q	Students' favourite websites for English study
8. Please list at least two of your favourite English language learning websites. Please explain the reasons why you liked them and how helpful they were in improving your listening and speaking skills.	Open-ended Question	
6. How satisfied are you with the improvement in your English listening since the beginning of the semester?	MC-Q	Students' self-assessment on listening and speaking progress
7. How satisfied are you with the improvement in your English speaking since the beginning of the semester?	MC-Q	
11. What progress do you feel you have made in LISTENING and SPEAKING since the beginning of the semester?	Open Question	
9. How much of the materials posted on " <i>Blackboard Academic Suite</i> " have you read and listened? Please list two and give reasons. How helpful or useful were they in improving your listening and speaking abilities?	Open-ended Question	Effects of CALL materials on listening and speaking
10. Is it useful for students to give class presentations? Do you think that giving class presentations can improve spoken English and develop learner autonomy? Please give specific reasons in detail.	Open-ended Question	Effects of oral presentations and autonomy

Questions 1 to 4 belonged to the category of the learners' favourite materials from CALL, which investigated whether they would select suitable materials in their autonomous learning out of class or not. If the CALL materials were not suitable, I would guide their study in the next cycle appropriately, according to their responses. Questions 5 and 8 investigated the learners' favourite websites for English study, so that they could make full use of the materials appropriately. Questions 6, 7 and 11 mainly examined the learners' self-assessment on their

listening and speaking progress, which would confirm whether they had improved their listening and speaking skills since the beginning of the semester. Question 9 examined the effects of CALL materials on the students' listening and speaking progress. Question 10 surveyed the impact of class presentations on the improvement of their speaking skills and the promotion of learner autonomy.

5.5.2. Data Analysis and Findings

The sources of the observation data were derived from the questionnaire, follow-up interviews, and the students' learning diaries. The following main issues in relation to the findings of Action Research Cycle Two are now discussed.

5.5.2.1 Significance of learning materials from CALL environments

The result from Question 1 in Table 5.5 shows that the most popular podcast for both classes was English-language songs and music. It may be that the students found the songs and music enjoyable or relaxing, especially in their leisure time. Meanwhile, they could learn some English from the lyrics. As English songs and music are very popular, they will become the easiest content for learners to practise English at the beginning (Snauwaert, 2010).

The second most popular podcast for both classes was BBC and VOA English radio programmes downloaded from the internet, to be listened to on computers and digital media players.

Question 2 investigated the kinds of language subtitles learners preferred when seeing English-language movies. It is very clear that the first choice for the majority of the students was to watch English-language movies with both

Chinese and English subtitles, which was the easiest for them to understand the content of the films.

If there are Chinese subtitles on English films, undoubtedly, learners can understand them more easily. However, it is inefficient in improving their listening level because learners may emphasize their native language and ignore the target language. It seemed that watching English movies with Chinese subtitles may help beginners to understand the movies. However, as my students were at an intermediate level, I suggested that they should use English subtitles, because watching English-language films with English subtitles is more effective than with Chinese subtitles in assisting their listening comprehension, which has been confirmed in an empirical study, undertaken by Tsai and Huang (2009) at a Taiwanese university. Although learners will feel it very difficult to make sense of the English films without subtitles at the beginning, they will improve their listening proficiency gradually. With the progress of learners' listening proficiency, I suggested that watching English movies without subtitles would be a better way to practise their listening and speaking skills, and may help learners reach a higher level. Consequently, I also advised them to purchase English-language movies on DVD with a choice of different subtitles, according to their current English proficiency, in order to enhance their English listening level.

Question 3 suggests that BBC TV programmes and the other videos on Western cultures, and UK history and customs, were very popular to the majority of both classes. All this shows that the students were satisfied with these authentic materials in order to improve their English proficiency and increase their wider knowledge.

Question 4 shows that the audio files on the coursebook were the most popular in both classes.

Table 5. 5 Categories of the learners' favourite materials from CALL environments

Questions/Classes (The number (N) of the returned questionnaires: Class One (N=40) from 46; Class Two (N=49) from 56)	The choices for each question or the percentage of each class (Note: in each question, the participants could choose more than one option according to their own situation)				
1. What kind of podcasts did you prefer to download and listen to (including online) from CALL environments, such as the internet and the University Blackboard Platform?	English-language songs and music	Audio book(s) including stories and novels.	CET (Bands 4 & 6)(listening tests) in China	TOEFL +IELTS listening tests	BBC+ VOA Radio programmes
Class One	100%	38%	19%	30%	71%
Class Two	89%	32%	34%	24%	34%
2. What kinds of English films did you prefer to download and watch (including online)?	English films with Chinese subtitles.	English films only with English subtitles.	English films with both Chinese and English subtitles.	English films with no subtitles.	
Class One	10%	48%	81%	19%	
Class Two	38%	43%	68%	11%	
3. What kinds of the other videos did you prefer to download and watch (including online)?	CET Bands 4 & 6 Tutors	TOEFL+ IELTS Tutors	BBC TV or the other TV programmes	Western cultures, UK history...	
Class One	5%	33%	76%	95%	
Class Two	34%	21%	61%	43%	
4. What materials did you prefer on <i>Blackboard Academic Suite</i> ?	(CDs of the course-book.	<i>Communicating in Business (+CDs)</i>	<i>Target Score</i> (TOEIC Preparatory book(+CDs)	BBC Business English (+MP3)	TOEFL and IELTS listening (+MP3)
Class One	57%	57%	19%	52%	33%
Class Two	55%	30%	17%	38%	19%

In summary, the careful selection of appropriate learning materials plays an important role in the improvement of English language proficiency and the promotion of learner autonomy. Finally, it is suggested that language teachers should provide more learning materials for students at different levels of proficiency, made available through learning tools such as the Blackboard Platform, so that they can be motivated to learn autonomously and effectively.

5.5.2.2 Positive effects of the learners' favourite learning

websites

If a learner is fond of a learning website, I think that he or she will be motivated to actively learn something from that website. If a learner can actively learn something from internet-based resources, the learner may make progress in some respects. I analyzed how such websites influenced learning. First, I checked which English language learning websites my students preferred to access. Table 5.6 indicates that the BBC learning English website was the most popular for both classes.

Table 5. 6 The learners' favourite English language learning websites

Question 5. Which English language learning website(s) did you prefer? (Note: (1) Two or more than two options could be chosen. (2) The number (N) of the returned questionnaires: Class One (N=40) from 46; Class Two (N=49) from 56).		
Website(s)	Class One	Class Two
www.businessenglishpod.com	19%	23%
www.bbc.co.uk/learningenglish	71%	50%
www.cnn.com	19%	30%
http://www.ebigear.com (Note: this website has Chinese as the instruction language)	19%	19%
The others (please specify)	24%	19%

Secondly, the students' comments on their favourite English learning websites were analyzed, according to Question 8. From the list of the students' preferred English learning websites, the BBC learning English website was still the most popular, which agreed with the result of Question 5, as stated above. Table 5.7 below reveals the main reasons why they preferred the BBC website to other learning websites.

Table 5. 7 Main reasons of the students' favourite website (the BBC learning English)

Main reasons	The typical comments on the BBC web	Author's comments
1) Abundant learning resources	A) It provides us with abundant news video, audio podcasts and professional news reports. B) As there is so much information such as news, weather and culture on English learning, it is a window on the UK.	Although they expressed the same or similar opinions in different words/expressions, the website did present various and abundant materials to learn English.
2) Authentic materials in Standard English	A) We have been offered good opportunities to imitate Standard English from the BBC website. B) The pronunciation of the listening material is very pure and perfect. C) The native speakers from videos and audio files speak Standard English, which helps learners to imitate.	The comments show that the students preferred the Standard English pronunciation to the other kinds of English and the valuable video/audio files were worth imitating so that their pronunciation could be improved.
3) Expanding knowledge and improving English proficiency	A) It is really helpful to improve our comprehensive English proficiency, especially in terms of listening and speaking skills. B) The website helps learners to improve skills to prepare for tests and expand our knowledge.	To enhance learners' English proficiency is of course very important. If the learning website can improve their test scores, it is like gilding the lily.
4) Promoting learner autonomy	Standard pronunciation is used in the listening materials and there are tape scripts, which is convenient for learners to check with their answers. Also, we can know what's happening in the world from the BBC.	When students practise listening a couple of times outside class, the listening scripts can help to check whether they comprehended the material correctly or not. Therefore, their learner autonomy may be promoted in that way.

From the above comments, the students benefitted from the BBC website very much, whether they wanted to enhance their English language proficiency or prepare for tests, such as the IELTS and the TOEFL Tests. Obviously, a good English language learning website positively influences English language learning.

Additionally, the majority of students were fond of the Blackboard academic suite because so many learning materials were needed for learning out of class, which were closely related to the course. As one of the students pointed out, he was becoming more and more interested in learning English by listening to the audio files. By imitating the pronunciation of the video and audio files, he

became more confident in speaking English than before. The student's reflections show that the Blackboard Platform played an important part in supporting English language learning.

Besides the BBC learning English website and the University Blackboard Platform, the other two English learning websites, www.hjenglish.com and www.putclub.com, were very popular with these students because the language for instruction on the websites was in Chinese and the learning materials were easier to understand. Unlike the BBC learning English website, learners could find information on all kinds of English language tests, such as the CET, IELTS and TOEFL Tests. Also, they could download exercises from the websites for practice.

Another important point was that the students could discuss their own learning strategies in the Chinese discussion forum in order to share learning experiences. Just as some students pointed out, such kind of discussion was useful and helpful in motivating the interest and enhancing learning efficiency.

In summary, the correct and appropriate choice of the English learning websites and learning materials can push and support English language learning and promote autonomous learning.

5.5.2.3 Enhancement of listening and speaking skills

From the questionnaire at the end of Cycle Two, 85% and 77% of the students in Classes One and Two respectively perceived that they improved their English listening proficiency (see Table 5.8). However, the percentage of their improvement in speaking skills in the two classes was lower (nearly 70% in Class One and nearly 60% in Class Two). It seems that speaking skills improve more slowly than listening skills in the long run. As a result, it is much easier for learners to improve their listening, a receptive skill like reading, than their

speaking, a productive skill, like writing, because receptive skills are easier to develop than productive skills.

Table 5. 8 Students' perception on their improvement in listening and speaking at Cycle Two

11. What progress do you feel you have made in LISTENING and SPEAKING since the beginning of the semester? (Note: The number (N) of the returned questionnaires: Class One (N=40 from 46); Class Two (N=49 from 56)).			
	Class	No or a little improvement	Great or obvious improvement
Listening	Class One	15%	85%
	Class Two	23%	77%
Speaking	Class One	31%	69%
	Class Two	43%	57%

The following are the students' typical comments on their learning experiences from the follow-up interviews, their learning diaries and my research journal (see Tables 5.9 and 5.10). I summarized the participants' frequent comments selected carefully from the above sources. The following thematic analysis is to follow Norton (2009) and Cohen et al (2007).

Table 5.9 shows how the students described their learning experiences in terms of English listening proficiency with the use of CALL environments in addition to my positive comments about their learning experiences. Table 5.10 indicates the typical perceptions that the students had of their improvement of speaking skills and learning experiences worth recommending to the other Chinese learners of English.

Table 5. 9 Students' learning experiences of improvement in listening by using CALL

<u>Themes and student learning experiences (Main points)</u>	<u>Author's comments and analysis</u>
<p><u>1) Authentic materials practice</u> A) We listened to the US President's weekly address and learned many new words and phrases from it. B) We listened to oral presentations from the advanced studio classroom. C) We watched English-language movies online.</p>	<p>It is very helpful to listen to more authentic English materials from the internet to improve learners' listening proficiency. If learners want to succeed in enhancing their listening level, the key issue is whether they can keep listening for at least 15 minutes every day in their spare time. If they can, undoubtedly, their listening level can be improved gradually.</p>
<p><u>2)Comprehending listening directly</u> A) We did a lot of listening practice online. B) We understood parts of the listening passage in English directly instead of translating them into Chinese.</p>	<p>When beginning to learning a second/foreign language, we usually try to translate everything from the target language into our own native language. Otherwise, we are not quite sure about whether we can understand it or not. In fact, that is an incorrect way to learn a second/foreign language. The correct way is that learners should keep on listening so that they can understand more without any translation. Therefore, teachers should train their students' listening to think in English in classroom teaching gradually, by using "the Direct-Method Approach" in only L2 (Second Language) in class (Flowerdew & Miller, 2005).</p>
<p><u>3) Difficult listening practice</u> A) We have practised more difficult tests such as IELTS and TOEFL Tests this semester, which might lead to improving our listening level. B) Although the listening materials in the textbook are more difficult than before, we have felt a sense of comprehension about them gradually by continuing to listen to the same passage/interview many times.</p>	<p>As far as Chinese university students are concerned, the IELTS and TOEFL Tests, including Cambridge Business English Advanced Tests are much more difficult than any College English Tests in China, such as Band 6. At the beginning, such difficult practice tests are too challenging. As one student pointed out, she could understand nothing at all when she practised such kinds of listening materials at the beginning. As later she kept listening to the same material, again and again, finally she could understand most of the listening materials. Therefore, as found in many empirical studies, such as Jensen and Vinther's (2003), repeating listening to the same material at a normal speaking speed a few times is helpful for learners to improve their listening comprehension skills.</p>
<p><u>4)Effective learning methods found</u> A) We discovered more effective listening methods such as noting down key words while listening to more difficult listening materials.</p>	<p>In my opinion, mastering effective learning methods is more important than learning some knowledge. We are in an age of increasing information (or 'knowledge explosion'): knowledge is limitless. However, our lives are very limited. In our definite life spans, we must master effective learning methods in order to master as much knowledge as possible.</p>

Table 5. 10 The students' perception of the improvement of speaking skills

Student perceptions of speaking improvement	Author's comments and analysis
(A) Group work and presentations improved our oral English greatly because more time had been spent and much more effort had been made on speaking practice and on preparing the presentations outside class.	In classroom teaching, group work and presentations are very good practical ways for learners to practise speaking. In particular, presentations are a good way to train speaking skills and develop autonomous learning because they should search for information in relation to their topics from the internet and prepare by practising their presentations at least a couple of times before they make them formally. Such a practice way will improve their speaking skills gradually.
(B) Self-confidence helps us with the great progress of oral English because we do not worry about making mistakes and do not feel as nervous as before when we speak English.	From my teaching practice, there were two main shortcomings when Chinese students speak English. One was to fear making mistakes. The other was to fear “losing face”. Therefore, in class, the majority of students were unwilling to speak English or answer questions actively so that they could avoid making mistakes, which might lead to “losing face”. As they were afraid of losing face, they always worried about their mistakes in speaking English. As a result, they were not confident in speaking English so their oral English abilities were becoming weaker. In order to solve such a learning problem, it is very important for teachers to encourage them and build confidence in speaking English so as to help them overcome their nervousness when they speak it. Additionally, they should be offered more opportunities to speak to help build self-confidence. From the above comments, these students have overcome their speaking problems, which satisfied me with their progress in English.

Now I have discussed the students' perceptions of improvement in English listening and speaking with the use of CALL environments from the above comments and analysis. Next, I discuss how satisfied the students felt with their progress in their listening and speaking during the two action research cycles. From the questionnaire at the end of Cycle Two, Questions 6 and 7 investigated student satisfaction of English listening and speaking proficiency. Table 5.11 indicates clearly that more than half of the students in each class were satisfied with the progress that they had made in terms of English listening and speaking proficiency, but the students in Class One were the more satisfied.

Comparing Table 5.8 with Table 5.11, it was found that the percentage of student satisfaction with the improvement of their English listening and speaking

proficiency in both classes was much less than that of the student perception of their improvement in English listening and speaking proficiency at the end of Cycle Two. It also demonstrates that many students would need to make greater progress in their communicative abilities, although the question was how. I think that the students and I should make a greater effort in AR Cycle Three so that they could be satisfied with further progress in English listening and speaking skills.

Table 5. 11 Percentage of students' satisfaction of listening & speaking improvement at Cycle Two

6. How satisfied are you with the improvement in your English listening since the beginning of the semester?	Very dissatisfied	Dissatisfied	unsure about it	Satisfied	Very Satisfied
Class One (N=40)	0	14%	20%	56%	10%
Class Two (N=49)	0	17%	29%	50%	4%
7. How satisfied are you with the improvement of your English speaking since the beginning of the semester?	Very dissatisfied	Dissatisfied	unsure about it	Satisfied	Very Satisfied
Class One (N=40)	0	19%	20%	61%	0
Class Two (N=49)	0	25%	24%	51%	0

In summary, the data analysis of Cycle Two suggests that the students' English listening and speaking skills were promoted more greatly than before. In Cycle Three, the teacher and researcher should continue to take effective measures to further improve the oral communicative abilities of students.

5.5.2.4 Effects of Class Presentations

In Cycle Two, as suggested by the students, I decided to ask each of them to prepare a class presentation, the topic of which was to be chosen by the student, in order to provide more opportunities to speak English in class. Additionally, each presenter was required to show the outline of their presentation by using PPT (Power Point).

Further, as the Shanghai World Exposition 2010 had just opened, the University

Student Union hosted an English presentation contest about the Expo, in order to enrich the students' out-of-class activities. More than twenty students from the two classes participated in the activity. The final result of the contest was that the majority of them won prizes. Although many students did not take part in that activity, they still went to listen to the oral presentations. In my view, listening to the presentations was also helpful in improving the students' listening comprehension, as well.

After AR Cycle Two, I investigated the students' perceptions of the effects of giving class presentations and the out-of-class English contest. When asked whether class presentations were helpful in improving spoken English, the majority of students in each class answered positively. Another question was whether preparing for a class presentation helped learners to develop autonomous learning or not. In the same way, most of them gave positive answers. Table 5.12 illustrates the typical views and specific details of the positive effects of giving class presentations, in addition to my comments.

Table 5. 12 The positive effects of giving oral presentations

The students' feedback on oral presentations	Author's comments and analysis
<p><u>A) Improvement of spoken English</u></p> <p>1) "I have learned many things, such as English pronunciation, the management of the agenda of my presentation and how to keep to the point. I think that making oral presentations is more practical than doing TOEFL tests." <u>(S6, Class One)</u>.</p> <p>2) "An oral presentation gives us chances to express ourselves in English, and we must prepare very well for it before the presentation. In this way, we should search for relevant materials, think over the topic, make the language more polished and pay attention to language mistakes and so on. Therefore, I feel that it can improve our abilities in many aspects, especially in terms of oral English." <u>(S20, Class One)</u>.</p>	<p>Student 6 (Class One) described his process during the preparation of his presentation. In the preparation process, he felt that he had learned more practical things such as English pronunciation and the organization skills of the presentation than from the books. The other student emphasized that preparing for it very well before giving the presentation formally could lead to improving her oral English. She also talked about the improvement of many comprehension abilities, such as oral English ability, during the preparation process. In short, making oral presentations helps improve not only a learner's comprehension abilities but also their oral English.</p>
<p><u>B) Promotion of learner autonomy</u></p> <p>"Making an oral presentation can improve our presentation skills and make us more confident to act in a real situation. Particularly, we need to search for a lot of relevant materials from the internet, sort them out and write an outline of the presentation. Finally, we need to practise speaking again and again before making the presentation formally. Although it took some time, the preparation of a presentation can boost our learning skills, especially autonomous learning skill. Meanwhile, during the preparation, we gained more knowledge from it." <u>(S12, Class One)</u></p>	<p>Many students held such similar positive views on the promotion of learner autonomy by preparing presentations. From the students' feedback, they benefitted from preparing and giving the presentation formally, which not only promotes autonomous learning but allows them to learn from the internet-based resources.</p>
<p><u>C) Improvement of English listening levels</u></p> <p>"Making an oral presentation can exercise the audience's listening skill" <u>(S11, Class Two)</u></p>	<p>I agree with the student's view that because the audience should make appropriate comments on the oral presentation according to their comprehension on it. If the audience did not make sense of a speaker's presentation, they could not give appropriate and correct feedback on it. As a result, the audience's listening comprehension might be greatly influenced by the presentation.</p>

The above student feedback shows that there were many positive comments on the class presentations. However, some students held negative views, as well. For instance, some lost self-confidence, felt very nervous, were worried about making mistakes, feared to 'lose face' and so on. In spite of this, the positive

effects of giving presentations outweighed the negative effects. On the whole, preparing and giving a presentation helped students not only improve their both listening and speaking skills but also promote autonomous learning. All these advantages may be considered to be positive effects.

5.5.2.5 Combination of learner autonomy and online learning resources

Here I discuss how to combine the full use of learner autonomy and online learning resources in order to improve the students' English language proficiency, especially their listening and speaking abilities, based on the comments from the collected data.

First, some comments from the student learning diaries were about the learning materials posted on the University Blackboard Platform Learning Web. Student 12 (Class One) felt that the listening materials on the Blackboard Platform were more helpful to him in improving his listening abilities than watching movies. Indeed, watching movies is a fun thing. However, there is often colloquial or bad language in films. If learners expect their listening abilities to reach a higher level, they need to listen to higher level Standard English materials, such as the BBC website and IELTS listening materials. Student 27 (Class One) talked about her learning experience on listening to TOEFL and IELTS practice tests, which were very challenging to her listening level. As she repeatedly listened to the same material, she could make sense of the majority of what had been said. I think that she made very great progress in her listening because of repeating the listening to the same material at a regular native English speed a few times is helpful for learners to improve their listening comprehension skills (Jensen & Vinther, 2003).

Two students also commented that the audio files with the coursebook (*'Business Benchmark Advanced'*) and "Business Language to Go" (BBC

Business English), both on the Blackboard Platform, were very helpful in improving their listening abilities. They built up their self-confidence by listening to higher level English materials. The above analysis suggests clearly that the learning resources on the Blackboard Platform played an important role in improving the students' English listening abilities.

Additionally, the learning experiences from Students 7 and 8 (Class Two) by the use of the advanced technologies were very common in the two classes. Both liked watching English-language movies on computers or with MP4 players, because the movies could help them not only to improve their listening ability but also to better understand Western cultures and customs. Also, both liked reciting vocabulary. The difference between them was that Student 7 preferred reading novels in English and Student 8 enjoyed reading news from websites such as the BBC. On the whole, they could use internet learning resources to learn English autonomously after class.

Finally, one of the most important learning experiences was presented by Student 1 (Class One), who was the best student of the two classes. One of the main reasons was that he performed best in class, including in classroom tests, such as the TOEIC and IELTS Tests. The other main reason was that he obtained higher scores in the New TOEFL (nearly 100 out of 120 points) and nearly 1,900 out of 2,400 in the US college SAT (formerly, Scholastic Assessment Test) entrance examination. As he stated in his learning diary, he really enjoyed watching US TV shows, such as the Big Bang Theory and Boston Legal. Meanwhile, he read novels by George Orwell. Although the novels seemed to be a little too difficult, he appreciated the author's writing style and political views. Also, he watched downloaded podcasts and news. He felt that success in his English study was a combination of learner autonomy and modern technologies, such as computers and digital media players. From his English learning experience, he was good at using modern technologies to learn English autonomously. As a result, he has achieved much in terms of

comprehensive English abilities.

In brief, from the above discussion and analysis of data, the promotion of student autonomous learning is one of the most important ways of enhancing their comprehensive English proficiency. Another important thing is that they can “create a good English language learning environment” with the use of online learning resources. It has been shown that, from the students’ learning experiences, a combination of these two things greatly increased their learning efficiency.

5.6 Action Research Stage Four: Reflections

In this section, I would like to discuss the main findings from this Cycle, especially student autonomous learning with the use of CALL environments and how they support English language learning. Here I will bring together what I have found above in order to have a better understanding and then try to link what I did in this Cycle, or my reflections on the research stage, or how it relates to ideas in the literature.

5.6.1 Reflections on the importance of selecting appropriate learning materials

Modern technologies have brought about dramatic changes to our everyday lives. In particular, since computers and the internet have become readily available, great changes have taken place in the field of education as well. Online learning and distance learning have become commonplace today. If people want to learn something new or study further, they may not go to traditional schools or universities but can study at home autonomously and flexibly with the use of the internet-based learning resources.

However, having encountered so many learning resources on the internet, learners usually do not know how to select their learning materials correctly and appropriately. Therefore, in order to learn something more effectively, they need experienced teachers to guide them in choosing learning websites and materials carefully. In my teaching practice, I always instructed my students to use online resources so as to promote their autonomy and increase their learning efficiency. For example, in Cycle Two, I recommended the BBC learning English website, which was considered to be one of the most useful English learning websites. As a result, the investigation results indicate that the BBC learning English website was the most popular English learning website for both classes. Additionally, it has been found that the University Blackboard Platform was popular for learning resources amongst the students, which could help them not only learn English, but do so autonomously out of class, as well.

In short, the correct selection of appropriate learning materials plays a crucial role in the improvement of learners' English language proficiency and the promotion of their learner autonomy.

5.6.2 Reflections on the improvement of listening and speaking skills

The results indicate that 85% and 77% of the students in Classes One and Two respectively made great achievements in their English listening proficiency (see Table 5.8 above). Although the progress in the speaking skills of two classes was not as obvious as that of listening skills, nearly 70% of the students in Class One and nearly 60% of the students in Class Two believed that their speaking skills had been improved to some extent, as well. From my classroom observation and my students' reflections in their learning diaries, the students felt that the progress they had made was due to the following factors which supported their

English language learning:

1) The CALL environments, including the BBC learning website and the University Blackboard Platform, provided the students so useful and helpful learning resources. This was one of the most important factors for them to enhance their listening and speaking abilities.

2) The teacher's correct guidance in their English study made sure that they were on the right track. In particular, some of the guidance, such as learning strategies and the correct selection of appropriate English learning websites, was very helpful to their English language learning.

3) As the student-centred teaching approach was conducted in classroom teaching, some teaching activities such as group work and class presentations could help push these students to enhance their speaking skills. As a result, through such interactive listening and speaking activities, the students may not only improve their listening comprehension but also their speaking skills in their active performance in class. This is perhaps one of my most important reflections on the student-centred approach.

4) The development and promotion of autonomous learning was considered to be one of the most important factors that contributed to their progress in their English study. Next, I present reflections on the importance of learner autonomy by the use of CALL environments in detail.

5.6.3 Reflections on autonomous learning from using CALL environments

In AR Cycle Two, one of the main homework tasks that I assigned to the students was to prepare an oral presentation on topics they were interested in,

chosen freely by themselves. Also, they were required to use Power-point to show the audience the main outline of their presentation (key words/sentences), and the relevant background information, pictures and other materials. Additionally, they were asked to make an effective presentation, which should be brief, clear and logical, and which should be given using appropriate body language, such as gestures. Although the students believed these requirements to be very strict and rigid, my class observation suggested that this homework was helpful in improving their speaking skills and promoting their autonomous learning, such as Level 2 (Learner action: select), shown in Table 5.13 and adapted from Oxford (2008:45–46).

Table 5. 13 Oxford's adaption of Nunan's stages of autonomy of fit independent L2 learning

Level	Learner action	Learner role	Goals, which lead to→→	Tasks
1	Become aware	Recipient of information	The independent learning system explains the official goals	The independent learning system provides the task(s) and explains the reason for doing the task(s).
2	Select	Reviewer and selector among system-given options	Learners choose their own goals from a range of official goals.	Learners choose which tasks (or part of tasks) from given alternatives as ways to achieve the goals. They choose the order in which to do the tasks or parts of tasks.
3	Adapt	Adaptor	Learners adapt (but do not eliminate) official goals.	Learners adapt given tasks, a little or a lot, as means of achieving the goals.
4	Create	Inventor, originator, Creator	Learners create their own goals.	Learners create or decide on their own tasks to fulfill the goals
5	Transcend	World-seeker, Researcher, Teacher	Learners identify their own interests and create goals relevant to those	Learners seek and perform tasks in the outside world that involve creating new knowledge and helping others to learn the L2.

The main reasons are as follows. First, they needed to choose topics, by themselves, which interested them, increasing their motivation in English learning. This could promote autonomy because motivation plays a vital role in autonomous learning (Gao & Lamb, 2011).

Secondly, they needed to search relevant information or materials from the internet and arrange them, because modern technologies such as the internet not only provides plenty of resources but also increases autonomous learning in the gathering and sorting of materials (Reinders & White, 2011).

Thirdly, they completed a written presentation, including the outline of the presentation, and made a power-point. They were to have rehearsed a few times before they made presentations formally.

Fourthly, some gave class presentations. They used Power-point to show pictures or photos that they had prepared for their presentations, which could make these presentations lively and interesting, while other students listened carefully in order to develop their listening skills to some extent.

Fifthly, after an oral presentation was completed, the other students were required to comment on the presentation according to the criteria for effective presentations, and to point out its merits and shortcomings. One of the main aims of the teaching activity was to exercise the students' speaking skills and develop their critical thinking skills.

Finally, I summarized the comments on all the presentations, praised the students' performances as much as I could in order to encourage them. Meanwhile, I offered suggestions on how to improve their presentations in terms of English pronunciation, body language, and presentation structure. What I had done in my teaching actions, such as encouragement and advice given to the students, based upon Li's teaching experience (2009), was to help my students to promote autonomous learning mentioned above, such as Level 2 (Learner action: select), shown in Table 5.13, from Oxford (2008:45–46). Its tasks at this level of autonomy are: "Learners choose which tasks (or part of tasks) from given alternatives as ways to achieve the goals."

On the whole, the advantages of oral presentations in class are that students not only improve speaking and listening skills but also promote autonomous learning.

Additionally, from class observation, although the total language proficiency level of Class Two was lower than that of Class One, the oral presentations made by the former was nearly as good as those made by the latter (from my research journal: 22 May 2010). Indeed, from the previous test results, the students in Class Two did not perform so well as those in Class One. However, from their

performance in presentations, I speculated that harder work and more autonomous learning practice for the students of Class Two made up for their lower in their test scores, which enabled them to perform better in oral presentations.

In Cycle Two, it was believed that the levels of my students' implementing learner autonomy were based on Oxford's (2008: 45–46) (see Table 5.13) and Nunan's theory of learner autonomy (1997). From the students' feedback, it was believed that the levels at which they were implementing their autonomy were located at Levels 1 to 3 (Regarding learners' action, Level 1: Become aware; Level 2: Select; Level 3: Adapt) (Oxford, 2008: 45). For example, in the above homework to prepare class presentations, after they had chosen their topics and selected relevant reference materials from the internet, they used their own English skills to summarize and present their ideas in order to achieve the goals required by their English teacher – which I judged to be evidence of working at Level 3: Adapt.

However, their levels of autonomous learning needed to be improved further in Cycle Three or in their future study. If learner in implementing autonomy reach Level 4 ('Create': a creation level in their action), or Level 5 ('Transcend': a transcendence level in their action), that should further extend their capabilities as users of English. How to achieve these goals is still a severe test for both the teacher and the students. As far as language teachers are concerned, it is suggested that they should give their students more guidance in terms of effective learning strategies, but they should not provide more specific learning tasks/goals to their students. In order to meet a fundamental challenge of independent learning, learners need to “develop the ability to engage with, interact with, and derive benefit from learning environments which are not directly mediated by a teacher” (White, 2008: 3). She also argues that independent learning dependent upon students' understanding of their own needs and interests will be developed by creating the opportunities and

experiences not only to encourage student choice and self-reliance but also to promote the development of learning strategies and metacognitive knowledge. This requires learners to 'create' their own learning tasks or goals. Only in this way, can their autonomous learning abilities be increased gradually in order to enhance their lifelong learning skills.

In today's world, the development of the modern technology has reached unprecedented levels. Computers and the internet have changed our daily lives and traditional learning styles. As stated previously, Chinese students learn English in non-native English learning environments. In this situation, we should think of ways to use modern technologies, such as computers and the internet, to 'create' English learning environments, especially listening and speaking environments. I shared my experience of how to create English learning environments with my students, telling them that, in my spare time, I often watch online TV such as BBC World News Programme by using a computer at home. Even if I am doing my housework alone, I often listen to BBC TV/radio programmes so that I can 'soak' myself in the World of English. Sometimes I download open courses from Cambridge, Oxford, Harvard, Yale and the other first-class universities onto my computer. As long as I have some free time, including lunch and supper break, I can watch them. Gradually influenced by this kind of learning environment, I have found that my English listening proficiency has made greater progress than before. Meanwhile, I have also learnt something from these open courses. My English language learning experience may enlighten and encourage the students. Depending on their own interests and their own language proficiency, they began to 'create' their own English learning environments from the internet-based learning resources, including the University Blackboard Platform resources.

On the whole, the perfect combination of learner autonomy and CALL environments indeed helps learners to enhance their language proficiency, which is considered to be one of the most important reflections on my teaching

practice.

5.7 Summary of Learning Outcomes

Regarding the CALL environments, some significant research findings have been found on the improvement of communicative abilities in English language learning. Firstly, the careful selection of appropriate learning materials plays a vital role in supporting students' English language learning and developing autonomous learning. The above investigation results indicate clearly that the most favourite podcast for the students of both classes was English songs and music, which allows them to relax and enjoy themselves besides learning some English. In addition to this, BBC radio and TV programmes from its website, and the audio files from the coursebook from the University Blackboard website were very popular for both classes. Consequently, the main learning resources played an important part in improving the students' listening abilities and comprehensible input.

Secondly, the learners' favourite learning English websites were helpful to improve their listening and speaking skills. From the survey results, it was found that the BBC English learning website was the most popular for the majority of both classes among the learning websites suggested because it provided them abundant learning resources.

Thirdly, the students' listening and speaking skills were promoted substantially under the CALL learning environments. As mentioned above, 85% and 77% of the students in Classes One and Two respectively perceived that they made greater progress in their English listening proficiency, although the percentage of improvement in the speaking skills of the two classes was lower than that (nearly 70% in Class One and nearly 60% in Class Two), perhaps because speaking skills may improve more slowly than listening skills. Also, one of the most

important findings in this cycle is that the effects of making oral presentations in class had a positive impact on the students' English language learning. One of the primary reasons was that preparing for and giving an oral presentation helped students not only improve their both listening and speaking proficiency but also promote autonomous learning. Meanwhile, they can build their self-confidence in speaking English without being afraid of being laughed at, one of the most important points in learning English. Finally, another important finding is that the perfect combination of the use of learner autonomy and online learning resources increases learning efficiency. On the whole, the above important findings from Cycle 2 will play a significant role in English learning for these learners in the future. Hopefully, other Chinese learners may be enlightened from these learning English experiences.

5.8 Learning Problems at the End of Cycle Two

According to the students' questionnaires, follow-up interviews and their learning diaries at the end of Cycle 2, it was found that the most difficult English-learning problems remained listening, followed by speaking, vocabulary and writing (see Table 5.14).

Table 5. 14 The students' main problems in learning English at the end of Cycle Two

Aspects	Specific difficulties	The teacher's advice to solve the problems
Listening	1) Normal speed conversations or interviews by native speakers 2) Unfamiliar topics/contents such as academic lectures 3)Advanced English listening materials (e.g., IELTS and TOEFL) 4) BBC or VOA (Voice of America) News programmes	These thorniest issues in English listening are very difficult to deal with. In order to overcome these obstacles, I, as a teacher and researcher, must adopt a novel teaching approach in Cycle Three to help my students to reach a higher level in their listening abilities. Meanwhile, I would continue to develop autonomous learning in order that they could improve their lifelong learning skills.
Speaking	1) Not fluently; pronunciation problems 2) Lack of communicative environments or partners	I would continue to guide students in using internet-based learning resources to create a "World of English" so that their speaking skills could be improved.
Vocabulary	Mainly insufficient vocabulary, especially some advanced level vocabulary	It is suggested that more English readings at intermediate and advanced levels should be done, which may help learners enlarge their vocabulary.
Writing	Shortage of writing skills	It is suggested that more modern model articles or papers should be recited and more writing practice should be done.

Besides the above learning problems, some learning efficiency, interest and motivation with some students was very low. All these problems may stop students from making greater progress in their English study. Perhaps, some of the most difficult problems will be solved completely in the future.

5.9 Changes in Teaching Styles next Cycle

In Cycle 3 of this study, I, as a teacher and researcher, should change my teaching styles in the following respects, according to the students' feedback at the end of Cycle 2 and their suggestions on teaching reform:

1) Classroom teaching should be more interesting and more active and the students' motivation in learning English should be increased. The suggestions are: to encourage the students to learn the language actively and autonomously; to play some interesting games in classroom teaching; to discuss current affairs,

especially much-talked-about topics, such as the World Cup; to talk about the cultures of English-speaking countries, such as the UK and the USA; to try to use more interesting teaching content to attract the students in learning English, and so on.

2) Listening skills should still be emphasized. Although the students had made greater progress than before in listening abilities, they still had some difficulty in listening to authentic listening materials at normal speed, such as in the IELTS listening tests, the TOEFL listening sections and the BBC news. Just as one of the students suggested, listening practice should gradually become more difficult so that the students' listening abilities could be improved step by step. Additionally, some students required me to give them more detailed explanations of the listening tests as well as some listening tips.

3) More opportunities should be given to the students to make presentations in class. The majority of the students strongly expected me to offer them more opportunities to give class presentations so that both their listening and speaking could be improved gradually, because it seemed to them that making presentations were a good way to improve comprehension.

4) The most important thing in classroom teaching is that the teacher should teach the students English language learning methods and strategies. One of the students in Class Two suggested to me: "The teacher should teach us how to learn English well, rather than just listen to material and discuss issues. I think that the English language is NOT taught by teachers BUT learnt by the learners themselves. If learners master correct language learning methods, there is no problem in learning the language(s) very well". I do not believe that the student had read any books on English language teaching methodology, but the view he expressed on language teaching and learning is very similar to some well-known English teaching scholarly views. This shows that the student has thought deeply about language teaching and learning from his own learning experience.

Therefore, this suggestion should be seriously considered as well.

On the whole, the above suggestions are constructive. Therefore, I should consider about them carefully and design a practical teaching plan to implement them in the last action research cycle.

5.10 Summary of Chapter 5

This chapter has described the four stages of conducting the action research project in Cycle Two in detail. During the period of this cycle, the students made greater achievements than before by the full use of the CALL environments and the learning resources from the BBC learning English website and the University Blackboard Platform Learning website. The significant research findings in this cycle greatly encouraged me and my students to improve my teaching practice and enhance their comprehensive learning abilities in the last cycle of the action research project. Meanwhile, by reflecting on how I taught and on what my students required, some practical and feasible proposals put forward by the students would be considered seriously so that the teaching quality could be enhanced in Cycle Three.

Chapter 6 Action Research Cycle Three

6.1 Introduction

Chapter 6 describes the process of Action Research Cycle Three, which will be my reflections on my attempts to address the problems identified in Cycle Two. The survey result indicates clearly that the most difficult English learning problem was still listening, followed by speaking.

The specific details of the listening difficulty were: 1) Normal speed conversations or interviews by native speakers of English; 2) Unfamiliar topics/contents, such as academic lectures; 3) Advanced English listening materials, such as IELTS and TOEFL Tests; 4) BBC or VOA (Voice of America) News programmes.

Besides these listening problems, some of the students could not speak English very fluently. Additionally, learning efficiency by some students was still very low. The main above problems would be addressed by Action Research Cycle Three. At the end of this chapter, the three cycles of the action research project are briefly summarized.

6.2 The TOEFL Listening Podcast Website

The third website used both in class and out of class was a TOEFL listening podcast website: <http://www.eslpod.com/toefl>, a well-known podcast website for English language leaning (see Figure 6.1).

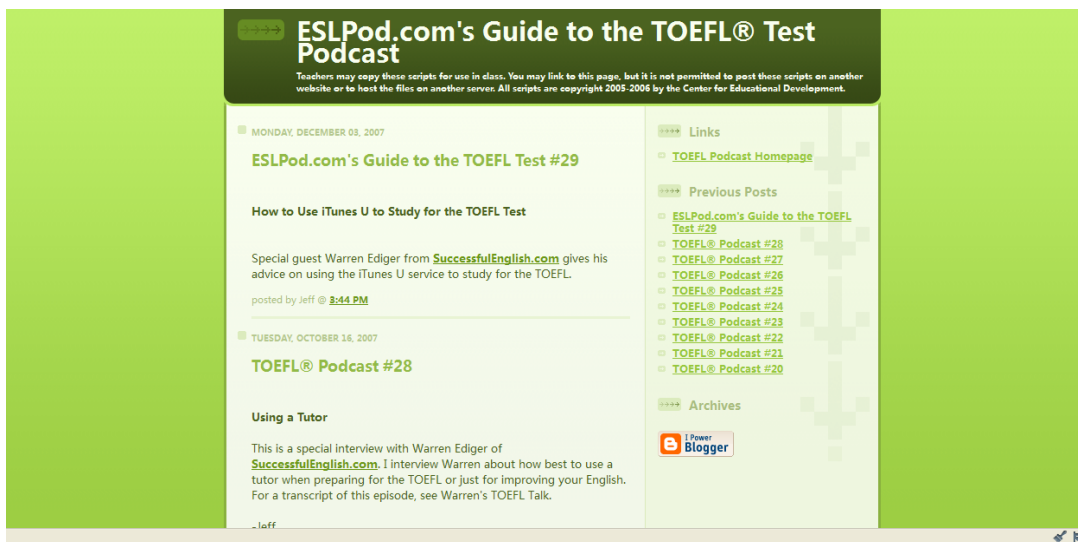


Figure 6. 1 The TOEFL listening podcast website (<http://www.eslpod.com/toefl>)

6.2.1 Primary Reasons for Selecting the Website

Firstly, although the students made further progress in their English communicative abilities, they still found it difficult to understand advanced level authentic materials, such as IELTS and TOEFL listening tests, especially those which included various accents. As some of them planned to study abroad in English-speaking countries, such as the UK and the USA, and others wanted to work for foreign companies in China, they wanted their English proficiency, especially their listening level, to reach an advanced level.

Secondly, some still had a low learning efficiency in English language learning. Therefore, they needed to improve their learning efficiency. Finally, the most important thing for the students was to improve their study skills and to promote their learner autonomy as the students would not have any further university English courses after this semester. Therefore, mastering study skills and independent learning strategies would play a vital role in learning English in the future.

6.2.2 Characteristics of the TOEFL Podcast Website

1) The learning resources are authentic and authoritative. According to the brief introduction to the website, all the TOEFL podcasts were recorded by former American English professors with many years of high school, adult and university ESL (English as a Second Language) teaching experience in the USA and in other countries. Dr Jeff McQuillan, the host for the podcast, a former professor of applied linguistics, presents detailed explanations for each podcast. From their rich teaching experiences and academic background, obviously, they are well-known and authoritative experts in teaching students English as a second language.

2) The speech rate of the listening materials is from slow to a typical native-speaker's speed. Each TOEFL Podcast consists of four parts. First, learners hear a portion of a conversation or lecture similar to the one they may hear at a university class in the USA. The first portion, spoken slowly, offers learners an opportunity to acquire new terms and vocabulary.

The second part of the podcast is an explanation of key vocabulary and expressions from the sample conversation or lecture, used in plain English.

Third, learners listen to the conversation or lecture again, but this time they will hear it at a natural speed (about 180 words per minute). Finally, the host presenter will ask learners a few comprehension questions to check their understanding, similar to what may be heard on the actual TOEFL Test. It is believed that such a gradual and orderly learning approach can help learners to build their confidence in advanced listening level so that their listening proficiency can be improved gradually.

3) The teaching approach on the TOEFL Podcast is more effective and its

learning efficiency is higher, compared with other teaching approaches or similar courses. According to the introduction message on the website, usually TOEFL books or courses present listening materials at a very fast speed to learners of EFL (English as a Foreign Language) and many of them cannot understand much of what has been said, which is very inefficient use of time. However, the approach in the podcast to practise TOEFL listening Tests has its own strengths. First, learners will listen to a conversation or lecture more slowly and clearly so that they can actually grasp the meaning and master the words and idiomatic expressions. Then, Dr McQuillan explains the vocabulary, background information, such as cultural issues and the other relevant knowledge, slowly and clearly. Finally, the same conversation or lecture will be broadcast at a normal speed. After learners listen to it a few times, they can comprehend nearly 90% of it at most, which is a more efficient use of learners' time than other approaches. Such a step-by-step learning process enables learners to grasp what has been said by native speakers of English at a normal speed.

On the whole, it is believed that it is an effective and practical approach to improve English language learners' listening level. Therefore, I would like to use this approach in my teaching practice and guide my students to use it out of class in order to develop their advanced English listening and speaking abilities.

6.3 Action Research Stage One: Planning

In this section, a teaching lesson planning for Cycle Three is outlined. During this phase, the teaching materials were mainly based on the TOEFL podcast website and other internet learning resources.

6.3.1 The Lesson Planning

In Cycle Three, a student-centred approach was still used in classroom teaching. Out of class, the students focused on learning English autonomously by using the TOEFL Podcast website or the other recommended learning websites. Table 6.1 shows the teaching lesson planning in Cycle Three.

Table 6. 1 The teaching lesson planning in Action Research Cycle Three

	Teaching content	Language skills	Guidance from the teacher
1	<p>1) Watch the video from <i>Reading Explorer 1</i> (Douglas, 2008).</p> <p>2) Make oral presentations.</p> <p>3) Listen to the TOEFL podcast (1): Introduction.</p>	<p>1) Focus on improving the students' listening skills and learning strategies.</p> <p>2) Continue to develop their speaking skills.</p>	<p>Teach them learning strategies. Guide them to use some listening tips while they are listening.</p>
2	<p>1) Make oral presentations.</p> <p>2) Group discussion on an extension for an assignment.</p> <p>3) Listen to TOEFL Podcast (6): Ask for an Extension for an assignment.</p>	<p>1) Develop the students' speaking skills and listening skills.</p> <p>2) Encourage students to use brainstorming method so that they can develop their creativity.</p>	<p>1) Guide them to develop their communicative skills comprehensively.</p> <p>2) Make them understand some cultures in western universities.</p>
3	<p>1) Quiz on World Cup History</p> <p>2) Group discussion on the World Cup</p> <p>3) Listen to BBC news on Argentina's Head Coach, Maradona.</p> <p>4) Listen to the TOEFL Podcast (9): Exam Results.</p>	<p>1) Make classes lively and interesting so that the students' motivation to learn English could be enhanced.</p> <p>2) Develop their advanced listening skills.</p>	<p>Guide them to learn English autonomously from the TOEFL podcast website and the other learning English websites such as BBC so that their listening abilities could be improved.</p>
4	<p>1) The exchanged students who came back from the UK made oral presentations.</p> <p>2) Group discussion (Which country will win the World Cup in 2010?)</p> <p>3) Listen to the TOEFL Podcast (12): Campus Safety.</p>	<p>1) Develop students' speaking skills.</p> <p>2) Develop their advanced listening skills.</p>	<p>1) Guide them to develop their communicative skills comprehensively.</p> <p>2) Make them understand some British cultures.</p>
5	<p>1) Watch the IELTS Speaking Test (Jacklin & Jacklin, 2006)</p> <p>2) Group discussion: (A) on the music (B) on students' favourite English learning website.</p> <p>3) Listen to longer lectures or talk from the TOEFL Podcast (27): Marketing Lecture.</p>	<p>1) Develop their speaking skills.</p> <p>2) Develop their advanced listening skills.</p> <p>3) Master some advanced listening test tips such as TOEFL and IELTS Tests.</p>	<p>Guide them to continue with the learner autonomy from learning English websites and the Blackboard Platform in the university website.</p>

6.3.2 Explanation of the Classroom Teaching Activities

The above teaching lesson planning indicates that the notable features of the teaching in Cycle Three are basically the same as those in Cycle Two: to focus on listening skills in addition to speaking skills; to use a student-centred

approach in classroom teaching, along with cooperative learning and brainstorming; to emphasize developing the students' autonomous learning outside class using CALL. Although these teaching activities were similar to Cycle Two, the approach to the teaching of listening was quite different. Cycle Three explores a new teaching method to address one of the most difficult listening problems, how to reach an advanced level from an intermediate level for a short time.

6.4 Action Research Stage Two: Action

6.4.1 The Listening Activities

The TOEFL listening podcast website contains conversations between the two speakers and academic lectures on subjects such as history and science. Because class time was pressing, only a two typical conversations or lectures were practised each time. Regarding the other podcasts, I required the students to practise listening out of class autonomously. The following was one example of the listening activities in a listening class by using the TOEFL listening podcast website resources:

1) Pre-listening stage (Warm-up exercises):

Group discussion: Do you always submit your assignments to your teacher(s)/tutor(s) on time? If not, do you ask an extension for an assignment? The topic on the requirements for an extension of an assignment is related to the one in the TOEFL podcast (6), which is available from <http://www.eslpod.com/toefl>. After the discussion, I told them the some relevant regulations and policies at British universities. If a student does not submit his or her assignment in time, the student would get lower scores than normal.

Additionally, I told them of my learning experiences at the University of Exeter when I studied for an MSc degree in educational research. When one of the assignments was close to the deadline, I could not submit it in time because of a serious backache. I saw a doctor at a hospital and the doctor wrote a note about the illness and suggestions. I submitted it to my tutors, who gave me a one-week extension for my assignment. After told of my learning experience in the UK, the students were asked to pay attention to the rules and policies for submitting research papers or assignments in American universities while listening.

2).Post-listening stage:

I had the students listen to the TOEFL podcast on the requirements of submitting late assignments. They heard it twice at a slow speaking rate. While listening, they wrote down some important information from the podcast. After that, I briefly explained some words and expressions. Next, I asked them to focus on listening to the explanations of the podcast hosted by the well-known professor in detail. Then, I let them listen to the conversation once again at a normal speaking rate for native speakers. Finally, the two questions were heard so that their listening comprehension could be checked.

I found that the students easily got the answers after they understood the relevant background knowledge/information, because the role of schemata (also called background knowledge or pre-existing knowledge of the world) plays in comprehending language (Harmer, 2001).

Harmer (2010) also argues that such schematic knowledge is stimulated, which causes learners to recognize what they see or hear in their reading or listening activities. Schmidt-Rinehart (1994) suggested that background knowledge is an important supportive factor to aid L2 (Second Language) listening comprehension at all levels of proficiency. Recently, Soureshjani (2011) confirmed that gaining cultural background knowledge to the target language

significantly influences learners' listening and reading comprehension in language learning, especially English learning. Obviously, background knowledge helps learners to improve their listening and reading comprehension in some ways.

Additionally, I gave tips on answering TOEFL listening tests, including how to avoid choosing distracters in a multiple choice. I think that all the tips were helpful to build confidence in listening and improve their listening abilities.

6.4.2 The Speaking Activities

According to the students' requirements and expectations at the end of Cycle Two, besides group discussion, games and quizzes were added to class teaching in Cycle Three so that the classes could be made lively and interesting. Based on the students' investigation, they were interested in topical issues, such as the FIFA (Fédération Internationale de Football Association) World Cup. As the period of the World Cup 2010 South Africa (from 11 June to 11 July) happened to fall during Cycle Three, the main topics discussed were in relation to the World Cup. For example, at the beginning of class, I had the students work in groups to fill in the blanks: Which country (or countries) won the World Cup five times, four times, three times, twice, or only once from 1930 to 2006? A few minutes later, I told each group to select one student from their own group as a representative to come to the blackboard to write down their answers. The 6 students, as representatives from each group, wrote down the correct answers. Then, I asked them a series of questions in relation to the history of the World Cup, such as the host nations and some of the most well-known football players. If a student answered a question wrongly, he or she would be knocked out of the game. Thus, four students were knocked out one after another. Finally, a student, who knew much more about World Cup history than the others, won the game. Such a type of game is called a memory game in classroom teaching, and

challenges the students' abilities to memorize facts (Wright et al, 1984). Wu et al. (2007) claimed that the games add fun to language learning and help learner motivation. Therefore, such a kind of teaching activity in relation to games made the students more interested and more active in participating in English language learning.

Another interesting teaching activity was the group discussion on the prediction of the winner of the World Cup in 2010. As the majority of my students were football fans, they often discussed who would win the World Cup. Although a large number of the students predicted the winner of the World Cup 2010 incorrectly, such a speaking activity exercised their oral English and analysis abilities.

Additionally, according to some students' advice at the end of Cycle Two, these students were offered more opportunities for class presentations because making presentations was a good way to practise their oral English and listening abilities, and develop autonomous learning. Therefore, they were eager to participate in such a speaking activity so that they could show their ability in terms of oral English. In order to meet their expectations and needs, I arranged some time for presentations in each class. Furthermore, it was well worth mentioning that the five students who had visited a British university as exchange students for two weeks made excellent oral presentations for their classmates in class. They introduced the university and British culture and some spectacular scenery (mainly in London). Based upon their presentations, as I had studied in England for a few years, I supplemented more points in relation to their topics. From class observation, I deeply felt that the five students' oral presentations drew their classmates' attention to British culture and the higher educational system with a keen interest. It was believed that the presentations could give them some background knowledge about the UK, which would be very useful to support their English language learning in the future as well.

6.4.3 Guidance to Students' Autonomous Learning and Learning Strategies

Some students suggested that I should teach them how to learn English effectively by using CALL rather than have them practise listening exercises and answer some questions, simply because such practice could not make them concentrate on their studies in class. Another view was that the English language could NOT be taught by teachers, but can be learnt by learners themselves gradually. They wished me to teach more learning strategies and learning methods in English language learning. According to their requirements, based on my previous guidance in learning methods, I systematically summarized effective English learning methods in terms of listening, speaking, reading and writing skills, along with vocabulary memory strategies. Besides these, in order to satisfy their autonomous English learning needs in the future, I recommended some effective English learning websites. It was believed that what I had done would be a good impact upon their English study in the future.

6.5 Action Research Stage Three: Observation

6.5.1 Data Collection and Data Coding

Similar to the previous two action research cycles, the observation data in Cycle Three consisted of the analysis of student feedback on their English language learning experiences by using CALL from their questionnaire, follow-up interviews and learning diaries, and my research journal. The students' perceptions and reflections on English learning websites, such as the TOEFL listening podcast website, were collected via the questionnaire, mainly through open-ended questions, and follow-up interviews. Of the 102 questionnaires

distributed, 94 were completed a 92% completion rate. The six open-ended questions, covering several themes, are given below (as detailed in Table 6.2).

Table 6.2 Categories of questions surveying learners' feedback of using TOEFL podcast website

Questions	Theme
1. Do you think that the teaching approach on the TOEFL podcast website was an effective way for you to practise listening and speaking skills? (A. Effective B. Unsure C. Ineffective). Please give some specific reasons.	The effectiveness of the new teaching approach by the TOEFL podcast website.
2. Do you think that the well-known expert podcast host's explanations on the listening materials were useful for you in learning English autonomously after class? Please give some specific reasons.	The effects on autonomous learning by the TOEFL podcast website.
3. How helpful do you feel the TOEFL podcast website was in improving your listening and speaking level, on the whole?	The helpfulness of the improvement of listening and speaking level.
4. The TOEFL test (pre-test) investigation (please answer the following questions): (A) Was the TOEFL listening difficult for you? (B) Did you understand all the instructions and questions? (C) What part did you find easy to understand? (D) What part did you find difficult to understand? (E) Please state (a): what was most helpful in the teaching. (b): Something that was least helpful in the teaching.	The effect of the pre-test of the TOEFL Listening Testing in class teaching.
5. After the post-test (TOEFL listening), what progress do you feel that you have made in your English listening proficiency by using the TOEFL podcast website?	The impact of the TOEFL podcast on the students' English listening proficiency.
6. Could you please give suggestions on how to reform English language teaching by using CALL in class in the future?	The students' suggestions on English language teaching reform in the future.

In this section, the data results are provided with answers to examine:

The effectiveness of the new teaching approach from the TOEFL podcast website;

The effects of the TOEFL podcast website on autonomous learning;

The effects on class teaching of the TOEFL Listening Test pre-test;

The effects of the TOEFL podcast on the students' English listening proficiency.

Each issue is discussed below in detail.

6.5.2 Effectiveness of the New Teaching Listening Approach

As mentioned above, listening plays an important role in daily communicative activities. According to statistical studies, listening accounts for 45% of communication, compared to only 30% speaking, 16% reading and 9% writing (Whipple, 2008: 16). This suggests clearly that listening forms the biggest proportion of communication, accounting for nearly half of all communication. Therefore, to enhance listening abilities, especially to advanced listening levels, is one of the most important tasks in English language learning and teaching.

It was critical to select a suitable teaching approach to enhance the listening level of students. Generally speaking, there are two teaching approaches to teach advanced listening courses, such as IELTS and TOEFL. One approach is to select difficult listening materials: the difficulty index of the materials is very large and the talking speed is normal to native speakers of English, which is too “fast” for non-native English learners to understand at the beginning. It needs learners to listen to the same material many times. In spite of that, sometimes learners still feel it is too difficult to comprehend completely. This may cause learners to lose interest and confidence in English listening.

The other approach is to select easy listening materials at a slower speed at the beginning. As far as the majority of learners are concerned, they prefer this kind of learning approach because such an approach increases from an easy level to a more difficult level and is therefore in accordance with the scientific view of the learning process. Although this approach can make learners feel relaxed and build their confidence in listening, the pace of improvement may be very slow, which is one of the obvious disadvantages.

The main goal of listening is to understand native speakers of English at normal

speed because in English-speaking countries no one speaks “special English” under normal circumstances.

From the above, it is clear that each teaching approach has its own merits and demerits. One of the best ways is to combine the two best of each approach so that learners can improve their listening level as fast as they can. In conformance with this principle, I selected listening materials in class from the TOEFL podcast website (<http://www.eslpod.com/toefl>) discussed above, from which the listening materials can be used as extensive listening materials out of class as well. Whether this approach on the TOEFL website is an effective way or not would be confirmed by my students’ learning practice and my teaching practice.

According to the questionnaire at the end of Action Research Cycle Three (See Table 6.3), 89% of the students in Class One and 94% of Class Two thought that using the TOEFL podcast website was an effective way or useful way to practise listening and speaking skills. Their comments on the learning website from their follow-up interviews and learning diaries were very positive. The comments are mainly divided into three categories, shown in Table 6.4 below:

Table 6. 3 Student perceptions on effectiveness of the new teaching approach from the TOEFL web

1. Do you think that the teaching approach on the TOEFL podcast website was an effective way for you to practise listening and speaking skills?	Effective	Unsure	Ineffective
Class One (N=42) (from 46)	89%	11%	0
Class Two (N=52) (from 56)	94%	6%	0

Table 6. 4 Comments on effectiveness of the new teaching approach from the TOEFL podcast web

Themes	The students' typical comments	Author's comments
<p>A) Learners' interests and self confidence increased</p>	<p>1) "The TOEFL podcasts are more interesting than the coursebook. We feel like in a class in the USA. Also, it can make us active in learning English".</p> <p>2) "The TOEFL podcasts have enhanced our English listening abilities stepwise and have also built up our confidence in learning English".</p> <p>3) "Slow-speed English can have us get into language learning easily, arouse our interest and build our self-confidence".</p>	<p>Through practising the TOEFL podcasts, the students increased their interest and confidence in learning English, so their learning motivation was improved (Ellis, 1994). As motivation is one of predictors of success in foreign language learning (Bot et al, 2005; Gass & Selinker, 2008), it is probable that their English language proficiency, especially listening abilities have been enhanced gradually.</p>
<p>B) Helpful learning methods and Study skills</p>	<p>4) "We think that this approach is suitable to one's natural learning process: from easy to difficult".</p> <p>5) "The learning methods on the TOEFL website help us understand advanced level English gradually, which is very effective".</p> <p>6) "I think that the explanations are instructional and also the experts on the podcasts teach us learners study skills, which are very helpful to improve our English proficiency".</p>	<p>Selecting suitable learning methods are helpful to support learners' study. The students felt it was effective to learn easier things at the beginning and then learn more difficult things gradually. Indeed, from our learning experiences, to learn something that is easier to begin with and becomes more challenging, matches our expectations of how to learn. In this case, the students will make progression in their study gradually. Additionally, the students' perceptions are the study skills available from the experts are useful and helpful for their improvements of English language proficiency. Recently, Lee's research findings suggests that "the better understanding of language learning strategies for English teachers can help students to learn more successfully and develop their learning autonomy" (2010: 132). In other words, the appropriate use of study skills helps successful language learning and the development of learner autonomy.</p>
<p>C) An effective way to improve advanced listening level</p>	<p>7) "The teaching approach is very effective because the podcasts can help us understand the meanings of the passages thoroughly. Also, the podcasts can help us improve advanced listening abilities unconsciously. Meanwhile, we can learn idiomatic oral English as well from the podcasts. The learning efficiency is very high."</p> <p>8) "In the process of learning TOEFL, we can find the existing problems and then try to solve them. In a period of time, we can accumulate knowledge. Finally, we have made greater achievements in terms of learning outcomes".</p>	<p>From the students' feedback, the learning website did support their learning English and improve their English proficiency, especially advanced listening level. Zhao (1997) and McBride (2011)'s findings provide a possible reason because they showed that groups using slower speeds for English listening significantly enhanced listening comprehension within a shorter time than other groups that had used faster speeds. Another main reason is that the teaching approach in terms of teaching listening was the combination of the bottom-up model and the top-down model, i.e., the interactive model in the TOEFL listening teaching by the use of the podcasts. I will analyze the models in terms of the advanced listening teaching as follows in detail further.</p>

As mentioned in Chapter 4, generally speaking, three teaching listening models are adopted in terms of teaching practice: the bottom-up model, the top-down model and the interactive model, the latter the most common of language teaching approaches in listening (Flowerdew & Miller, 2005; Nation & Newton, 2009; Richards & Schmidt, 2010). The bottom-up model allows listeners to understand by starting with the smallest unit, such as an individual sound, then words, phrases, clauses, to whole sentences (Flowerdew & Miller, 2005). Finally, listeners make sense of these individual sentences which combine to create ideas and concepts and relationships between them.

The top-down model emphasizes the use of listeners' previous knowledge, including background information and knowledge in listening practice so that listeners can understand the meaning more deeply.

The interactive model combines the above two models: the bottom-up model and the top-down model. The listening model adopted in the TOEFL podcast is similar to the bottom-up model, referred to as a natural learning approach from easy to difficult by some of my students.

Regarding the relationship between the speaking rate and listening comprehension, some research projects found that the slower speaking rate helped learners to comprehend significantly more than the faster rate (e.g., Chaudron, 1988; Griffiths, 1990; McBride, 2011). Among them, the most convincing example was McBride's study (2011). In her research project, four treatment groups were trained by listening materials of different speaking rates. Group A trained with listening materials at 180 words per minute (wpm). Group B at 135 wpm; Group C had a choice: first at 180 wpm, and then 135 wpm. Group D was first at 180 wpm, and then paused when repeated. The research results indicated that Group B (a slower speed) obtained the most improvement in listening, while Group A (a faster speed) had the least improvement ($A < C < D < B$). However, the TOEFL podcast did not use only one speaking rate, as first a

slower speaking rate was adopted. When learners understood all the vocabulary and phrases, the normal speaking rate was used. From the statistics of the pre-test and post-test (TOEFL Listening Test authentic paper) results in this cycle, listening comprehension was improved significantly (see Chapter 7).

On the whole, the overwhelming majority of the students were satisfied with the learning website and its teaching approach, mainly because learning materials enabled the students to increase their self-confidence in advanced listening and the new teaching approach made them learn much more effectively than before. Therefore, from their learning experiences, the website did play an important role in enhancing their English language proficiency (especially listening proficiency), which was very exciting and encouraging.

6.5.3 Effects of the TOEFL Podcast Website on Autonomous Learning

The survey at the end of Cycle Three shows that the majority of students in both classes thought that the well-known expert's explanations given on the TOEFL podcast website were very useful for them to learn English autonomously out of class. Their comments on the importance of the learning website from their follow-up interviews and learning diaries were very positive as well. The comments are mainly divided into three aspects in Table 6.5 below:

Table 6. 5 Comments on the effects of autonomous learning from the TOEFL podcast website

Themes	The students' typical comments (main points)	Author's comments
(A) Understanding the listening materials more easily and more deeply	<p>1) "The expert's explanations at a slow speed are helpful for the weak listening students to understand the listening materials in more detail".</p> <p>2) "The expert's explanations are more authoritative and easier to understand".</p> <p>3) "The expert's explanations are very effective and authoritative, from which we can make sense of some background knowledge and know some customs and common knowledge correctly".</p>	<p>Indeed, the expert's explanations help learners to understand the TOEFL listening materials more easily and more deeply. Also, the explanations are more authoritative than the others. Meanwhile, more knowledge (including background knowledge) seems to be very helpful for learners as it seems to help them to understand the meaning more deeply in their listening practice (Rost, 2006). Therefore, background knowledge related to the target language and its culture plays a vital role in improving learners' listening comprehension.</p>
(B) Supplementing the insufficiency of classroom teaching	<p>4) "As out-of-class autonomous learning English is freer, the learning efficiency is higher. The professor's analysis and explanations have made us students consolidate all the knowledge that we have learnt in class effectively".</p> <p>5) "As the class time is only two hours weekly, it is impossible to get too much knowledge from it. Only out-of-class autonomous learning can improve the four basic language skills. From the TOEFL learning website, we have learnt much more things out of class than in classroom teaching".</p>	<p>As classroom time is very limited, it is impossible for teachers to teach what they have known. On the other hand, a non-native English teacher's knowledge and English proficiency is incomparable to experts of native English speakers on TESOL. Therefore, through out-of-class autonomous learning from the website, the students could learn much more than in class.</p>
(C) Studying both Standard English and the Western cultures	<p>6) "Out-of-class autonomous learning is the source of deriving knowledge. The expert's explanations can give learners' directions in their studies after class.</p> <p>7) "The experts explain the TOEFL podcasts very idiomatically and correctly. It is helpful for us to come into contact with Standard English and imitate it".</p> <p>8) "Through the explanations of the podcasts, we have learnt American speaking styles, Modern English usage, and European and American cultures".</p>	<p>Undoubtedly, the experts speak Standard (American) English. Therefore, learners can use the TOEFL listening materials to practise imitating Standard English in order to improve their oral English. Also, the students learnt something of Western cultures, which they were keen to learn. As the English proverb goes, "kill two birds with one stone".</p>

In summary, through out-of-class autonomous learning from the TOEFL podcast website, the students not only improved their English language proficiency such

as listening and speaking skills, but also acquired much more knowledge, such as Western cultures and customs, than in classroom teaching.

6.5.4 Impact of TOEFL Listening Pre-test on Students' Learning

In this section I discuss how the TOEFL listening pre-test impacted on my teaching and the students' learning in Cycle Three. Table 6.6 shows that around 60% of the students in each class felt it difficult to do the TOEFL listening practice test the first time and around 20% of the students in each class felt the difficulty was moderate. A small minority, 4% of students, perceived no difficulty at all.

As the TOEFL Test, like the IELTS Test, is an international English language proficiency test, obviously, the degree of difficulty is more than other English language proficiency tests in China, such as the CET 6 (College English Test Band 6). Although most of my students had passed CET 6, their real English level had a long way to go, compared with the TOEFL Level. Additionally, Table 6.6 shows that the students of Class One performed much better than those of Class Two.

Table 6. 6 TOEFL listening test (pre-test) investigation

Q4. The TOEFL listening test (pre-test) investigation (please answer the following questions)				
A. Was the TOEFL listening test difficult for you?	Difficult	A little difficult	Moderately difficult	No difficulty
Class One (N=42)	57%	18%	21%	4%
Class Two (N=52)	67%	10%	19%	4%
B. Did you understand all the instructions and questions?	Yes	Not all of them	No	Unsure
Class One (N=42)	40%	7%	32%	21%
Class Two (N=52)	21%	27%	33%	19%
C. What part did you find easier to understand?	Part A (short conversations)	Part B (Long conversations)	Part C (Lectures)	Unsure
Class One (N=42)	81%	0	0	19%
Class Two (N=52)	83%	0	0	17%
D. What part did you find more difficult to understand?	Part A (short conversations)	Part B (Long conversations)	Part C (Lectures)	Unsure
Class One (N=42)	0	40%	51%	9%
Class Two (N=52)	0	44%	52%	4%
E. Was the pre-test (the 1 st TOEFL Listening Testing) helpful?	More helpful in the teaching	Less helpful in the teaching	Unsure	
Class One (N=42)	82%	13%	5%	
Class Two (N=52)	84%	12%	4%	

Table 6.6 also indicates that the easiest section in the TOEFL listening test was Part A (short conversations) while the most difficult section for both classes was Part B (long conversations) or Part C (lectures). The results clearly indicate that the shorter listening materials are easier to understand than the longer listening. In order to solve the problems such as the longer listening materials, the students need to practise listening from the short and easy materials to the longer and more difficult listening materials. In this way the learners' listening abilities may be gradually improved.

Finally, Table 6.6 clearly reveals that more than 80% of the students in both classes thought that the TOEFL listening pre-test was more helpful in the teaching. Although more than half of the students in each class felt it difficult to do the TOEFL listening pre-test, most thought that such a test was very challenging, which made them realize their gap in terms of listening compared to

advanced English. Having recognized the shortcomings of their listening levels, they could be motivated to practise listening more actively than before. Perhaps, that might motivate them to learn English autonomously out of class. From my class observation, they made greater efforts in order to improve their listening level. This also shows that the pre-test impacted on their learning positively. On the other hand, it should be pointed out that around one of eighth of the students in each class thought the pre-test was less helpful in the teaching. Perhaps this may be a negative impact on the teaching. Therefore, the negative impact on teaching should not be ignored in my future teaching. In spite of that, on the whole, the TOEFL listening pretest had a beneficial and positive impact on both teaching and learning.

6.5.5 Effects of TOEFL Podcasts on Students' Listening and Speaking Proficiency

From the questionnaire at the end of Cycle Three, more than 80% of the students in both classes perceived that they improved their English listening proficiency through learning from the TOEFL podcast website (see Table 6.7). However, the percentage of their improvement in speaking skills in the two classes was still lower than in their listening skills (three fourths in Class One and two thirds in Class Two). But their listening and speaking proficiency in Cycle Three were better than in Cycle Two (See Table 5.8). All this was derived from their perceptions about their learning progress. As regards to their exact progress, I would like to analyze the data from the pre-test and post-test TOEFL listening tests in detail and discuss the relevant issues in Chapter 7. In this chapter, I just focus on analyzing the data from the questionnaire, the follow-up interviews and my research journal in relation to the above issues.

Table 6.7 The impact of the TOEFL podcast on student English listening and speaking proficiency

Q5. After the post-test (TOEFL listening), what progress do you feel that you have made in your English listening proficiency by using the TOEFL podcast website? (Note: The number (N) of the returned questionnaires: Class One (N=42) (from 46); Class Two (N=52) (from 56)).			
	Class	No or a little improvement	Great/obvious improvement
Listening	Class One	11%	89%
	Class Two	19%	81%
Speaking	Class One	25%	75%
	Class Two	33%	67%

Table 6.8 below shows the students' typical comments on the effects of the TOEFL podcast on their listening proficiency, in addition to my comments on their learning experiences.

Table 6. 8 Student comments on effects of the TOEFL podcasts on listening and speaking

Themes	The students' typical comments	Author's comments
A) Faster improvement in listening and speaking abilities	<p>1) "Through learning from the TOEFL podcast website, my listening and speaking abilities have been improved faster than before".</p> <p>2) "The TOEFL podcast website helped me enhance my instant comprehension abilities and fast response abilities".</p>	<p>These two students perceived that they had improved their listening and speaking levels. But the former student did not give any specific details on the improvement of listening and speaking skills. The other student gave more specific details on the communicative abilities, which are about instant comprehension abilities and fast response abilities. These abilities are helpful and effective to improve a learner's communicative abilities in social situations.</p>
B) The advantages of the step-by-step teaching approach	<p>3) "The TOEFL podcast website is helpful in enhancing our listening and speaking abilities. By listening and then imitating the native speakers of English, speaking abilities can be improved. If the audio files are too fast and are too difficult, it is not easy to improve listening".</p>	<p>Obviously, this student likes this teaching approach very much because it is a good step-by-step approach from the easy to the more difficult. Therefore, the podcast website has become one of suitable English learning websites among the students.</p>
C) The extension of one's knowledge and the promotion of learner autonomy	<p>4) "We can learn more from it than the coursebook. Also, it is more active and acceptable than the coursebook".</p> <p>5) "The materials are very extensive, which enable us to get more knowledge and increase our language sense".</p> <p>6) "The TOEFL tests are more difficult than CET Band 6. By learning from the website, I am motivated and encouraged to practise English listening and speaking skills at a higher level".</p>	<p>These comments suggest that the materials on the TOEFL podcast website contain extensive areas of the knowledge in general. The students benefitted a great deal from the experts with extensive knowledge and profound scholarship on the website and this learning website will have a very important influence on the students' future autonomous learning.</p>

In summary, in this section, I have discussed the following issues from the collected data in Action Research Cycle Three:

The effectiveness of a new teaching approach from the TOEFL podcast website;

The effects on autonomous learning by the TOEFL podcast website;

The impact of the TOEFL Listening Test pre-test on class teaching;

The effects of the TOEFL podcast on the students' English listening and speaking proficiency.

The above data analysis indicates clearly that the students made greater progress in terms of listening and speaking skills by learning from the TOEFL podcast website than before. Meanwhile, their autonomous learning abilities were improved, which laid solid foundations for their future English language learning.

6.6 Action Research Stage Four: Reflections

In order to meet the needs of the students, I made an attempt to create some opportunities for them to actively participate in classroom teaching. As there were abundant English learning resources on the internet, including the Blackboard platform, these resources created favourable language learning environments for the students. Meanwhile, they were helpful for them in learning English autonomously out of class. The following are my reflections on my teaching practice and student autonomous learning using CALL.

6.6.1 Reflections on Topical Discussions

As mentioned above, one of the most interesting teaching activities in Cycle Three was a group discussion to predict the winner of the FIFA World Cup in 2010. From my class observation, the students participated in such discussion tasks very actively, perhaps because the most of them were football fans. As a result, they were very interested in talking about such topical issues. Also, they had some knowledge of football and World Cup history, so that the accuracy of the prediction could be increased. Such a speaking task has exercised not only a learner's speaking skills but also their debates and ability to analyze in English.

Group discussion can also encourage autonomous learning amongst students (Salas, 2005), by cooperating with the other students and sharing ideas with the

others. Through group work, their interest in speaking English could be improved as well, which means that the classes are active, lively and interesting. Therefore, I strongly feel that the choice of appropriate topical issues that interest students play a significant role in developing their potential abilities and promoting autonomous learning in language learning and teaching.

6.6.2 Reflections on the Novel Listening Teaching Approach

In order to improve the advanced listening skills of students, build their self-confidence and foster their learner autonomy, I adopted a new teaching approach, in line with the TOEFL podcast website, detailed above. According to both the results of pre-test and post-test of the original TOEFL, the listening comprehension scores of both of the two classes improved significantly (see Section 7.4.2, Chapter 7). Therefore, the novel teaching approach is well worth recommending to other ESL teachers and their students in a Chinese or similar context. As far as enhancing the learning efficiency of learners is concerned, it is important to choose an appropriate teaching approach and learning resources from the internet. Additionally, from my many years of teaching experience, I have been always considering new teaching approaches, one of the more novel and effective ways to enhance learners' listening proficiency from an intermediate level to an advanced level within a shorter time. I have now discovered this novel teaching approach that enhances the advanced listening skills of learners more effectively. From my review of the literature on teaching English listening research, no other approach in teaching listening is as effective as this one. In fact, the techniques for teaching listening skills, such as bottom-up processing and top-down processing, were very common to the approaches that I had adopted in class in previous cycles. One of the key ways of teaching English listening more effectively is combining both the bottom-up processing teaching technique with the top-down processing technique, together systematically.

Also, the encouragement by teachers and helping the students' self-confidence are very important factors in motivating students. Gilakjani and Ahmadi (2011) argue that one of the most valuable teaching approaches to English listening should be for teachers to create a positive learning environment which can encourage their students' listening actively. Such encouragement, in my view, can be considered to be helping to build the self-confidence of students. Perhaps that is one of the most important conditions that lead to success in learning English.

In brief, the discovery of a novel and effective approach to teach advanced English listening may be one of the most significant results from this research project and my teaching practice.

6.6.3 Reflections on the Promotion of Learner Autonomy

During the period covered by this project, another finding from my teaching practice was that teaching students learning strategies and study skills was more important than teaching them a great deal of knowledge. Oxford (1989) claims that "language learning strategies are behaviours or actions which learners use to make language learning more successful, self-directed and enjoyable" (Cited in Ellis (1994: 531)). This requires learners to use effective learning methods or study skills to master the basic skills of learning the target language, which may lead to their success in their language learning. As stated earlier, I taught my students some learning strategies and effective learning methods in terms of the four basic language skills, including vocabulary retention strategies. Meanwhile, I also emphasized the promotion of learner autonomy by using language learning strategies as Oxford (2008) proposed, which was helpful to enhance student learning progress. From their learning experiences, they have reflected on the importance of learner autonomy from their learning practice as follows:

- 1) “Learner autonomy mainly depends upon correct learning methods. The combination of the four basic language skills (listening, speaking, reading and writing) can form a systematic learning mechanism. Only in this way, can we improve our English proficiency faster” **(S4, Class One)**.
- 2) “In class little knowledge can be obtained, but learner autonomy is very helpful to acquire more knowledge out of class and widens a learner’s vision” **(S22, Class One)**.
- 3) “Learner autonomy makes up for one’s weak points and improve one’s abilities by selecting suitable methods.” **(S4, Class Two)**.
- 4) “Learner autonomy is a very good learning strategy, which is helpful to improve one’s study skills and arouse one’s learning interests.” **(S19, Class Two)**.

These reflections are helpful for students learning English or other subjects in lifelong learning. Additionally, from their accounts in their learning diaries and assignments, it can be seen clearly that their autonomous learning abilities were increased from Level 3 (Learning Action: Adapt) to Level 4 (Create) (see Table 5.13, in Chapter 5), according to the theories of autonomy put forward by Oxford (2008) and Nunan (1997). One of the main reasons was that they were encouraged to create their own goals and decide on their own tasks in order to fulfill the goals. For example, some of them planned to sit international English proficiency tests such as IELTS and TOEFL Tests after the course ended. They had made some detailed plans to prepare for these tests in different periods of time in order to pass the tests successfully the first time. Meanwhile, they consulted me on how to prepare for the tests more effectively so that they could follow the advice to study English gradually. Consequently, the students entered a higher level of learner autonomy in Cycle Three, compared to Cycle Two. Because there are no English courses in the final two years of their degree course, they will become fully autonomous in their English study, as with teachers and researchers, which is considered to be Level 5 (transcend), the highest level of learning action (Oxford, 2008; Nunan, 1997). In order to reach such a level of learning action, they should endeavour to work harder than before.

In summary, the combination of learning strategies and autonomous learning abilities, along with the internet-based learning environments, motivates them to continue learning English or other subjects. Therefore, from my point of view, learning how to learn well autonomously with effective learning strategies is critical to lifelong learning.

6.7 Learning Outcomes and Changes for Future Teaching Practice

From the above discussions and data analysis, there are some significant findings from AR Cycle Three.

1). The efficiency of the new teaching approach from the TOEFL podcast website was very high, according to the student investigation results, indicating that around 90% of the students in each class thought that it was an effective way and a useful way to practise listening and speaking skills. The majority of their comments on the learning website were very positive, and they could be divided into three categories as follows: A) The materials on the TOEFL learning website interested the students and made them confident in English listening. B) The teaching approach on the TOEFL learning website was useful for the students to master study skills mainly because the teaching approach abided by the natural laws of English language learning. C) The teaching approach on the TOEFL learning website was an effective way to improve advanced listening proficiency. As is well-known, it is not easy for language learners to improve their listening proficiency from an intermediate level to an advanced level. Generally speaking, learners need to spend a long time breaking through this barrier. The new teaching approach has effectively solved one of the most difficult learning problems to reach an advanced level from an intermediate level. Therefore, selecting a suitable learning website and an appropriate teaching approach are more important than the other factors.

2). One of the most important effects for the students was that their autonomous learning abilities had been enhanced by the TOEFL podcast website. The majority of students in both classes thought that the well-known expert's explanations on the learning website were very useful for them to learn English autonomously out of class. Their comments on the importance of the learning website from their interviews and learning journals were very positive as well. The comments are mainly divided into three categories as follows: (A) The famous expert's explanations enabled learners to better understand the listening materials more easily. (B) The explanations made up for the insufficiency of classroom teaching. (C) The explanations motivated learners to study English and Western cultures, such as British and American cultures and customs.

Additionally, Chinese students may have preferred American experts on the TOEFL website because in Chinese culture, people respect and admire people perceived to be experts. Some people worship very well-known experts in the field of science and technology because experts are deemed to have more knowledge and more particular skills than others. Therefore, these experts and their words are believed. Principally for this reason, the famous experts on the TOEFL podcast website may have drawn the students' interests to learning English autonomously.

Finally, the data collected from the questionnaire, the follow-up interview and learning diaries all indicate that the majority of students reached Level 4 in implementing autonomy according to Oxford's scheme (2008: 45–46) of learner autonomy, shown in Table 5.13 (Chapter 5). The main reasons were as follows. Some of them were preparing for the international English proficiency Tests, such as IELTS, TOEFL and GRE Tests, in order to go to the English-speaking countries for further study after graduation. Others were beginning preparatory work on the Cambridge Business English Certificate Test for their future careers. They also made detailed English study plans, including their own goals to be

reached in the next two years until graduating from university. However, they did not reach the top level (Level 5: Transcendence in their action) of accomplishing autonomy because they could not become teachers/researchers at this stage. In my view, they should make more effort in order to promote their autonomous abilities. It may take another two years to reach the highest level to achieve full learner autonomy. On the whole, the majority of students could reach such an autonomous level (Level 4).

3). One of the most important and outstanding features on the TOEFL podcast website was that it gave students self-confidence in listening to advanced level English and helped them improve their listening and speaking level. More than 80% of the students in each class felt that their listening skills were improved greatly through learning from the TOEFL podcast website. Three fourths and two thirds of the students respectively in both classes perceived their improvement in speaking skills in Cycle Three.

Besides the above main learning outcomes, another significant outcome was that the students mastered some effective English language learning strategies and learning methods. They will benefit a great deal from the study skills along with autonomous learning abilities in terms of lifelong learning. Meanwhile, majoring in computer sciences, they could operate the computer much more skillfully than any other students with non-computer science majors. With these advantages, as long as they could learn English autonomously and use learning strategies and learning methods correctly, undoubtedly, their English proficiency would be improved, too. From the above findings, one of the most important implications was that the correct choice of suitable learning websites and appropriate teaching approaches play a significant role in helping students to support their language learning successfully.

Although much more learning outcomes have been made by my students, in my future teaching practice there are still some changes or reforms to be made. For

example, more PPT courseware should be used as much as possible in future classroom teaching because it is easier for them. Additionally, more video materials should be used in classroom teaching than audio files, because video is more active and lively. Besides these, I am considering exploring a more effective teaching approach to enhance learners' speaking skills within the shortest possible time, which will be one of the most difficult and complicated research projects in the future.

In summary, there are some significant findings from the final cycle of the action research project. The students were satisfied with their progress because they made much greater achievements than before. As a teacher and researcher, I have got more confidence in my future teaching practice to support learners with the use of modern technologies.

Although there are no courses for the students from their third year onwards, the students would like to continue to learn English autonomously by using modern technologies, so that their English proficiency can be improved steadily.

6.8 Summarizing the Action Research Three Cycles

Three English language learning websites employed in classroom teaching for the second year undergraduate students have been described from Chapter 4 to Chapter 6. Additionally, the three continuous action research cycles have been reported, which focuses on the teacher's classroom teaching practice and his students' autonomous learning experience in English language learning out of class. In each cycle of the action research project, I abided by the essential principles of action research as a research methodology strictly. The action research approach has helped me not only enhance my capacity to develop my practical teaching skills via the application of CALL but also improve my professional development and my capacity for scientific research in the field of

TESOL.

Furthermore, a number of very important research findings have been presented in each cycle of this study. In Cycle One, one of the most significant findings is that the students could make full use of their spare time and their self-study time out of class by using the internet-based resources so that they can improve their listening proficiency and develop learner autonomy. Another significant finding is that, under the teacher's guidance, the students can use learning strategies and English learning methods in addition to modern technologies, such as computers, digital media players and internet-based resources to improve their listening abilities.

In Cycle Two, the survey result revealed that the BBC learning English website was the most popular for the students of both classes and they had benefitted from the BBC website in enhancing their language proficiency or preparing for tests such as IELTS and TOEFL Tests. This suggests clearly that the correct and appropriate choice of English learning websites could help support learners in their English language learning and promote autonomous learning. Another important finding is that the students' communicative abilities, such as listening and speaking skills, have been promoted more than before by using CALL environments, including the learning resources from the BBC learning English website and the University Blackborad Platform. Also, giving class presentations positively impacted on the students' progress in their oral English.

In Cycle Three, the most important finding is a very effective way to practise listening and speaking skills by using a new teaching approach based on the TOEFL podcast website. The new teaching approach helped the students not only enhance their English listening from an intermediate level to an advanced level, but also promote their autonomous learning. On the whole, in each research cycle, the students made progress in respect of listening and speaking skills to various degrees. Their autonomous learning abilities were promoted

gradually as well. It is worth mentioning also that they made the greatest achievements in terms of listening, speaking skills and autonomous learning abilities during Action Research Cycle Three.

Chapter 7 Summary of the Action Research Project

In this chapter, the findings from the pre-test and post-test results, questionnaires, follow-up interviews, the students' learning diaries (or assignments) and my research journal from each cycle of the action research project are discussed in reply to each of the research questions.

7.1 Brief Restatement of Research Questions

I discussed and explained all the research questions in Chapter 2 (Section 2.8), emerged from the literature review, from my professional interest and based on the purposes of this action research project. Here more points are added as follows, along with my brief explanations in brackets under each question to give the reader an overview of the individual cycles of the project and of the project as a whole.

RQ1: During Action Research (AR) Cycle One, to what extent do students improve their listening abilities using internet learning resources, such as the Business English podcasts, and how does this relate to learner autonomy? How effectively do students manage their English learning time with technology, under their English teacher's guidance?

(Question 1 focuses on addressing the main learning problems in the students' English study identified in Chapter 4 (Section 4.3.1), especially their listening problems. In considering this question during Action Research Cycle One, the most important teaching task was to improve the students' listening comprehension, based on Krashen's input theories and other SLA theories such as the Interactionist perspectives mentioned in Chapter 2 (Section 2.3.2.3) at the

beginning. Recent research (Xu, 2011) on listening also indicates the necessity of the priority of listening comprehension over speaking in the language acquisition process. Therefore, the emphasis of listening comprehension is the most important precondition and premise to develop the students' speaking abilities. Besides the development of listening and speaking, effective language learning strategies were taught as well. In particular, the students were encouraged to develop their autonomy learning abilities and use their time wisely by the effective use of modern technology. During Cycle One, the teaching and learning materials in class and out of class were from the coursebook and the internet-based resources mainly based on the Business English podcast website, recommended to the students for out of class autonomous learning as well. Some research results to answer RQ1 were found by analyzing the quantitative data such as the questionnaire statistically and the qualitative data such as the interviews interpretatively (see Section 4.5.2, Chapter 4). Other results will be found by using the same above methods in Section 7.2, this chapter. The key research findings to answer RQ1 will be summarized in Section 7.2.4, this chapter as well.)

RQ2: During AR Cycle Two, what is the impact on the students in terms of the improvement of their listening and speaking abilities when the English teacher instructs his students to use CALL environments (e.g., the BBC English learning website and the University Blackboard Platform) to learn English autonomously?

(Question 2, which was investigated during Cycle Two, was focussed on addressing the main learning problems in the students' English study which still existed at the end of Cycle One (see Section 4.7, Chapter 4). There were ongoing listening problems but in addition students identified problems in speaking. From this cycle on, the teaching and learning materials were more abundant than ever and were presented in a CALL environment. Besides the coursebook, rich learning resources were made available from the BBC learning English website and the University "Blackboard" Platform, uploaded many audio podcasts and video files, ebooks related to Business English, IELTS and TOEFL

learning materials. Both listening and speaking skills were emphasized in class teaching so that the students' oral communicative abilities could be enhanced. Meanwhile, the students were still encouraged to promote their autonomous learning levels. Also, it is very clear that using the above CALL environments differed from just using podcasts. The primary reason is that as it is difficult for Chinese learners to find suitable social environments to learn English except English classrooms in the Chinese context, using CALL learning environments is a supplementary way out of class. Some research results to answer RQ2 were found by analyzing the quantitative data such as the questionnaire statistically and the qualitative data such as the interviews interpretatively (see Section 5.5.2, Chapter 5). Other results will be found by using the same above methods in Section 7.3, this chapter. The key research findings to answer RQ2 will be summarized in Section 7.3.3, this chapter as well.)

RQ3: During AR Cycle Three, to what extent have the students made progress in listening skills by using English learning websites (e.g., mainly the TOEFL podcast website) recommended by their English teacher?

(Question 3, studied during Cycle Three, emphasized addressing the main learning English problems which still existed at the end of Cycle Two (see Section 5.8, Chapter 5). In Cycle Three, students continued to use the CALL environment as in Cycle Two but the in-class work was focused on using podcast materials from the TOEFL website caused the students to reach the advanced level in terms of listening abilities from the intermediate level. This careful integration of students' autonomous and in-class work was designed to further improve their speaking abilities while continuing to promote their autonomous learning abilities. Some research results to answer RQ3 were found by analyzing the quantitative data such as the questionnaire statistically and the qualitative data such as the interviews interpretatively (see Section 6.5, Chapter 6). Other results will be found by using the same methods in Section 7.4, this chapter. The key research findings to answer RQ3 will be summarized in Section 7.4.3, this chapter as well.)

RQ4: During the entire action research project, how can the students make use of CALL environments and the Internet learning resources autonomously to effectively enhance their listening and speaking abilities, under the guidance of their English teacher?

(Question 4, an overall question, is the overview of all the other questions which evidently draw all these together. It examined whether the students addressed their English learning problems such as “deaf and dumb English” successfully by using modern technology and CALL environments under their teacher’s guidance. If their goal and objectives set at the start of this course have been accomplished, the aims of this research project have been achieved. The research results to answer RQ4 were found mainly by analyzing the qualitative data such as the final assignment interpretatively (see Sections 7.5.1 and 7.5.2, this chapter), along with the summary of the students’ performance in the pre- and post-test results of the three cycles of the action research project (see Section 7.5.3, this chapter). The key research findings to answer RQ4 will be summarized in Section 7.5.4, this chapter as well. Finally, it is expected that all the above research questions will be addressed adequately with the rigid data collection processes and appropriate analyses in both interpretive and statistical ways.)

7.2 Research Question 1

In this section, the questionnaire in relation to learner perspectives of the website and the follow-up interview results are presented in reply to Research Question (RQ) 1 (see Section 7.1 in this chapter). The answers to RQ 1 are based on the discussions in this section and some of the research findings in Chapter 4 (Action Research Cycle One).

7.2.1 Perceptions of the Internet-based Materials

From the questionnaire, the majority of the students preferred to use learning resources such as the Business English podcast website and the BBC Learning English website, rather than use the coursebook. As is shown clearly in Table 7.1, 80% or more in both classes preferred the internet-based resources. Less than one sixth of the students of both classes preferred to use the coursebook for their English study. Only in Class One did just 5% prefer both learning websites and the coursebook. It was believed that the learning materials on the internet would be much more popular than the coursebook.

Table 7. 1 Favoured learning materials for English study

	Learning Website(s)	Coursebook	Both	Total
Class One (N=41)	80%	15%	5%	100%
Class Two (N=50)	86%	14%	0	100%

The following comment summaries from follow-up interviews with students shed light onto reasons why students preferred internet-based learning resources:

1) Potential learning benefits from the recommended websites

All of the students found the learning materials on the websites to be helpful, not only in improving their English proficiency but also in expanding their knowledge generally. The following primary points are the main reasons why they preferred the two learning websites, on which I comment.

(A) The typical learning materials, updated frequently, were appropriate for the students' English level, which motivated them to learn actively.

(B) The websites were helpful in improving the students' English language abilities, such as listening, reading and writing. In particular, as one student in Class Two pointed out, the podcasts could have learners enhance their English proficiency gradually. That indicates that it is a very typical positive comment on the websites.

(C) The speakers on the two websites, including the hosts, speak a Standard English. From my many years' teaching experience, I realize that Standard British English is much appreciated by English language learners. Therefore, English language learners may benefit from the podcasts that use Standard English in order to improve their accent. Some of my students (S23, S29 and S42 in Class One; S17, S27, S38 and S52 in Class Two) perceived that their English pronunciation could be improved gradually by using Standard English podcasts.

2) Abundant learning resources on the Internet

The students agreed with the view that the internet learning resources were helpful in improving their communicative abilities, especially their listening abilities, mainly because there are a number of English language learning resources on the internet and learners can freely select their favourite content. Additionally, as these resources are online, it was very convenient to use at any time. The abundant learning resources and the convenient access to the internet helped to increase motivation and learner autonomy making it easier for them to improve their English language proficiency.

3) Authentic and practical learning resources on the Internet

The Business English podcasts were very practical and the learning materials, such as the BBC learning English website, were authentic, which can help learners imitate Standard English from native English speakers, developing their speaking skills. Some students thought that the above learning materials were more interesting than the coursebook, and this could increase their interest in learning English.

The above summaries of student comments on the recommended learning websites and the internet resources are very positive. However, the other

students' views totally differed from the above ones, as below.

“I dislike the learning resources on the websites because they are very numerous, which can be confusing. Also, they are not useful, but the coursebook is more useful.” **(S9, Class Two).**

“I dislike the Business English website because some topics are so boring. I think that listening to music and watching movies are better ways to improve my English proficiency.” **(S55, Class Two).**

Indeed, these comments sounded very reasonable. Having faced so many learning resources, as an ordinary learner, he/she found it difficult to make correct choices at the beginning. This suggests that some students needed their teacher to guide them to select appropriate learning materials dependent upon their levels and their requirements.

It should also be acknowledged that some learning content on the websites are uninteresting. Sometimes, in order to improve their abilities, learners have to study these. Sometimes, this would reinforce the notion that students need to make choices and, perhaps, that their teacher needs to provide guidance on these choices.

In summary, the majority of the students' comments and perceptions on the learning materials from the internet were very positive. The materials were mainly helpful in improving their listening and reading abilities. Also, the materials were very plentiful, interesting, practical and authentic. The advantages of internet learning resources, which made a great impact on learners, outweighed the disadvantages.

7.2.2 Analysis of the Pre-test and the Post-test in Cycle One

During AR Cycle One, I used a TOEIC listening Test to examine the students' listening proficiency. One of the main reasons for adopting such tests, also called

diagnostic tests in language testing, was “to identify strengths and weaknesses in a learner’s knowledge and use of language” (Alderson, 2005:11). As the TOEIC Test can recognize a student’s strengths and weaknesses in their communicative abilities, it was suitable for use as a diagnostic test before the course began. The listening test, which lasted for approximately 45 minutes, consisted of four parts, and examined listening abilities in terms of conversations and lectures in a business context. All the test directions, statements, conversations and talks were spoken only once. Altogether there were 100 items in the entire listening test. From the number of the TOEIC listening items and the speaking speed, obviously, it is much more difficult than the CET 6 (College English Test Band 6 in China) because the latter consists of only 20 items in the listening section and its speaking speed is much slower.

The following data analysis is based on the test results of the TOEIC listening pre- and post-test in Cycle One, by using the related-group (also called a paired-sample) t-test to test the null hypothesis that there is no difference in the means. Tables 7.2 to 7.5 show the t-test output for the two classes using SPSS. Tables 7.3 and 7.5 show that for two classes, there were statistically significant differences in the pre-test and post-test means (Class One $t=-7.193$, $df=45$, $p<0.001$; Class Two $t=-7.681$, $df=53$, $p<0.001$). Tables 7.2 and 7.4 show that in both cases the post-test means were larger. In both classes, the null hypothesis was therefore rejected.

Some interesting differences in the standard deviation were also evident. In Table 7.2, the Standard Deviation (SD) result for Class One suggests that as the SD in the post-test increases, so the range of marks is wider for the post-test. This, combined with a higher mean, suggests that the more able students may have improved a lot while the least able perhaps did not improve as much.

Additionally, Table 7.3 indicates that the mean mark for the post-test in Class One had increased by 8.4%, compared to that of the pre-test. In the same way,

Table 7.5 shows that the mean mark for the post-test in Class Two was 10.2% higher, compared to that of the pre-test. Although the students of Class Two had made greater progress than those in Class One, they still had some distance to go compared with Class One, from the average marks. In summary, for both classes, the marks for listening and speaking showed improvements that were unlikely to be attributable to chance.

Paired Samples Statistics

Table 7. 2 Class One (1) TOEIC listening pre-test and post-test

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	pretest	53.50	46	10.221	1.507
	posttest	61.89	46	10.806	1.593

Paired Samples Test

Table 7. 3 Class One (2) TOEIC listening pre-test and post-test

		Paired Differences				t	df	Sig. (2-tailed)	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower				upper
Pair 1	pretest- posttest	-8.391	7.912	1.167	-10.741	-6.042	-7.193	45	.000

Paired Samples Statistics

Table 7. 4 Class Two (1) TOEIC listening pre-test and post-test

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	pretest	39.91	54	11.545	1.571
	posttest	50.09	54	11.065	1.506

Paired Samples Test

Table 7. 5 Class Two (2) TOEIC listening pre-test and post-test

		Paired Differences				t	df	Sig. (2-tailed)	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower				upper
Pair 1	pretest- posttest	-10.185	9.744	1.326	-12.845	-7.526	-7.681	53	.000

7.2.3 Effects of the TOEIC Listening Pre-test

As mentioned previously, backwash in testing refers to “the positive or negative impact of a test on classroom teaching or learning” (Richards & Schmidt, 2002: 586). Positive backwash can improve teaching and learning (Baxter, 1997: 28). Indeed, the positive impact of a test plays a significant role in classroom teaching and learning, which teachers expect. Table 7.6 shows the TOEIC listening testing (pre-test) investigation. The pre-test backwash on teaching and learning is discussed.

Table 7.6 indicates clearly that around 80% of the students in each class felt that it was difficult or very difficult to do the TOEIC listening test for the first time. The main reasons are as follows: A) They had never been trained to do such kind of exercises before, so they were not familiar to the test format or some of the content in relation to Business English. B) They were used to the speaking speed of CET 6 listening level, which is a slower speed than that of TOEIC as normal speed of native speakers, therefore, the TOEIC listening was a great challenge to them. C) They failed to remember sufficient vocabulary in their English language learning. Generally speaking, a candidate should be familiar with at least 8,000 words and master some useful idioms and usages before he/she sits the TOEIC Test. However, the majority of students knew around 6,000 words, which was not enough to deal with some of more difficult items in the listening test.

Table 7. 6 TOEIC listening pre-test investigation

(A).Was the TOEIC listening test difficult to you?	Very Difficult	Difficult	Unsure	Easy	Very Easy
Class One (N=41)	22%	61%	13%	4%	0
Class Two (N=50)	18%	60%	22%	0	0
(B).Tell something related to the pre-test	More helpful in the teaching	Unsure		Less helpful in the teaching	
Class One (N=41)	74%	13%		13%	
Class Two (N=50)	80%	11%		9%	

Table 7.6 shows that more than 70% of the students in both classes agreed that the TOEIC listening pre-test of was more helpful in classroom teaching, indicating the positive impact of the pre-test on teaching. Although the majority of the students in each class felt it difficult to do the TOEIC listening test, they thought that such a kind of test made them realize their shortcomings in listening proficiency and motivated them to study harder. Table 7.7 summarises the student comments on the TOEIC listening pre-test in terms of the positive impact on teaching and learning in addition to my remarks:

Table 7.7 Student comments on the impact of the TOEIC pre-test on teaching and learning

Themes	Summaries of student comments	Author's comments
Existing problems in learning English	The TOEIC listening difficulties for the students included: (A) Some topics were unfamiliar. (B) The listening speed was faster than CET 6. (C) A number of new words and expressions were strange. (D) Some passages were difficult to understand.	Although the TOEIC listening test challenged their English level at the time, finding their existing learning problems was the first important step in solving them.
Possible solutions to the above problems	1) Listening to such materials frequently may help learners improve listening and speaking. 2) Having realized their existing learning problems, they decided to work harder towards listening and speaking by using technology.	The existing learning problems motivated them to solve the problems immediately. Although their methods were not novel, taking the action quickly is more important.
Learners' interests and motivations	Compared with the CET 6 in China, the TOEIC Test was different. This could have helped interest or motivate learners.	As mentioned previously, learner interest and motivation may be helpful factors, leading to successful foreign language acquisition.
Learner autonomy	The TOEIC listening test demonstrated the shortcomings to them in their listening so that listening abilities could be improved by working hard later.	The students took responsibility for their own progress in their English study following the pre-test. Discovering their weaknesses in their listening and taking action to solve these helped promote their autonomous learning in their learning practice.

The above positive comments on the TOEIC test effect on teaching also indicate that the impact of the test on their learning was positive. However, around 10% of the students in each class (see Table 7.6) thought that the pre-test was less helpful, or had a negative backwash, on teaching. In spite of that, on the whole,

the TOEIC pre-test effect on language teaching and learning was more positive than negative, which was more helpful for learners to be encouraged to learn English autonomously by using CALL out of class.

7.2.4 Summary Answers for Research Question 1

The main findings derived from the analysis of the data in Chapters 4 and 7 of this thesis are restated briefly below and answer Research Question 1:

1) Management of Learning Time

The results show that the students could make full use of their leisure time and their self-study time out of class by using internet-based resources to improve their listening proficiency and develop their learner autonomy. For example, they used the time for eating or time on public transport to listen to English on digital media players, which was considered to be an effective use of 'fragmented time'. Thus effective time management could help learners to improve in their studies (Schunk, 2012).

2) Appropriate Application of Learning Strategies

As mentioned in Chapter 4, under the teacher's guidance, the students could use learning strategies and English learning methods in addition to modern technologies, such as computers and digital media players and internet-based resources, to improve their listening abilities.

3) Improvements to Listening in Cycle One

The investigation results suggested that the students' listening and speaking abilities were improved to various degrees, one of the most important and

significant findings during AR Cycle One. In this chapter, Tables 7.2 and 7.4 indicate that the TOEIC listening post-test results in Class One and in Class Two were 8.4% and 10.2% higher, respectively, compared to the pre-test results, suggesting that both of classes had improved their listening and communicative abilities.

4) The Promotion of Learner Autonomy in Cycle One

In Cycle One, I recommended the website, www.businesspod.com, to the students. This was very useful for them in learning business English, especially in relation to listening and speaking skills. Regarding the development of learner autonomy, Table 4.8 in Chapter 4 indicates clearly that more than half of the students from both classes felt the Business English podcast website was at least 40% helpful in promoting autonomous learning.

5) The Importance of Internet-based Learning Resources

As mentioned previously, the questionnaire results show that the majority of students preferred using the learning resources from websites such as the Business English podcast website and BBC Learning English website, rather than use the coursebook. Table 7.1 indicates clearly that 80% or more in both classes of the students preferred to select their English language learning materials from their favourite learning websites. From their perceptions, the internet-based resources play a very vital role in improving their English proficiency, especially their listening abilities.

In short, from the above findings in Cycle One, the students could manage their learning time wisely so that their learning efficiency could be increased. More importantly, through the comparison of the TOEIC listening pre-test and the post-test, their listening level was significantly improved by using modern technology and internet-based learning resources. Meanwhile, their autonomous

learning had been promoted to various degrees. All of these achievements were due to the effective use of modern technologies and the teacher's correct guidance, along with the students' hard work and promotion of their learner autonomy.

7.3 Research Question 2

In this section, the questionnaire in relation to learner perceptions of the advantages and the disadvantages of CALL, and the follow-up interview results are presented in reply to Research Question 2 (see Section 7.1 in this chapter). The answers to RQ 2 are based on the discussion in this section and some of the research findings in Chapter 5 (AR Cycle Two).

7.3.1 Perceptions of the Advantages and Drawbacks of CALL

In this section, I discuss my students' perceptions of the advantages and drawbacks of CALL, and on how to use these advantages to improve their English proficiency.

7.3.1.1 Improvement of English Proficiency using CALL

According to the above five advantages of CALL, one of the most outstanding features is that the learners felt that the use of internet learning resources helped them to improve their English proficiency. The following student comment summaries reflect learning experiences in relation to the advantages of CALL:

- A). "Download some good learning materials frequently from the internet and then use them to improve our English proficiency, especially our listening abilities."
- B). "Download our favourite listening materials such as English-language songs and films from the internet. Imitate a standard pronunciation of native speakers to practise our spoken English."

- C). “Use learning software to remember new words and sentences, which is an effective way to learn vocabulary and language.”
- D). “Use computers frequently to watch English-language movies and imitate the pronunciation of words by the actors and actresses in order to improve our speaking skills.”
- E). “Make friends on the internet to practise our oral English.”

The above learning experiences of using CALL were very typical among the students, indicating clearly that the appropriate use of CALL played a very significant role in improving English proficiency, especially their listening and speaking skills.

7.3.1.2 Learners’ Perceptions on Drawbacks of CALL

Table 7.8 below shows student perceptions of the drawbacks of CALL from the questionnaire and follow-up interviews at the end of Cycle Two.

Table 7. 8 Student perceptions of the drawbacks of CALL

Summaries of student comments on the drawbacks of CALL	Students’ main comments
1. The learning websites which have not been evaluated by experts cannot be ensured to be qualified.	1. The disqualified learning websites may mislead learners’ study.
2. A) Internet materials may look more disordered because of the large amount of information. As a result, students are more likely to be distracted. B) Learners can’t focus on their English study while using CALL, and play games.	2. One’s attention is distracted from his/her study by the use of the internet/computer.
3. A) A lot of other things on the internet interfere in our English study plans such as films, games and music. When learning English online, we may want to play games or listen to some popular music or chat with the other friends in Chinese. B) When we use computers to learn English, sometimes we are very uncertain about what should be learnt. As a result, some precious time may be wasted.	3. The time is wasted on something other than the learners’ studies on the using the internet or a computer.

The drawbacks of CALL shown in Table 7.8 are taken from the students’ learning experiences from both classes. These drawbacks of CALL basically correspond with those highlighted by some scholars mentioned in Chapter 2. Here it should be pointed out that the most important thing for students is to reduce negative influence on their studies as possible when they use computers and the internet. Only in that way can they use the advantages of CALL to support their English

study more effectively.

In summary, the above analysis of the data collected in Cycle Two shows clearly that the advantages of CALL influenced the students' learning positively, though some disadvantages were recognised. This suggests that students could use the advantages of CALL to improve their English proficiency, especially their listening and speaking abilities at the highest level. However, the teacher may need to develop ways to help them to reduce its drawbacks when they use CALL to learn English autonomously out of class.

7.3.2 Analysis of the Pre-test and the Post-test in Cycle Two

In Cycle Two, I used one of the IELTS tests to measure the English listening level of the students.

There were two main reasons for using the test. First, I wanted to identify the students' strengths and weaknesses in their listening abilities so that I could adapt teaching methods to improve their listening proficiency. Second, it allowed the students to familiarize themselves with the IELTS test format and requirements, as some planned to study or work abroad and may take the test in the future. As the format involves filling in blank spaces, the IELTS test was more difficult than the TOEIC test, which used multiple choice.

The following data analysis is based on the test results of the IELTS listening pre-test and the post-test in Cycle Two, by using the related-group (also called paired-sample) t-test to test the null hypothesis that there is no difference in the means. Tables 7.9 to 7.12 show the t-test output for the two classes using SPSS. Tables 7.10 and 7.12 suggest that for Class One and for Class Two there were statistically significant differences in the pre-test and post-test means (Class One $t=-7.789$, $df=45$, $p<0.001$; Class Two $t=-7.461$, $df=54$, $p<0.001$). Tables 7.9 and

7.11 indicate that in both cases the post-test means were larger. For Class One, the marks for the post-test on average were 12.3 higher than those of the pre-test, meaning that the latter marks were 12.3% higher compared with the pre-test. In Class Two, the marks for the post-test on average had increased by 7.7% compared with the pre-test. In both classes, the null hypothesis was therefore rejected, indicating statistically significant improvements in listening levels over Cycle Two.

Paired Samples Statistics

Table 7. 9 Class One (1) IELTS listening pre-test and post-test

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pretest	33.9130	46	9.92545	1.46343
	Posttest	46.1957	46	13.00362	1.91728

Paired Samples Test

Table 7. 10 Class One (2) IELTS listening pre-test and post-test

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	upper			
Pair 1 pretest- posttest	-1.22826E1	10.69561	1.57698	-15.45881	-9.10640	-7.789	45	.000

Paired Samples Statistics

Table 7. 11 Class Two (1) IELTS listening pre-test and post-test

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pretest	36.0909	55	9.21406	1.24242
	Posttest	43.7727	55	9.37729	1.26443

Paired Samples Test

Table 7. 12 Class Two (2) IELTS listening pre-test and post-test

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	upper			
Pair 1 pretest- posttest	-7.68182	7.63542	1.02956	-9.74596	-5.61767	-7.461	54	.000

Additionally, Tables 7.9 to 7.12 suggest that Class One was consistent in becoming more different, whereas Class Two became more similar. From the students' interviews and learning diaries, at the beginning of the first semester of the first year, the class they were put into was determined English test results. Therefore, the students of Class One had the higher marks than any of the other eight classes in the college of computer science. However, as some students in Class One passed CET 6, the highest level of English proficiency tests for non-English major college students in China, at the end of the second semester. Perhaps for this reason, they did not want to learn English any longer out of class and so did not make any progress in their English levels, which seemed lower than before. But the majority of students in Class Two continued to learn and prepare for CET 6, so the levels of some students surpassed some of those of Class One. Therefore, it seemed that the range scores in Class Two in terms of English level were not as big as those in Class One.

On the whole, it is significant that both classes made greater improvements in their listening and communicative abilities between their IELTS pre-tests and post-tests in Cycle Two.

7.3.3 Summary Answers for Research Question 2

The main findings from the analysis of the data in Chapters 5 and 7 provide a

reply to Research Question 2.

1) The significance of the learners' favourite and appropriate materials from CALL environments

The questionnaire results show that the most popular podcast was the English-language songs and music podcast. The second most popular podcast for both classes was the BBC and VOA radio programmes in English. The students could use digital media players to listen to the podcasts from the websites more conveniently. Additionally, the results show that the majority of students preferred to watch English-language films with both Chinese and English subtitles because it was much easier to understand than with English-only subtitles or without any subtitles. In such a case, I gave the students some suggestions and guidance on English language learning methods, especially English listening strategies, so that they could enhance their listening abilities and speaking skills gradually.

The learning strategies included some tips on the choice of English films. It seemed that watching English-language movies with Chinese subtitles may help beginners to understand better. However, my students were at an intermediate level of English proficiency, so I suggested that they should use English subtitles because Tsai and Huang (2009) has demonstrated that watching English-language films with English subtitles is more effective than with Chinese subtitles. I also suggested that watching English movies without subtitles would be a better way to practise listening and speaking skills, and may help in reaching an advanced level.

Additionally, BBC TV programmes and the other videos on Western cultures, history and customs, along with the audio files from the coursebook, were very popular for the majority of students from both classes.

Finally, it is suggested that teachers should provide more different levels of learning materials from the internet resources for students at different language learning levels, so that they may be motivated to learn autonomously and effectively. In brief, the selection of appropriate learning materials plays an important role in the development of autonomous learning and learning more generally.

2) The positive effects of the learners' favourite learning websites

The results indicate that the BBC learning English website was the most popular for both classes. From the students' comments and reflections, they benefitted from the BBC website in terms of the enhancement of their English proficiency and preparatory work for the IELTS and TOEFL Tests. It is clear that a good English language learning website has some positive effects on learners' learning outcomes.

Additionally, many learning materials on the Blackboard academic suite (referred to simply as 'Blackboard'), closely related to the course "Business English", were popular for the majority of students. In particular, various kinds of video and audio files, and ebooks, helped students at different levels to choose the most interesting to them, so their English proficiency and autonomous learning could be improved in this way together. Other useful kinds of online material were test preparation materials, such as those for the IELTS and TOEFL Tests, which, in their feedback, some students (S1, S4, S11, S22, S23, S27, S38, S45 in Class One; S6, S8, S11, S30, S34, S40, S45, S55 in Class Two) said did help them to pass one of these international English proficiency tests.

In summary, the correct and appropriate choices of English language learning websites and the effective use of learning materials from recommended websites and 'Blackboard' were helpful for the students in supporting their English study and developing autonomous learning.

3) Improvement of listening and speaking skills by using CALL environments

The students' perceptions in terms of their listening and speaking abilities show in Table 5.8 (Chapter 5) that 85% and 77% of the students in Classes One and Two respectively thought they made progress in their English listening proficiency, although the percentage of improvement in speaking skills for both classes was less (nearly 70% in Class One and nearly 60% in Class Two).

In summary, through the investigation and the data analysis in Cycle Two, generally speaking, the students' listening and speaking skills were enhanced more greatly than before. However, many students thought that they should need to make greater progress in their oral communicative abilities in Cycle Three or in the future, according to the questionnaire at the end of Cycle Two.

4) Positive Effects of Making Oral Presentations in Class

From the students' feedback at the end of Cycle Two, they benefitted from the presentation preparation and the formal presentation. The students' feedback indicates that giving oral presentations not only developed their autonomous learning ability but also enriched their knowledge of internet-based resources. Meanwhile, Presentations also helped improve their oral English skills and listening abilities. All these positively impact learning and teaching.

5) Making full use of CALL to improve English proficiency

CALL can help English language learners to improve their English proficiency. The students made more effort to improve their English proficiency, especially their listening and speaking skills, by using the advantages that CALL offers while trying their best to reduce some of the negative impacts on their learning

from the disadvantages of CALL, such as playing games on the computer.

6) Improvement in IELTS listening from the test results in Cycle Two

Although IELTS is one of the most difficult international English proficiency tests, through the comparative analysis of its listening pre-test and the post-test results, one of the significant findings was that the post-test marks on average were higher than the pre-test marks for both classes, as outlined above. On the whole, during Cycle Two, the students made pleasing progress in their English language study although they should need to improve their English proficiency in their future study.

In summary, from the above major findings from Cycle Two, the students could follow their English teacher's suggestions on language learning strategies and the effective use of CALL environments, such as the BBC English learning website and 'Blackboard' that the teacher had strongly recommended. More importantly, through the comparison of the IELTS listening pre-test and the post-test, their listening marks had significantly increased by around 10% on average, by using the CALL environments. Meanwhile, their oral English abilities and their autonomous learning were developed by giving presentations in class, preparing activities out of class and practising speaking English with peers and their other foreign friends online.

The main factors influencing greatly the enhancement of listening and speaking were the following ones: the teaching of effective learning strategies; the effective guidance of the teacher; promotion of learner autonomy (see Section 5.6.3, Chapter 5); the full use of advantages of modern technologies and CALL environments; the choice of favourite and appropriate learning materials from CALL environments, and so on.

7.4 Research Question 3

In this section, the questionnaire in relation to the learners' perceptions on learner autonomy and follow-up interview results are presented. The answers to Research Question 3 (see Section 7.1 in this chapter) are based on the discussions in this section and some major research findings in Chapter 6 (AR Cycle Three).

7.4.1 Student Reflections on Learner Autonomy by Using CALL

In Chapter 6 (Section 6.5.3), I discussed the effects of the TOEFL podcast website on autonomous learning. The questionnaire results at the end of Cycle Three show that 85% of the students in both classes felt that the podcast host's explanations on the TOEFL listening materials from the website were very useful for autonomous learning. Their perceptions of the TOEFL podcast website were divided into three categories:

- (A) The well-known expert's explanations helped learners understand the listening materials more easily.
- (B) The explanations made up for insufficient classroom teaching.
- (C) The explanations allowed learners to come into contact with (American) Standard English and Western cultures.

Here it should be pointed out that the students' perceptions emphasizing the famous expert's explanations reflected the learning culture in China, where people deemed to be experts who are respected and admired, as detailed in Chapter 6.

1) More knowledge and learning abilities through autonomy

The following student comment summaries indicate that more knowledge and learning abilities can be obtained by learners through autonomous learning after class.

- A) In class a little knowledge can be obtained, but learner autonomy is very helpful to acquire more knowledge out of class and widen a learner's vision.
- B) Autonomous learning allows learners to gain more knowledge not only beyond the teaching scope but also beyond their coursebook.
- C) Learner autonomy allows students to enhance their comprehension skills, which develops their professional abilities.

2) Learner autonomy and learning motivation

The following are summaries of students' views on learner autonomy and learning motivation:

- A) Learner autonomy is to study something without supervision.
- B) Learner autonomy enables learners to learn something more consciously and gain more knowledge in their spare time.
- C) Learner autonomy is to learn something actively so that learners can effectively review the knowledge that they have learnt.
- D) Learner autonomy motivates someone to learn something for a specific goal or personal interest.
- E) Learner autonomy is a learning process to actively use internet-based resources to improve learning efficiency.

The above student comments suggest that learner autonomy is a very active learning mode. Meanwhile, learner autonomy can increase learning motivation. I agree completely with one of the student's views that learner autonomy is to study something without supervision. If a learner can supervise himself/herself without others' control, he/she can reach a high point in his/her studies. Perhaps that is the highest level of learner autonomy, as Oxford (2008) has suggested: a learner's role is to become a researcher or teacher (see Table 5.13, Chapter 5). However, it is difficult to learn autonomously with self-supervision for some learners, especially minors. In such a situation, teachers should patiently guide and consistently encourage their students to do that.

3) Learner autonomy and lifelong learning

Regarding the relationship between learner autonomy and lifelong learning, one of my students pointed out its nature:

“The abilities of learner autonomy are the ones for lifelong learning and the skills to acquire new knowledge and increase knowledge.” **(S55, Class Two).**

Obviously, learner autonomy is one of the most important learning abilities for one’s lifelong learning. Therefore, once such a learning ability has been mastered, learners will benefit from it throughout their lifetime.

4) The understanding of learner autonomy

Learner autonomy is very good in various ways from different point of views summarized by my students below, but Chinese people differ from Western people on the understanding of the concept.

A) “Learner autonomy in China is different from that in Western countries. Their learner autonomy is self-study completely. In contrast, ours is difficult to do that for all the courses.”

B) “In Western countries, the students have formed the habits of autonomous learning from basic education, whose concept on autonomy has been deeply rooted in their mind since their childhood. But in China, autonomous learning begins in higher education.”

C) “China’s education and its testing system have made students lose their autonomous learning abilities, so autonomous learning should be emphasized from basic education such as elementary education in China.”

D) “Western education, which focuses on learner autonomy, leads to students’ higher creative abilities.”

From the above students’ perceptions, obviously, some of them were not satisfied with the Chinese education and its testing system. They were eager to learn something more autonomously and more freely like Western countries. However, because of the restrictive Chinese education testing system, teachers in China have to adopt teacher-centred approaches, such as “spoon-feeding” methods of teaching, to impart a large amount of knowledge to their students so that they can obtain better marks in their examinations. In such a teaching and testing system, although some students do well, their autonomous learning

abilities, even their creative abilities, are reduced. In order to increase autonomous learning and creative abilities, it was suggested by one of the above students that teachers should emphasize autonomous learning from elementary education.

The above students' positive comments and perceptions were very helpful for learners to realize the nature of learner autonomy in the information age. Kumaravadivelu (2006) argues that promoting learner autonomy plays a very vital role in language learning because language learning is mainly an autonomous activity. Meanwhile, to foster learner autonomy is very helpful to develop the capability for lifelong learning. Regarding the purposes of learner autonomy, as Student 40 (Class Two) reflected, "Learner autonomy means learners themselves allocate and use the time wisely. It focuses on compensating for learners' weak points in their study". As outlined in previous chapters, my teaching practice encouraged students to learn autonomously so that they could promote their autonomous learning mainly because Chinese educational systems and testing systems are different from those of the Western countries. In the Western countries such as the UK, as far as I know, primary school students experience autonomous learning. However, in China, only university students really come into autonomous learning. As my students did not experience autonomy in school days, I should focus on the development and the promotion of their autonomy so that they could control their learning by themselves. Besides my encouragement, I also gave them more space in their learning so that they could make their own decision in their study. In these situations, under my encouragement and support, they willingly desired to engage in autonomous learning. The students' reflections on the promotion of learner autonomy at the end of Cycle Three (see Section 6.6.3, Chapter 6) clearly indicate that their autonomous learning abilities were increased from Level 3 (Learning Action: Adapt) to Level 4 (Create), in second place preceded only by Level 5 (transcend) (see Table 5.13, Chapter 5), according to the theories of autonomy put forward by Oxford (2008) and Nunan (1997). That is a

very big achievement. Probably it is one of the most significant outcomes in this action research project.

7.4.2 Analysis of the Pre-test and the Post-test in Cycle Three

In AR Cycle Three, I used the TOEFL listening tests to measure the students' English listening proficiency in the pre-test and post-test. Like the IELTS Test, the TOEFL Test is an international advanced English proficiency test. Consequently, it challenged my students.

The following data analysis is based on the test results of the pre-test and the post-test of TOEFL listening in Cycle Three, by using the related-group (also called paired-sample) t-test to test the null hypothesis, that there is no difference in the means. Tables 7.13 to 7.16 show the t-test output of the TOEFL listening pre-test and the post-test in Cycle Three for the two classes by using SPSS. Tables 7.14 and 7.16 suggest that for Class One and for Class Two there were statistically significant differences in the pre-test and post-test means (Class One $t=-9.604$, $df=45$, $p<0.001$; Class Two $t=-7.028$, $df=55$, $p<0.001$). Tables 7.13 and 7.15 suggest that in both cases the post-test means were larger. In both classes, the null hypothesis was therefore rejected, indicating that there were statistically significant improvements in their listening level in Cycle Three.

Paired Samples Statistics

Table 7. 13 Class One (1) TOEFL listening pre-test and post-test

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pretest	43.9565	46	10.44341	1.53980
	Posttest	54.9130	46	12.67513	1.86885

Paired Samples Test

Table 7. 14 Class One (2) TOEFL listening pre-test and post-test

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	upper			
Pair 1 pretest- posttest	-1.09565E1	7.73723	1.14079	-13.25420	-8.65885	-9.604	45	.000

Paired Samples Statistics

Table 7. 15 Class Two (1) TOEFL listening pre-test and post-test

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pretest	39.8929	56	11.77004	1.57284
	Posttest	52.8214	56	17.77343	2.37507

Paired Samples Test

Table 7. 16 Class Two (2) TOEFL listening pre-test and post-test

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	upper			
Pair 1 pretest- posttest	-1.29286E1	13.76670	1.83965	-16.61532	-9.24182	-7.028	55	.000

Tables 7.13 and 7.15 indicate that the SD of the post-test in Class Two was much larger than that of Class One. As SD is defined, the larger SD, the further the data points are from the mean mark; the smaller SD, the more clustered closely around the mean. The SD of Class Two in the post-test was spread out, probably because the most able students were extending their learning. In contrast, the less able students made slower progress in their learning. In this case, teachers should encourage these students and give them more advice on how to learn more effectively, so that they can make greater progress in their learning.

Additionally, Table 7.13 suggests that the mean mark in the post-test for Class One was by 10.9 higher, meaning that it had increased by 10.9% on the average

at range scores, compared with the pre-test mean mark. In the same way, Table 7.15 shows that the mean mark for the post-test for Class Two was 12.9% higher on the average at range scores, compared to the pre-test mean mark.

Although the students in Class Two got lower marks on average than Class One, obviously, they made greater progress than those of Class One. One of the students in Class Two in fact got full marks in the post-test of the TOEFL, which was the most impressive performance, and was possibly because he persevered in learning English autonomously using CALL. On the whole, it is significant that both classes made greater improvements in their listening proficiency in Cycle Three.

7.4.3 Summary Answers for Research Question 3

The main findings deriving from the data analysis of Chapters 6 and 7 are restated briefly below, which can respond to Research Question 3:

1) The improvement of advanced listening level by using the TOEFL podcast.

According to the TOEFL pre-test and post-test statistics in Cycle Three, the mean marks in the post-test for Class One increased by 10.9% from the pre-test. For Class Two, the mean marks had increased by 12.9%, compared to their pre-test. If one of the students had done half of the TOEFL listening test correctly, it is predicted that he/she will have got higher marks within the 6 months by using the TOEFL podcast website. In short, this learning website is one of the most efficient ones, which is worth recommending to the other learners to improve advanced English listening.

2) The effectiveness of the new teaching approach based on the TOEFL

podcast website

The new teaching approach based on the TOEFL podcast website was that the TOEFL podcasts have conversations and lectures that are provided at a slower speed to begin with. The podcast host then explained any difficult or important language points slowly and clearly. Finally, the conversations or lectures are repeated at a normal speed. Such a step-by-step English listening teaching and learning mode was welcomed by my students. The investigation results indicate that at the end of Cycle Three around 90% of the students from both classes thought that it was an effective way to practise listening and speaking skills by using the new teaching approach based on the TOEFL podcast website (see Table 6.3 or Section 6.7, Chapter 6).

The summaries of the students' comments on the website are as follows:

- A) The materials on the TOEFL learning website interested the students and gave them confidence in English listening.
- B) The teaching approach was useful for students to master study skills.
- C) The teaching approach was an effective way to improve advanced listening proficiency.

Here it should be pointed out that the overwhelming majority of the students were satisfied with the learning website and its teaching approach. From their learning experiences, the website played an important role in improving their English language proficiency, which was very exciting and encouraging.

3) Effects of TOEFL podcast website on autonomous learning

The questionnaire results show that 85% of the students from both classes thought that the famous expert's explanations on the TOEFL listening materials were very useful for them to learn English autonomously out of class (See Section 6.5.3, Chapter 6). The positive comments on the effectiveness of this website are as follows:

- (A) The well-known expert's explanations made learners understand the listening materials more easily.
- (B) The explanations made up for any insufficiency in classroom teaching.
- (C) Learners came into contact with a Standard English and Western cultures.

More importantly, from Section 6.6.3 (Chapter 6), during Cycle Three, in comparison with Cycle Two, obviously the student autonomous learning abilities were increased from Level 3 (Learning Action: Adapt) to Level 4 (Create), according to the theories of learner autonomy (Nunan, 1997; Oxford, 2008).

4) Effects of the TOEFL podcast on the students' English listening proficiency

The questionnaire result on the helpfulness to the improvement of listening and speaking levels indicate that more than 80% of the students in both classes felt that their listening and speaking skills were improved by the TOEFL podcast website (See Section 6.5.5., Chapter 6). Also, these students benefitted a great deal from the experts with extensive knowledge and profound scholarship. Meanwhile, this learning website had a very important influence on the students' future autonomous learning.

In brief, the above findings from Cycle Three suggested that the new teaching approach used, based on the TOEFL podcast website, was one of the most successful approaches. Through the comparison of the TOEFL listening pre-test and post-test, their marks for listening were 10% higher on average in each class by using the podcast website in this cycle. Meanwhile, their autonomous learning level reached a higher level than in Cycle Two, which laid solid foundations for their future learning. On the whole, the new teaching approach was one of the most effective ways to improve learners' advanced English listening proficiency.

7.5 Research Question 4

In this section, the students' English language experiences using technology such as computers, the internet and digital media players, are mainly discussed from their final assignment at the end of the fourth semester, which was a term paper of around 500 English words (see Appendix V). The answers to Research Question 4 (see Section 7.1 in this chapter) are based on the discussions here, along with the summary of the students' performance in the pre- and post-test results of the three cycles of the action research project.

7.5.1 English Learning Experiences by Using Modern Technology

Here the main issues to be discussed are as follows: The students' English language learning experiences of CALL in their middle schools and at university during their first three semesters; the development of learner autonomy using CALL in the fourth semester; the effective use of CALL environments; oral English practice outside of class; the importance of the English teacher's guidance; the students' progress in their English study with CALL; the students' reflections on their CALL experience and their future English study plans.

7.5.1.1 English study in middle schools and in the first three university semesters

According to the students' assignments, in their middle schools, they practised English reading for college entrance examinations, though there was a listening part in the test paper, whose marks were excluded from the overall mark. Also, they never used computers and the internet to learn English. During the six years in their middle schools they practised using several hundred test papers. They had no opportunities to communicate with any native speaker of English, either. Only some had used recorders to listen to English-language tapes occasionally. Perhaps this is the present situation of English language teaching

in the majority of middle schools in China, because of the current testing system.

During their first three semesters, the students began to use computers, the internet and digital media players to learn English outside of class. However, they accessed some English language learning websites to download listening materials and the other learning materials they needed to prepare for the CET Bands 4 and 6.

The following reflections, summarized from some of the students' assignments, describe the important role of technology during the first three semesters when preparing for the CET Bands 4 and 6.

A) "In the first three semesters, we spent a lot of time every day doing test papers online in order to prepare for the CET Bands 4 and 6."

B) "We listened to the downloaded materials from the internet learning resources, which were very helpful and efficient to support our English study."

C) "Our success in passing the CET (Bands 4 and 6) and the improvement of our oral English is because of computers and the internet in addition to digital media players."

D) "The use of technology enables us learners not only to save a large amount of time, but also to increase our learning efficiency in English study." **(S1, Class One)**

Student 1 (Class One) attributed his passing the New TOEFL Test with good marks to the full use of modern technologies. Overall, from their learning experiences, the appropriate use of technology can improve learning, save time and increase their learning efficiency. However, not all the students could make use of the technology appropriately to support their learning. For example, one student in Class One stated in his paper that he had wasted his precious time in the first three semesters by using his laptop to play games and had never used them in his study, including his English study, which led to lower marks in the CET (Bands 4 and 6) than the majority of his classmates. In spite of that special case, there is no denying the fact that the technology has indeed brought an unprecedented revolution in the field of education, increasing the quality of

education.

7.5.1.2 Promotion of learner autonomy by using CALL in Semester Four

Most of the students in their assignments expressed satisfaction with the development of learner autonomy using technology, which helped to support their English language learning. Table 7.17 summarizes the typical learning experiences of learner autonomy using technology, in addition to my comments.

Table 7. 17 Student learning experiences on developing learner autonomy by modern technology

Themes	The summarized learning experiences	Author's comments
Teacher's guidance	What our English teacher said in class gave us a dramatically excellent direction for our autonomous learning after class.	The students had a good opinion of my correct guidance about their autonomous learning.
Learning efficiency	The principal reasons why we were satisfied with the encouragement of learner autonomy using technology was its efficiency and convenience to operate. We managed our time more wisely.	In my view, saving time and using time wisely are almost equal to increasing learning efficiency in one's study.
Improving listening and speaking	We learned English autonomously outside of class using computers and digital media players. Since this course began, our English listening abilities have continuously improved. For instance, we listened to or watched the downloaded materials in order to practise English listening and speaking skills by imitating English-language movies and BBC programmes. We also communicated with foreign friends over the internet.	The combination of the autonomous learning and advanced technologies meant that students could learn consciously, which led to the enhancement of their listening and speaking abilities.
Online learning	Online learning is a fantastic way for us to have a contact with the worlds' greatest minds, for example, Nobel winners, Academic Award winners or the well-known professors from top universities of the world. Topics such as politics and religion interested us learners and changed our ways of seeing the world.	According to the description, I can infer from it that they must have watched some of the free open courses, such as Yale's open courses, which are very popular on the internet. Meanwhile, such open courses can not only increase a learner's knowledge but also improve their English proficiency.
Reading eBooks	While reading eBooks, we can select the unknown words by using the mouse, which shows the meaning automatically on the computer monitor. Reading in that way saves looking up new words in dictionaries.	Because of the convenience of electronic libraries, readers can read a large number of various eBooks and e-journals. Reading from networked computers saves a great deal of time than going to traditional libraries.

On the whole, from the above students' learning experiences, they not only developed autonomous learning but also improved their English proficiency, especially speaking, using technology.

7.5.1.3 The effective use of CALL environments

During the fourth semester, the majority of students made full use of the CALL

environments from the internet learning resources and the 'Blackboard' learning materials, which helped improve their English proficiency, especially listening and speaking skills. The following learning experiences are typical of their effective use of CALL environments in the fourth semester:

(A) The effects of the accessing recommended learning websites

Because there are so many, it is very difficult for learners to find an appropriate learning website which fits their needs. An experienced language teacher's guidance or recommendations play a significant role in a learner's study. Learners should make full use of the learning websites that their teacher has recommended so that their learning can be supported and improved. The following are some students' comments on using English language learning websites effectively.

(i) Following our experienced teacher's valuable suggestions, we accessed the recommended learning websites, from which a lot of knowledge and skills were learnt. For example, the Business English podcast website, which covers every aspect of Business English, did help us students to improve English proficiency very fast.

(ii) The BBC website that we preferred the most provided videos and podcasts on English language learning. Since the beginning of this semester, we have been practising these learning materials in our spare time. Therefore, we were amazed to find that our listening and speaking skills were dramatically improved at the end of this semester.

From my teaching experience, the BBC English language learning website is one of the most popular learning in the field of the TESOL. There are three primary reasons: First, learners at different levels are provided with plenty of English learning resources and they can select suitable contents corresponding to their own English levels. Second, the podcasts and videos are spoken by experts of English language teaching, who speak (British) Standard English. This is helpful for learners to practise their listening and speaking abilities. Finally, the learning contents cover different subjects, which are helpful for learners to expand their knowledge in various areas. Perhaps this is why most of my students preferred the BBC website to others. For the same reason, the other

learning websites such as the Business English podcast website and the TOEFL podcast website were also welcomed by my students, because they felt that these learning websites helped them make greater progress in terms of their English proficiency quickly.

(B) The use of the valuable learning materials from the Blackboard Platform

Many students appreciated the 'Blackboard' and its support for their English language learning. The following are summaries of student comments on the use of the learning materials on 'Blackboard':

(i) This semester our English teacher provided not only many various valuable learning materials on 'Blackboard' but also a better learning environment to enhance our English proficiency. Some of them were not difficult, but they could improve our English proficiency by practising listening and speaking frequently. However, other learning materials, such as the TOEFL and IELTS listening, were really hard to understand, because the speakers' speech was too fast. But one-semester learning practice allowed us to grasp what has been said from such advanced listening materials gradually.

(ii) 'Blackboard' is also a good place for us students to communicate with the teacher and the other classmates. We could discuss difficulties between ourselves and our English teacher, who could give us appropriate guidance. We have felt that making full use of such a platform is an effective way to enhance our English proficiency because we have been practising listening and imitating native speakers from the materials, and these have helped improve our listening and speaking skills in the past a few months.

From the above students' learning experiences, 'Blackboard' presented not only some valuable learning materials but also an interactive platform between the students and their teacher, which could help them promote learner autonomy and offer more opportunities to conduct cooperative learning. As has been pointed out above, it is important to make full use of the learning materials on 'Blackboard' as this has been considered to be an effective way to enhance learners' English proficiency, especially listening and speaking skills.

(C) The effective use of the other learning websites

Table 7.18 below shows some student learning experiences of other learning websites and learning resources found by themselves.

Table 7. 18 Student learning experiences of other learning websites/resources

Themes	The summarized learning experiences	Author's comments
Finding other learning websites	Some favourite English learning websites helps Chinese students to improve their English proficiency: e.g. 1) The National Geographic Channel (the USA) 2) Hujiang English: www.hjenglish.com (China) 3) Big Ear English: http://www.ebigear.com (China)	I think that learning materials from <i>The National Geographic Channel</i> are suitable for advanced English learners. But the other website is fit to various levels of English learners in China.
Using leisure time	We used modern technologies more frequently to learn English this semester, e.g.: practising listening and watching favourite movies during our rest time.	The effective use of technology enables learners to manage their time wisely.
Watching movies	Watching English TV serials like 'Friends' and movies like 'Twilight' was relaxing after an entire day of tiring classes.	This method not only entertains learners but also to practise their listening and speaking skills.
Learning English technology	Due to our major, we must read English documentation to learn about technology. So we could learn English while learning about technologies. Also, we watched the video of foreign technology (http://www.adobe.com/devnet/flex/videotraining/). In that way we could improve our listening skill as well.	I prefer such an English learning method, the combination of learning advanced technology and improving English listening and reading abilities, which is well worth advocating.
Creating 'English World'	The full use of modern technologies such as computers and the internet have created for us learners ' <i>an English learning environment</i> ', although we are in China.	See the following comment below.

One of the most important learning experiences is creating 'the World of the English Language'. From this experience, I have realized that the effective use of technology is to create "an English language learning environment" for Chinese students in China. It is believed that creating such a learning environment by using technology is a landmark in the history of the English language teaching and learning in China. Finally, in my view, one of the most important educational modes in the future is that online learning will become an irresistible trend because of the many advantages of modern technologies.

7.5.1.4 Oral English practice outside of class

According to the students' assignments, speaking practice outside of class consisted of the following six main activities:

(A) Oral English practice by imitating the lines of the movies

The following example is one of the typical cases:

“As I am interested in movies and TV series very much, I have downloaded and watched a lot of movies and TV series such as ‘Friends’. When I find a video clip, I listen to one sentence, and press the pause button, and repeat it. That way, it helps me improve my oral English.” **(S14, Class One)**.

I prefer this way to practise speaking English because it is very easy and simple to conduct. As a result, such a practical method is well worth recommending. In fact, many students have conducted this learning method to practise their speaking skills.

(B) Joining an English club for English speaking practice

The following is a summarized learning method about oral English practice:

“After class, we joined the all-star club, whose purpose was to emphasize spoken English. Usually, we got up very early every morning in order to practise English speaking with our partners by using downloaded materials, such as famous speeches and English-language movies. We often got together to communicate with one another in English, therefore we have had more opportunities to practise speaking English. We think it necessary to improve our speaking English skills because our major in software engineering may offer more opportunities for employment with foreign companies in the future. Therefore, it is very important to communicate with colleagues and clients in English.”

This is one of the good learning methods to practise speaking English. As Richards and Schmidt (2002: 90) point out, one of the main characteristics of the communicative approach is that “learners use a language through using it to communicate”. A key issue is for a learner to employ the foreign language in their language learning practice in order to enhance his/her communicative abilities. Therefore, to learn a foreign language needs frequent speaking practice.

(C) Going to an ‘English Corner’ to practise oral English

“I seldom practise speaking English outside of class with my peers, or classmates, or my Chinese friends. But I’ve got a chance to communicate with an Englishman. I’ve also been to an ‘English Corner’ to practise speaking. All of my English friends said that Chinese students’ English is very good.” **(S25, Class One)**.

Going to an “English corner” is an important learning method to practise speaking English. In the “corner”, there are a lot of students who are interested in speaking English, including some native speakers of English as volunteers, who offer to help Chinese students correct their pronunciation and improve their speaking skills. Additionally, the native English speakers’ encouragement has increased student learning motivation and their learner autonomy to support their English language learning further.

(D) Talking with roommates, classmates and friends in English

“The following is an interesting story about our English speaking practice. I have a unique way to practise English with my roommates in our dormitory, which is considered to be an ‘English corner’. My roommates and I often spend some time in speaking English. During that time, we are not allowed to say anything in Chinese. Not a word! We are not just sitting there speaking English. But we do the normal things during this period of time. We often set the time throughout the night, which is very fun. We sometimes can’t find the right word(s) to express ourselves, but it is just that way for us to find our weaknesses.”

(S11, Class Two).

I think that this is one of the best ways to practise speaking English. The above learning experience also shows that the students had extraordinarily high levels of motivation, which could encourage their English language learning positively. However, some students often complain that they are very weak in speaking English because of a lack of good English-speaking environment around them. S11 (Class Two) and her roommates created themselves a good ‘English-speaking environment’ in their dormitory, which has set a good example to Chinese learners in terms of oral English practice. As this learning method is very easy and simple to conduct, it is well worth recommending the other English language learners as well.

(E) Using Skype/MSN to chat with foreign friends online

“I use Skype/MSN to talk with some native English-speaking friends online when I am free.” **(S3, Class One).**

I always think that this is one of the most ideal learning methods to practise speaking skills with native speakers of English. Nowadays, as many foreigners

love Chinese culture and desire to learn the Chinese language very much, Chinese students can offer language exchange lessons online, where Chinese speaking practice is offered in exchange for English speaking practice. As a result, all of us can benefit a great deal from one another, which is helpful for us to improve each other's target language level.

(F) Communicating with foreign students and teachers in the university.

“I seize chances to talk with foreign students and teachers at university. They are so kind and helpful that my oral English has improved very fast.” **(S37, Class Two).**

This is also one of the most ideal learning approaches for practising oral English. However, I used to remind the students that they should respect the cultures and customs of foreigners. Also, I warned them not to disrupt their foreign friends' lives too much.

In summary, the above six learning methods for practising English speaking are very practical and effective.

7.5.1.5 The importance of the English teacher's guidance

The following comments are from the students' assignments at the end of Cycle Three. The four aspects of the importance of the teacher's guidance in their language learning process are as follows:

(A) The teacher is very responsible for his work.

“He is very responsible for his work and regards the revolution of English teaching as his career. When I prepared for the TOEFL and GRE Tests, I was grateful to the admirable teacher because all the materials for TOEFL and GRE provided by him were very useful. I also appreciate his method of teaching, which makes the curriculum flexible and practical. Now I have passed the TOEFL Test. From my English language learning experience, I think that good, practical learning methods and hard work, along with the excellent teacher's guidance, are fundamental factors which led to my success in English study.” **(S4, Class One; Similar comments from: S23/S28/S37/S45, Class One; S25/S42/S51, Class Two).**

These students had a good opinion of my work. But I always believe that all I

have done is my duty as a teacher. Meanwhile, I should rethink profoundly about my own teaching practice and adjust my teaching style continuously so that they can satisfy students' expectations.

(B) The teacher's teaching approach encourages the students to practise oral English.

“As a very shy student, I was afraid to make mistakes in speaking English in class, so I often kept silent in class. Then, my English teacher encouraged me to speak boldly. Later, I tried my best to answer his questions in order to improve my oral English. In particular, I liked group discussion because my oral English could be improved by communicating with my partners. Therefore, I want our teacher to persist on this teaching approach.” (S19, Class Two; Similarly: S35/S46, Class One)

From my teaching practice, I have found that one of the principal reasons why shy students worry about their mistakes in speaking English is a lack of self-confidence. Language teachers should concentrate on this problem. One of the effective approaches to help learners increase self-confidence is: “a small personal word of encouragement is sufficient” (Dörnyei, 2001b: 130). Therefore, encouragement plays an important role in increasing a learner's self-confidence, which is helpful to support learning as well.

(C) The teacher's guidance and suggestions promote his students' learning motivation and autonomous learning abilities.

“This semester our English teacher introduced many methods that helped us learn English autonomously. These methods were helpful in improving my English proficiency and foster my autonomous learning.” (S55, Class Two).

“Since the beginning of this course, I have learnt about IELTS, GRE and TOEFL in more detail than I had before. Additionally, the teacher gave many suggestions and much guidance on our English study, which made us more interested in English learning. I think that the interest is a good teacher. Anything that can arouse the interest in English study increases our learning motivation. To be honest, I have made greater progress in listening this semester than before. So I should thank the teacher for his guidance and suggestions.” (S9, Class Two; Similarly: S54, Class Two).

I agree with the view that “interest is a good teacher”. As far as language learners are concerned, without interest, there is no learning motivation. It has been argued that one of the main characteristics of autonomy is that

autonomous learners should have a high motivation, as motivation has been associated with learner autonomy (Oxford, 2003a).

(D) The teacher's guidance and suggestions are really useful and helpful.

Regarding the comment in terms of this aspect, there are more comments on this than the other aspects.

“I feel my English teacher's suggestions and guidance on my English study are very useful and helpful. They have helped me take a short cut in learning English. The teacher advised us to go to the learning website of Business English as it was rich in resources, and use with the content of the textbook. It truly helps improve my listening abilities.” (S3, Class One; Similarly: S8/S12/S15/S21/S39/S46, Class One; S18/S20/S44/S56, Class Two).

“Our English teacher indeed brings me a new horizon, a new view and a new space in learning English. Without his help and guidance, I could not make so great progress in learning English so quickly.” (S5, Class Two; Similarly: S36/S42, Class One; S17/S24/S27/S48, Class Two).

The above typical comments are my students' reflections on my guidance of their English study. What the students had appreciated might be my advice and correct guidance in their studies, including, for them, new education concepts. All these could help progress to be made within a shorter time in terms of their English proficiency. As long as learners master effective learning strategies and methods in addition to working hard, they can obtain more knowledge in their studies. It is believed that the teachers' correct guidance should have a great influence upon the improvement of their students' studies.

7.5.1.6 The students' learning outcomes by using modern technologies

According to the students' assignments, the three aspects of what has been mainly achieved in their English study by using CALL are as follows below:

(A) The students master the fundamental principles of English language learning methods effectively.

“What I have achieved most this semester is that I have learnt the fundamental nature of English study. I hold the opinion that my English proficiency has been enhanced by using modern technologies. The use of technology is not boring but interesting, so I always feel

tireless when learning English. Both my reading and listening abilities have been improved more than before. I think learning English by using technology is better than other means, such as recorders. It's really effective too.”**(S21, Class Two; Similarly: S22, Class Two).**

According to Griffiths (2004), learning strategies will not prove to solve all the language learning problems, but together with the other techniques, they “may well prove to be an extremely useful addition to a language learner’s tool kit” (p17). Therefore, the correct English learning strategies and methods, along with technology, are crucial factors which can lead to success in language learning. Besides these, other important factors may be learner motivation and autonomy, including their degree to which effort is made to study. It seems that all these factors may cause successful learning.

(B) Watching English-language movies and TV programmes is one of the best ways to learn English.

This learning method has been mentioned above many times and was preferred by most of the students.

(i) “Watching American TV programmes online can effectively improve English proficiency. We can not only listen to them but also imitate a speaker’s pronunciation. American TV programmes are not very difficult to understand, but the dialogue is still a challenge. At first, we must refer to the subtitles to understand the meaning of the dialogue. After a period of time, as we have got used to speed of speaking, we understand what has been said without reading the subtitles, which is what we have achieved by the use of computers.”

(ii) “We have seen a lot of English-language films this semester, most of which were without captions. Seeing films without subtitles improved our listening skills dramatically. We saw some of them over and over again in order to try our best to catch every word of the film. We memorized all the lines in order to imitate their way of saying the lines, which has improved our oral English. All of those experiences help us to support our English study, enlarging our vocabulary and understanding of Western cultures.”

One of the important things is that students have learnt how to make good use of technology to learn English effectively and autonomously. This is one of the most vital factors which led to success in learning English.

(C) The most important achievements with CALL are the improvement of the students’ listening and speaking abilities.

The majority of students felt that it was satisfactory to have made greater progress in their English proficiency, especially in terms of listening and speaking in the fourth semester using CALL.

“This semester we have used technology more frequently than before. We often listen to the news in English, see English-language movies and talk to foreign friends over the internet. Through the full use of computers and the internet, our listening and speaking skills have been greatly improved, especially on the TOEFL and the IELTS Tests. Therefore, a good method allows learners to learn more useful things autonomously within a shorter time.”

As space is limited, similar learning experiences to the above ones will not be listed. In fact, these learning experiences are so precious that the other learners can refer to them according to their individual situations. Particularly, some students reached advanced level in listening and speaking like IELTS and TOEFL levels. Such great achievements that they had made were nothing less than a miracle. In short, all the students made progress in their English study with CALL this semester.

7.5.1.7 The students’ reflections from CALL experiences

The students’ assignments reflected many things from their learning experiences through the use of technology. The following are their main reflections:

(A) Learning English using technology supplements insufficiencies in classroom teaching.

“By using modern technology, I have achieved much more than before. I have mastered much more knowledge out of class that cannot be learnt in class. I am becoming more and more interested in the news from the BBC TV and radio programmes, which can improve my listening abilities and my pronunciation in English.” **(S29, Class One)**.

In classroom teaching, as time is limited, it is impossible for teachers to teach so much knowledge to their students in a short time. Additionally, compared with the abundant learning resources on the internet, a teacher’s knowledge is too limited. Therefore, as long as students keep learning autonomously using modern technology, they will conceivably have obtained much more knowledge than in

the classroom.

(B) Through the use of modern technology, learners can create an English learning environment for themselves in order to improve their English proficiency.

“We do our best to create an English learning environment. It is really a good way to use technology to learn English. We can find as many resources as we can on the internet. It is more convenient to find something with modern technologies than in the library. They help us to learn English by not only reading but also watching and listening. Thanks to modern technologies, I have become more interested in English and I have made greater progress than ever.” (S20, Class One).

As stated earlier, it is much better for a second language learner to learn English in English-speaking countries than in his or her own country, mainly because of the better learning environment in terms of listening and speaking. However, learners can use computers and the internet to create English study environments for themselves. With the rapid development of advanced technologies, such learning environments will be improved. As a result, learners will not only be able to learn the English language in their own countries, but also save the expense of trips and tuition fees to other countries.

(C) The combination of traditional methods and modern technologies makes English language learning very effective.

“Indeed, learning English by technologies such as the internet is extremely helpful. However, we cannot completely discard books. Only through the good combination of traditional methods and the modern technologies can we learn English very effectively.” (S26, Class Two; Similarly: S15, Class Two).

Reading on computers may be more harmful to one’s eyes than books. Additionally, computers are inconvenient to carry, but books are very portable. Therefore, sometimes the combination of advantages will be better.

(D) Technologies such as computers and the internet are the best teachers for learners to learn English autonomously.

“I am very satisfied with the progress with technology in English study. Without them, I can never have made as much progress. The internet is considered our ‘best English teacher’ because it taught us so much.” (S22, Class One).

“I think modern technologies have become the best way to study English. During this semester, I have learnt to find learning materials on the internet from so many kinds of English learning websites. Meanwhile, we learners can conveniently read the latest

English-language news available from foreign websites at any time. Therefore, I will keep studying English in that way.” **(S11, Class Two)**.

I agree with the point that modern technologies are the best teachers or the best ways to study English, if learners can use them correctly and appropriately. All this has been confirmed in student learning practice. What we learners should do is to continue to make full use of them so that our English proficiency can be improved gradually.

(E) Using technology is one of the most effective ways to learn English.

As stated previously, watching English-language movies has been considered to one of the most effective ways of learning English by the majority of students.

“We cannot deny the fact that modern technologies make us learners study English more convenient and more effective. Nowadays more and more people prefer learning English through the internet to just reading reference books. In my case, with the help of the electronic products, I have made great progress in recent years..... Indeed, electronic products help me with my English study.” **(S45, Class Two; Similarly: S31/S43, Class One; S42/S51, Class Two)**.

From the above students and other learners’ learning experiences, it is clear that using technology such as computers and the internet is one of the most effective ways to learn English. It should be noted that a vital issues is how to make full use of them correctly and appropriately.

(F) Technology-assisted autonomous learning is a perfect way to improve learners’ English proficiency.

“By using modern technologies this semester, my speaking and listening abilities in English have improved. I have learnt a lot about Western cultures. I think that self-study with technology is a perfect way to improve English basic abilities.” **(S37, Class Two; Similarly: S33/S45, Class One; S39/S55, Class Two)**.

It is well-known that using modern technologies is one of the most effective ways to learn English. Further, learner autonomy is one of the most vital factors which lead to success in language learning. Without autonomous learning, even if the technologies that learners use are “advanced”, they will not succeed in language

learning. Therefore, a good combination of modern technologies and learner autonomy is a perfect way to learn English.

7.5.1.8 The students' future English study plan

Although the students were to have no English courses in their final two years of their degree programme, all wanted to continue to learn English autonomously using technology, according to their assignments. The majority made detailed plans on how to improve their English language basic skills, such as listening and speaking skills. Some students wanted to take the IELTS and TOEFL Tests because they planned to go to English-speaking countries, such as the UK and the USA, for further study after graduation. Others hoped to sit the Cambridge BEC (Business English Certificate) Test because they wanted to work for foreign companies in China in the future. In short, these motives to learn English have pushed them to positively make much more efforts to improve their English proficiency, along with the good combination of the modern technologies and learner autonomy.

7.5.2 Summary of the Students' English Learning Experiences by Using CALL

Tables 7.19 and 7.20 compares the English language learning experience of students using CALL during the middle schools, the first three semesters and the fourth semester in the university. Obviously, as this study was conducted during the fourth semester, the students made greater progress in their English language learning than before using technology, especially in their oral communicative abilities, such as listening and speaking.

Table 7. 19 Student English learning experiences with CALL during middle schools, the 1st three semesters and 4th semester in the University (I)

Learning Period	Main characteristics of English Language Learning by Using CALL
Middle schools (3 Junior years; 3 Senior years)	1) The students read or wrote test papers and little listening and speaking practise either in class or out of class. 2) CALL was not used either in class or outside of class. 3) Only a few used recorders to listen to English tapes occasionally after class.
The first three semesters at university (one year and a half in total)	1) CALL was used in classroom teaching. 2) The students began to use the computers, the internet and digital media players to learn English outside of class. 3) The students prepared for the CET (Bands 4 & 6) in China using technology.
Fourth semester in the University (nearly five months, during which this action research project was conducted) (Part I)	1 The development of learner autonomy by the use of CALL helped the students support their English language learning.
	2 The effective use of CALL environments improves the students' English proficiency (A) The effects of the accessing learning websites recommended by the English teacher; (B) The use of the valuable learning materials on Blackboard; (C) The use of the other learning websites selected by the students.
	3 Oral English practice outside of class (A) Practise oral English by imitating the lines of the movies. (B) Join an English club to practise speaking English frequently. (C) Go to an "English Corner" to practise oral English with Chinese people and native speakers of English. (D) Talk with roommates, classmates and friends in English. (E) Use Skype/MSN to chat with foreign friends online. (F) Communicate with foreign students and teachers at the university.
	4 The importance of the English teacher's guidance (A) The teacher is very responsible for his work. (B) The teacher's approach encourages students to practise oral English. (C) The teacher's guidance and suggestions encourages learning motivation and autonomous learning. (D) The teacher's guidance and suggestions are really useful and helpful.

Table 7. 20 Student English learning experiences with CALL during middle schools, the 1st three semesters and 4th semester in the University (II)

Learning Period	Main characteristics of English Language Learning by Using CALL
Fourth semester (Part II)	5 The students' learning outcomes by using modern technologies (A) The students mastered the fundamental principles of English language learning methods effectively. (B) Watching movies and TV programmes in English was one of the best ways to learn English. (C) The most important achievements by using CALL were the improvement of the students' listening and speaking abilities.
	6 The students' reflections from their CALL experiences (A) Learning English using technology supplements any insufficiencies in classroom teaching. (B) By using technology, learners can create 'English learning environments' in order to improve their English proficiency. (C) The combination of traditional methods and modern technology can make learners learn English very effectively. (D) Technology such as the internet is the best teacher for autonomous learning. (E) Using technology is one of the most effective ways to learn English. (F) Autonomous learning using technology is a perfect way to improve a learner's English proficiency.
	7 The students' future English study plan (A) Because there were no English courses in the last two years of their degree programme, all the students hoped to continue to learn English autonomously with the use of modern technologies. (B) Some students wanted to take IELTS or TOEFL Tests. (C) Others wanted to sit the Cambridge BEC (Business English Certificate) Test.

7.5.3 Summary of the Students' Performance in TOEIC, IELTS and TOEFL Tests

Table 7.21 shows that the comparison of the TOEIC, IELTS and TOEFL Tests marks in the pre-test and the post-test for each cycle of this study. Compared with the pre-test result, the mean of the post-test result had increased by around 10%, especially at the end of the third cycle of this study, when both classes were more than 10% higher. Generally speaking, the mean mark for Class One is better than that of Class Two, except in the pre-test of the IELTS Test. However, according to the table, the average increase of Class Two is better

than that of Class One, which is a satisfactory result because the overall English proficiency of Class Two on average was originally weaker than that of Class One. On the whole, it is of great significance that the TOEFL post-test mean mark for each of the two classes was more than 50 (out of 100). During Cycle Three, the students were extremely busy studying for other courses because of final exams. Within such a short time, all the students made much greater progress in their English listening thanks to the appropriate use of technology, such as computers and the internet, along with the correct use of learning methods and strategies.

Table 7. 21 The comparison of the TOEIC, IELTS and TOEFL Tests Marks

Class		TOEIC Mean Marks	Increase by (percentage), compared with the pre-test	IELTS Mean Marks	Increase by (percentage), compared with the pre-test	TOEFL Mean Marks	Increase by (percentage), compared with the pre-test
Class One	Pre-test	53.5	8.4%	33.9	12.3%	44.0	10.9%
	Post-test	61.9		46.2		54.9	
Class Two	Pre-test	39.9	10.2%	36.1	7.7%	39.9	12.9%
	Post-test	50.1		43.8		52.8	

7.5.4 Summary Answers for Research Question 4

In this study, students were encouraged to develop learner autonomy which was helpful in promoting their learning motivation and support their learning. In fact, they were encouraged to manage their own learning affairs by themselves in order that their progress in their studies could be improved greatly. If a student is unable to learn autonomously, even if there were an excellent learning environment and equipment, the student would not be able to make significant progress in his/her study. All this shows that autonomous learning abilities have played a very vital role in learners' studies.

Another key issue is that a teacher's correct guidance should have a great influence upon the improvement by the students of their studies, as stated

previously. Throughout the research project, I emphasized the guidance on autonomous learning, effective learning methods and strategies, and so on. I also gave specific guidance on, for example, effective listening in English study. Therefore, the importance of a teacher's guidance allows students to take shortcuts so that they can save learning time and increase their learning efficiency.

From the student feedback, indeed they used both teacher guidance and autonomous learning, along with CALL environments (the internet and the University Blackboard Platform) to effectively enhance their English proficiency, especially listening and speaking abilities.

7.6 Summary of Chapter 7

In this chapter, in order to answer the four research questions reliably and validly, first, I discussed the learners' perceptions of the advantages and disadvantages of CALL; their perceptions on learner autonomy by using CALL; and so on. Regarding the data in relation to Research Question 4, I mainly analyzed the original data from my students' assignments at the end of this course in detail.

Second, I undertook statistical analysis of the students' original marks for the TOEIC, IELTS, TOEFL pre- and post-tests with SPSS. In each action research cycle, the pre- and post-test marks were used to identify the strengths and weaknesses of students so that I could change my teaching style and solve their learning problems in the next cycle. Meanwhile, the comparison of the pre-test and post-test results was used to measure the students' improvement in their learning or indicate how successful the teaching has been over each Action Research cycle (Henning et al, 2009).

Third, I used the principal research findings from the previous chapters

(Chapters 4, 5 and 6) in order to answer the questions fully. The findings were mainly obtained from the interpretation of the qualitative data.

On the whole, the research findings, which derived from both qualitative data and quantitative data, also called triangulation, can be said to be reliable and valid (Cohen et al, 2000) so as to fully answer the four research questions.

Chapter 8 Implications and Conclusions

8.1 Introduction

The results of the action research project were discussed in the previous chapters. In this chapter, an overview of this study, a summary of the major findings, a reflection on the research approach, the implications of using CALL environments in English language teaching and learning, and recommendations for further research and practice are presented.

8.2 Description of This Study

The purpose of this study was to explore the effective use of modern technology and the encouragement of learner autonomy to support language teaching and English language learning at a university in Northeastern China. The teaching materials were based on three English learning websites, and a coursebook, *Business Benchmark Advanced* (Brook-Hart, 2007a). Although the course was called “Business English”, it mainly focused on general English in classroom teaching, especially listening and speaking practice. The intention was that the students’ English learning problems such as the ‘deaf and dumb English’ could be solved completely. The research participants were second-year undergraduate students from the computer science majors.

The action research project consisted of three cycles. The teaching time of each cycle was 6 weeks, with two hours teaching each week. During the research period of each cycle, I used the teaching materials from one of the three English language learning websites and the coursebook “*Business Benchmark*

Advanced' to teach the students in class. I used student-centred teaching approaches to teach them how to practise listening and speaking skills. Also, I guided them towards effective English language learning methods and strategies, and recommended useful English language learning websites. One of the most important things was that I taught them to learn English effectively by combining learner autonomy and the use of modern technologies out of class.

At the beginning of each cycle, I measured the students' listening level by using international English proficiency test papers, such as the IELTS, referred to as the pre-test. At the end of each cycle, I tested their listening proficiency again using the same test paper, referred to as the post-test, in order to assess their improvement through the comparison of the two test results. The purposes of the pre- and post-tests were to identify the students' strengths and weaknesses, as well as to measure their improvement during the certain period of learning time (Henning et al, 2009). Additionally, at the beginning of the course and at the end of each cycle, I collected abundant data from student questionnaires, follow-up interviews, learning diaries and assignments. From students' feedback and reflections on their out-of-class autonomous learning, my classroom teaching and their existing learning problems, I changed my teaching styles in the following cycles so that their needs and requirements could be better met. From the two test results of each cycle, it was clear that the students improved their English proficiency, especially their listening abilities. On the whole, the students have benefitted a great deal from autonomous learning by using modern technologies. Furthermore, in this study, the aim of using the action research methodology was to improve the student learning experience and my teaching experience in classroom, and to contribute to my own professional development. In my teaching practice, I strictly followed the principles of action research project: planning, action, observation and reflection. In particular, both my students' reflections and mine have made me understand my teaching practice more deeply than ever. The most important findings in the teaching experiment were that, in a Chinese context, a new teaching approach in teaching English

listening from the intermediate level to the advanced level has been developed and a new teaching model using CALL environments has come into being. These significant findings have the potential to greatly influence English language teaching and learning for Chinese students. This suggests that, by using an action research methodology to conduct this study, I have achieved the hoped for research findings. In the meantime, I have enriched my teaching practice from the research project in areas, such as a teacher's guidance on the effective use of the modern technologies and learner autonomy. Also, I now look at teaching and learning differently as a result of the project. In brief, the action research project that I undertook has achieved its aims.

8.3 Summary of Major Findings

This section starts with the outline sketch of this action research project and then summarises the major findings in relation to the four research questions briefly.

8.3.1 An Overview

I present an overview of the learning outcomes in this study and discuss the relationship between the four key factors influencing successful learning which are summarised in Figure 8.1 below. In this diagram the directions of the arrows show the main influences though all the factors are involved in a web of influence in which all things are interlinked.

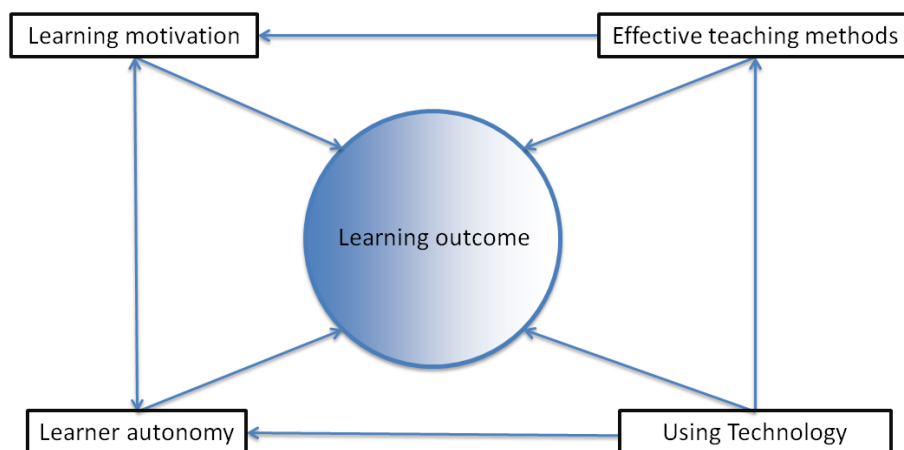


Figure 8. 1 The four leading factors found to be influencing successful English learning

Firstly, the box “Effective teaching methods” consisted of the effective use of the student-centred teaching approaches, the teacher’s correct guidance (e.g., motivating students to develop their autonomous learning) and the teaching of good study skills, effective learning methods and strategies in classroom (see Section 7.5, Chapter 7 in detail). All these helped improve the students’ learning outcomes and meanwhile they increased the students’ confidence and their learning motivation.

Secondly, the box “learning motivation” is one of the most important factors to learn a foreign language successfully. A great deal of statistical evidence provided by numerous studies indicates that motivation is one of predictors of success in Second Language or Foreign Language Learning (Bot et al, 2005; Gass & Selinker 2008). Also, from my teaching practice and teaching experience, it is very clear that if a student had no motivation in learning a foreign language, even if he or she had excellent teachers, good learning equipment and learning environment, it is very difficult for him or her to learn the language very well. Therefore, motivation is one of the most important and essential conditions to learn a foreign language very well. However, the questionnaire investigation at the start of this action research project shows that around 90% of the students in two classes were already very interested in learning English. The majority of the students planned to go abroad for further study, or work abroad or work in

foreign companies in China and needed qualifications in English to support these ambitions. They therefore had high motivation to learn English very well. It was also very helpful for them to learn it faster than normal (Gass & Selinker 2008). To keep the project manageable, I therefore decided not to take actions specifically designed to improve motivation but (as indicated in Figure 8.1) the steps I took to investigate learner autonomy and effective teaching (both supported by use of technology) were shown to be related to motivation. As mentioned above, a great deal of statistical evidence provided by numerous studies indicates motivation is one of predictors of success in Second Language or Foreign Language Learning (Bot et al, 2005; Gass & Selinker, 2008). Also, from my teaching practice and teaching experience, it is very clear that if a student had no motivation in learning a foreign language, even if he or she had excellent teachers, good learning equipment and learning environment, it is very difficult for him or her to learn the language very well. Therefore, motivation is one of the most important and essential conditions to learn a foreign language very well.

Indeed, learning motivation and learner autonomy (the third box in Fig 8.1) are closely interrelated. Arguably, one of the main characteristics of autonomy is that autonomous learners should have a high motivation, as motivation has been associated with learner autonomy (Oxford, 2003b). Learner autonomy is certainly an issue in China so this was something I did specifically address. Regarding its relationship with motivation, the students presented their reflections and their learning experiences in Chapter 7 in detail (e.g., Sections 7.4.1, 7.5.1.4, 7.5.1.5 and 7.5.4). Autonomy is useful and helpful beyond its links with motivation as it helps to develop learners' *lifelong* learning (see Section 7.4.1, Chapter 7). According to the students' learning experiences and their reflections (See Section 7.5.1.7, Chapter 7), one of the most important findings is that a good combination of modern technologies and learner autonomy is one of the most effective ways to learn English.

Finally, the fourth box “Using Technology” refers to the use of modern technology, for example, the use of computers, the use of digital media players, the use of the internet (including the internet learning resources and the Blackboard Platform learning materials) (or online learning, or online communications by the use of Skype/MSN) and so on. Therefore, this study mainly emphasised on the use of the above technologies so that the students’ oral communicative abilities could be enhanced more effectively and quickly, which was evident from the changes in test scores (see Chapter 7). Also, technology motivated the students to promote their autonomous learning and also motivated me to make full use of it in my classroom teaching to improve their English proficiency (see Chapters 4 to 7 in detail).

On the whole, the interpretation of the collected data from the students’ learning diaries and assignments, in addition to the pre- and post-test results in the three cycles, confirmed that the systematic combination of these key factors could lead to a greater success in English language learning in a Chinese context, and may apply to other English language learners in other countries.

8.3.2 Findings Related to the Research Questions

8.3.2.1 Time Management and Effects on Listening by Using Modern Technology

The results were related to Research Question 1: “During Action Research (AR) Cycle One, to what extent do students improve their listening abilities using internet learning resources, such as the Business English podcasts, and how does this relate to learner autonomy? How effectively do students manage their English learning time with technology, under their English teacher’s guidance?”, The results indicated that the students had achieved greater progress in their English listening levels and abilities using modern technologies such as

computers and internet resources under my guidance in classroom teaching, and that this was maintained over the three cycles of this study.

During Action Research Cycle One, the English language learning website, Business English Podcast, was mainly used in classroom along with the coursebook in order to help the students to learn more Business English and improve their listening and speaking abilities in authentic contexts or in future work environments. When students used this learning website, their listening scores improved (From the statistical analysis of the students' TOEIC test results in Chapter 7 (Section 7.2.2), the post-test listening marks for Classes One and Two, the average increase was 8.4% and 10.2% respectively, compared to the pre-test).

Additionally, in my classroom teaching, a student-centred teaching approach was always conducted in all the three cycles. Concepts such as group work (promotion of cooperation between learners) and brainstorming (improvement of learners' creativity) were used, and I focused on guiding my students' learning methods and learning strategies so that they could enhance their learning efficiency in their English study. As a result, the combination of the student-centred approach employed in class and the students' autonomous learning out of class using CALL was very helpful to their progress in English language learning. On the whole, in whichever cycle the action research project was, all the students improved their English listening and speaking levels using modern technology along with autonomous learning.

My classroom teaching approach in the study was a student-centred approach and also used modern technology. One of the primary reasons for the student-centred approach was because it is based upon the theory that when students freely explore areas according to their personal interests, and are accompanied by a supportive, understanding facilitator in their learning, they can accomplish good academic results and mature personally and socially

(Motschnig-Pitrik, 2002). I argued that it was particularly important to explore the validity of this statement in the Chinese TESOL context because using the student-centered approach had the potential to overcome some of the disadvantages of the traditional teaching methods of English language teaching in China, such as teacher-centred approaches. With these approaches, a language teacher often focuses on teaching grammar, the usage of some vocabulary and expressions, and other language points related to reading passages. On the other hand, students just listen to him/her in class and they have only a little or no practice of skills such as listening and speaking, which makes it very difficult for them to master communicative language abilities in daily conversations. Perhaps this relates to the Chinese culture. Generally speaking, Chinese students are unwilling to speak in class, but they are willing to listen to their teachers passively. However, the student-centred approach in CALL environments can encourage learners' communication and collaboration (Phillips, 1998). Perhaps it may be one of the most important advantages of the student-centred approach and conducting such an approach may enhance a learner's communicative abilities.

As these students had formed the habits of a teacher-centred teaching approach for many years, it was impossible for them to adapt quickly to a student-centred approach. In order to help them accommodate to the change in teaching styles, I patiently guided them and encouraged them to succeed in shifting from their passive learning to active learning, as Doyle (2008) advocates. One student from Class Two stated in his learning diary that he wanted me to teach them much more knowledge in class, especially on UK history and culture, in addition to my learning experiences there, and he disliked participating in some of the student-centred teaching activities, such as group work. Gradually, however, the students began to change their learning concepts from passive learning into active learning. Lockheed and Levin (1991) argue that the focus of student learning should move from the more traditional passive approach of imparting knowledge to students an active approach, where students control their own

learning. Such an active approach could help my students become more autonomous in their study.

In my teaching practice, I strictly abided by the principles of a learner-centred approach so that the students' learning could be optimized. First, it is important to involve the students in firsthand learning (Doyle, 2008), an approach in which one acquires knowledge from one's direct experience. However, the way to learn a second language is different from gaining knowledge in the other subjects. For example, in terms of listening and speaking skills, English language learners in the Chinese context find it very difficult to "learn them" from direct experience, because the majority of them have few chances to communicate with English native speakers face-to-face and practise their oral communicative skills. Therefore, this requires teachers to offer their students more opportunities to practise communicative abilities, so that they can acquire these skills from their learning experiences. In my classroom teaching practice, a large number of teaching activities in relation to the student-centred approach were arranged, such as group discussion and oral presentations, with the emphasis on cooperative learning, in order to provide this scaffolding, increase their learning motivation and enhance their autonomous learning abilities. All the teaching activities agree with Wu's teaching practice (2008): pair and group work in teaching English can help learners to cultivate learner autonomy. Also, Wang (2010) argues that cooperative learning can increase a learner's motivation and promote learner autonomy.

Secondly, the central core of learner-centred practice is to give students more choices and control over their learning (Doyle, 2008). This needs learners to make their own decisions and take responsibility for their own learning. In my teaching practice, I often gave my students more space to make decisions in their studies. For instance, the students determined their learning materials and contents from the internet resources and practised listening through downloaded audio/video files out of class. Such out-of-class English learning activities

encouraged their learner autonomy, confirmed by a recent study (Chan, 2011).

Thirdly, another most important aspect of a learner-centred practice is to teach students lifelong learning skills. One of the most famous words on future learning is: “Tomorrow's illiterate will not be the man who can't read; he will be the man who has not learned how to learn” (Toffler, 1970: 271).

Based on these learning concepts and theories, I guided my students in study skills and learning strategies in my classroom teaching so that they could meet any challenges in their future lifelong learning, which again is very helpful in fostering their autonomous learning. My teaching practice was in line with Yang's study (1998). However, Yang (1998) just focused on guiding his students to learn different multiple languages such as French, Spanish and Japanese in addition to English in terms of macro-learning strategies. As for my work, I emphasized on providing more detailed guidance to students' learning methods and strategies and their autonomous learning in English study both in macrocosm and microcosm (See Sections 7.5.1.2, 7.5.1.3, mainly 7.5.1.5, Chapter 7).

Besides the above advantages of the student-centred teaching approach, one of the most important issues was the combination of this kind of teaching approach and new technologies, such as computers and the internet, so that the quality of teaching and learning could be enhanced more quickly than normal. In fact, my teaching practice was conducted through a combination of a student-centred approach and modern technologies to support my students' learning more effectively during all three cycles. As was presented in Chapter 7, one of the most important research findings was that the students improved their listening level, up by around 10% at the end of each cycle, compared with the beginning of each cycle. From the students' feedback, they preferred such a student-centred teaching approach to the teacher-centred approach, because they felt that the latter was very boring in classroom teaching, which was not helpful in enhancing their oral communicative abilities.

8.3.2.2 Use of CALL Environments and Learner Autonomy

Research Question 2 asked, “During AR Cycle Two, what is the impact on the students in terms of the improvement of their listening and speaking abilities when the English teacher instructs his students to use CALL environments (e.g., the BBC English learning website and the University Blackboard Platform) to learn English autonomously?” The significant new element in this cycle is the increased emphasis placed on student autonomy. The major findings, shown in Section 7.3, Chapter 7, suggest that the students enhanced their listening and speaking skills in CALL environments, made full use of the advantages of CALL to improve their English proficiency and developed their autonomous learning abilities.

During Cycle Two, the BBC English learning website was used in classroom teaching and in the students’ autonomous learning out of class. In fact, it had much more content than those on the Business English website. Consequently, the BBC website was more useful and helpful in improving the students’ listening abilities. This was evident from the statistical analysis of the IELTS Test results in Chapter 7 (Section 7.3.3), because the post-test listening marks of Classes One and Two on average were 12.3% and 7.7% higher, respectively, compared to the pre-test.

Learner autonomy using CALL was the focus of this study. The action research project findings indicate that all the students developed their autonomous learning by various degrees through accessing the recommended learning websites and “Blackboard”. All the research findings match the expectations based on the literature review in relation to the issues such as CALL environments, especially “Blackboard”, which is a novel course assistant learning tool to Chinese university students. In my teaching practice, I encouraged my students to become autonomous and guided them out-of-class

learning within a CALL environment correctly and appropriately, because the success of learner autonomy enhancement depends to a greater extent on the active role of teachers, whether in the classroom or outside the classroom (Fang, 2002). The important role of the teacher is to be a facilitator, a counselor and a helper, as mentioned previously in my teaching practice.

As summarized by Blin (2005), an autonomous learner takes full responsibility for his or her learning and can control the learning without his or her teacher's intervention. From my teaching experience and the research findings from this study, I have realized that learners need their teacher's guidance and encouragement (See Section 7.5.1.5, Chapter 7) (e.g., effective learning methods and strategies, and building students' confidence in terms of listening and speaking skills, etc.) so that the learner autonomy can be promoted, because such guidance and encouragement will prove beneficial for their autonomous learning, as all learners need to be prepared and supported on the path to greater autonomy (Jones, 2001).

Secondly, learning a second or foreign language within a CALL environment is one of the most important factors in enhancing learner autonomy, besides their teachers' guidance and support (Fang, 2006). In her study, Fang (2006: 204) put forward several reasons for this claim: (A) The internet and internal intranet improve the interaction of learners, because it is much easier for them to communicate with their teacher, group members and friends. (B) Networked interaction like email correspondence present learners with a non-threatening agent to pass one's feedback without the potential for face-to-face embarrassment. (C) The networking environment enables students to have control over their learning process. (D) The CALL environments act as a self-access centre, giving the learners much flexibility in learning English. Fang's work is similar to mine, but there are some differences. First of all, there was a "Blackboard Platform" as an assistant course learning tool in our university to provide students more opportunities and flexibility for communication and

learning. Also, in current China, online interaction is more convenient than before such as using QQ, an instant messaging communicating tool in China, similarly to Skype/MSN. In some ways, email is not as convenient as QQ. Therefore, regarding the CALL environments, ours was much better than Fang's (2006). Perhaps better CALL environments may help students to improve and support their language learning.

Finally, I should emphasize again that, although CALL environments and modern technology may have enhanced learning efficiency more greatly than the other learning tools, without any learner autonomy, there would have been some negative effects on their learning progress. From some student learning diaries, after they had passed the CET Band 6, they made no attempt to learn higher English autonomously out of class and only used computers to play games or other activities that had nothing to do with their English study, which caused their English proficiency to become lower. As a result, the good combination of CALL environments, modern technology and learner autonomy play an indispensable part in learning a second language or a foreign language.

8.3.2.3 The New Teaching Approach on Advanced English Listening

Research Question 3 asked, "During AR Cycle Three, to what extent have the students made progress in listening skills by using English learning websites (e.g., mainly the TOEFL podcast website) recommended by their English teacher?" This question explored enhancing advanced English listening skills, learner autonomy and the learning resources, by employing the new teaching approach in class based on one of the most effective learning websites. The research findings, as shown in Section 7.4, Chapter 7, suggest that the effectiveness of the new teaching approach based on the TOEFL podcast website meant that the students improved their advanced English listening levels more greatly than would otherwise be normal within such a short time (six

weeks).

The principal reasons why the new teaching approach enabled the students to improve their advanced listening abilities cover the following aspects: firstly, the English language learning websites used were very carefully selected by the teacher (myself). As there are millions of English language learning websites on the internet, it is very difficult to select one of the most suitable sites. In spite of that, as long as we teachers strictly abide by good criteria in relation to the teaching aims and the students' requirements, we can make correct and appropriate choices from very complicated and changeable cases. I selected the TOEFL podcast website using the following selection considerations, based on Son (2005), and Yang and Chan (2008): my students' interests, needs and expectations on improving advanced English listening abilities (e.g., can the website materials solve their English learning problems, such as listening and speaking skills?); learning methods and teaching approaches (e.g., are the English learning methods and teaching approaches suitable and effective? Will it help them to develop autonomous learning abilities?); learning materials and teaching contents (i.e., credibility, correctness, objectivity, authority, authenticity and so on); the availability of audio/video materials for listening and speaking practice; learning materials that can be freely downloaded for self-study, and so on. Therefore, the above aspects played an important role in selecting one of the most appropriate learning websites.

Secondly, I used a step-by-step approach to develop the students' listening abilities by using the podcasts on the TOEFL website. From our learning experiences, to learn something that is easier to begin with and becomes more challenging, matches our learning processes. This was reflected in the website where the speech rate of the podcasts is slower at first, then podcast host explains the dialogue or lecture slowly and clearly in detail. Finally, the speakers read the same dialogue or lecture at a faster speed. One of the most important findings at the end of Cycle Three indicates that around 90% of the students in

both classes thought that it was an effective way to practise listening and speaking skills. Both Zhao (1997) and McBride (2011) found that groups using slower speeds for English listening significantly improved listening comprehension within a shorter time than other groups that had used faster speeds. Additionally, the improvement of listening comprehension resulted from teaching listening approaches, such as bottom-up processing (McBride, 2011), or a combination the bottom-up skills and top-down skills, because the latter can compensate the former's insufficiency (Rost, 2002).

On the whole, the slower speed training method in teaching advanced English listening is one of the most effective teaching methods, which has again been confirmed by the findings of this study.

Thirdly, making full use of CALL environments and internet learning resources created authentic English language learning environments to enhance student motivation, in order to support their English study. Whether in classroom teaching or outside class, many authentic materials for English language learning from the internet were used, which were helpful in improving the student learning motivation in their English study, a finding that concurs with Wu and Wu (2008). One of the primary reasons is that "the use of authentic texts is now considered to be one way of maintaining or increase students' motivation for learning" (Guariento & Morley, 2001: 347). Authentic materials have also been regarded as a motivating force for a number of years (Gilmore, 2007).

Finally, using the TOEFL podcasts, students improved their listening and speaking abilities in out-of-class study, and developed their learner autonomy by doing so, as well. This finding has emerged from my own study (See Sections 6.5.3 and 6.5.5, Chapter 6; Section 7.4.3, Chapter 7). Similarly, Kavaliauskiene (2008) demonstrates that podcasts are a very useful for improving English (as a Foreign Language) listening skills. McBride (2009) employed the podcasts of authentic listening materials to enhance language learners listening

comprehension. Sze (2006) also found that the use of ELT (English Language Teaching) podcasts enabled his students to improve their English listening and speaking abilities, which was in line with Stanley's prediction (2005, cited in Sze (2006: 126)) that "podcasting as new technology has huge potential in enhancing second learners' listening and speaking skills". Sze recommends that second language teachers employ this new technology with imagination and creativity to develop student listening and speaking skills further. Although the research mentioned above on the use of podcasts just focused on the improvement of listening and speaking skills, their work did not make links with autonomous learning.

Another important issue is that learners need effective learning tools, such as a digital media player, to assist their learning, because these digital media players are now popular and convenient learning tools, both in China and elsewhere. Choi and Chen (2008) show that Taiwanese university students who participated in an MP3 training programme made significant improvement to their listening skills in comparison with those who did not use MP3s. As a result, their study revealed that the "MP3 was a cost-effective tool that could positively improve students' listening ability" (p193).

The important role for language teachers regarding the development of learner autonomy is to guide their learning strategies and instruct them to become successful autonomous learners in the Information age. Yang (1998) explored teaching students how to learn effectively and how to become autonomous learners in their own English study, by combining learning strategy instruction with the course content of second language acquisition. The course "enabled students to experience greater overall autonomy in learning" (Yang, 1998: 133). As for successful autonomous learners, Field (2007) argues that "true learner empowerment consists of the freedom to learn outside the teaching context and the ability to continue learning after instruction has finished" (p.30). In fact, this was also one of the goals I had set for my students. Although it was difficult to

complete it thoroughly, I encouraged them to make more effort to accomplish it.

8.3.2.4 The Comprehensive Learning Methods by Using CALL

Research Question 4 asked, “During the entire action research project, how can the students make use of CALL environments and the Internet learning resources autonomously to effectively enhance their listening and speaking abilities, under the guidance of their English teacher?” This is an overall research question, which examines the entire research project completely and comprehensively. The summary of the research findings in relation to Research Question 4 is shown in Section 7.5, Chapter 7. Additional things related to the entire research project are presented here.

First, pair and group work were used during the three cycles of the research project so that the students engaged in more interactive activities that could improve their communicative abilities in English, especially their speaking abilities. Another interactive pattern in classroom teaching was oral presentations. When one student gave an oral presentation to the class, the other students listened to him/her carefully. After the presentation, the presenter answered questions from the students. Then, the students offered comprehensive comments on his/her presentation, according to criteria for effective presentations. Of course, I gave some general overall comments at the end of each teaching activity about oral presentations. From my teaching practice in class, one of the most important findings was that the above interactive activities (oral presentations, pair and group work) in English language communication were very effective, again corroborating the findings of Lu, et al. (2010), whose study looked at interactive patterns in an English audio-video speaking class in CALL environments in China.

Second, learning motivation, learner autonomy and learning strategies are related to one another, and help support learners’ learning. According to

psychological research (Oxford, 2003b), one of the main characteristics of autonomous learners is high motivation. Learner motivation is closely connected with learner autonomy (ibid, p84).

Learning strategies, the specific steps or plans that learners use to enhance their learning, are frequently considered as a psychological gateway to second language learner autonomy. Lee (2010) shows a close relationship between learning strategies and language learning achievement. His research finding suggests that “the better understanding of language learning strategies for English teachers can help students to learn more successfully and develop their learning autonomy”(p132). Furthermore, Oxford (2003b) concludes that motivation was the key factor in learning strategy.

In summary, motivation is one of the most essential aspects to learning a foreign language successfully, which in turn is one of the leading factors in the use of learning strategies. The appropriate use of learning strategies helps successful language learning and the development of learner autonomy.

The third point is that autonomous learning with CALL environments increases learning efficiency and improves English language proficiency, especially listening abilities. This is another of the most important research findings in this study (see Chapter 7, Section 7.5.1). This again concurs with the literature. Pan et al (2008), for example, explored the development of student learner autonomy through networks in the combination of classroom teaching and autonomous learning. Their research indicates that those who were more active and autonomous in learning English with the full use of network environments improved their English comprehension more significantly than those who were not. Wu (2009) studied the combination of network-based multimedia environments and autonomous teaching and learning model. He found that network-based multimedia autonomous teaching and learning models could cater for most individual needs effectively, which shows the effectiveness of

network-based multimedia teaching and learning models in the development of learner autonomy.

In summary, the combination of modern technology and learner autonomy does increase learning efficiency.

Finally, the combination of learning motivation, autonomy, learning strategies and CALL environments led to success in English language learning. (See Section 8.3.1 in this chapter and Figure 8.1). This is one of the most important conclusions drawn from my research findings.

The four leading factors influencing student successful language learning are closely interrelated. First of all, language teachers play an important role in conducting an effective teaching in class. Obviously, they should begin by developing student interest and motivation in learning English, which is helpful for them to develop autonomous learning. Then, they use effective teaching approaches such as the student-centred approaches to improve their students' oral communicative abilities and teach them study skills. Simultaneously, the appropriate and effective use of learning strategies is related to interrelated factors, such as learner autonomy, learning styles and motivation (Rivera-Mills & Plonsky, 2007). Bouchard (2009) points out that "learner autonomy has been identified as one important factor in the success of mediated learning environments" (p.93). If learners are willing to learn actively at the beginning, they will have taken an important step to becoming autonomous learners. If a language learner is more autonomous, he/she may be more successful in learning a second or foreign language because learner autonomy has been found to positively correlate with successful second language learning (Rivera-Mills & Plonsky, 2007). It seems that the more important issue now is how to increase student autonomy through the effective use of learning strategies (*ibid*). In my teaching practice, I not only considered student demands and expectations of their course, but also their lifelong learning in the long run.

Guidance to the students on learning methods and autonomy were helpful to their continued learning and lifelong learning when they have no English courses or when they work. Finally, the systematic combination of learner autonomy and the effective use of modern technology can lead to successful language learning as mentioned above.

In summary, as long as learners can make full use of all the above four leading factors, such as learning motivation, learner autonomy, and learning strategies, along with the use of modern technology such as the CALL environments (or web-based supportive learning environments), correctly and appropriately, language proficiency will be enhanced and language learning will be successful.

Another important point to be emphasized here is that there are no short cuts to learn English successfully without hard work. If English language learners can make more effort to promote their learning motivation and autonomous learning, and use learning strategies and methods correctly, along with the aid of modern technology, they will make much greater achievements in their English study.

8.4 Implications of This Study

This study aimed to explore the English language learning experiences of university students using modern technology. Based on the research findings and my teaching practice, some practical and theoretical implications are as follows:

First, it is of great significance for me and the other TESOL teachers in China to use the correct and appropriate teaching approaches and strategies in classroom teaching. My teaching practice and action research findings suggest that the effective use of the student-centred approaches in the classroom play a vital role in improving my students' oral communicative abilities, such as listening

and speaking. Generally speaking, using a student-centred teaching approach can help students to develop autonomous learning; constructivism emphasizes the importance of learners actively participating in such a learning process (Chen, 2009). However, the majority of Chinese students have become accustomed to listening to teachers passively in English classes, which may lead to lower communicative abilities. Adopting a student-centred teaching approach can not only arouse student interests in learning English, but also improve their communicative abilities, especially speaking abilities, which is of great importance to Chinese students. Additionally, as various teaching activities in the student-centred class were undertaken, as well as using a multimedia computer teaching environment, my students became more interested and motivated in learning English, a trend which is prefigured in Neo and Neo (2010). Student motivation was encouraged, and their autonomous learning in class increased and this was helpful in supporting autonomous learning by CALL out of class. One of the most important insights from the above points in the Chinese context in using a student-centred teaching approach is that a desired or ideal 'object' in English language teaching is to improve communicative abilities in English language learning. For such an ideal 'goal' or 'object' to be reached depends on a series of learning activities undertaken by learners, according to activity theory (Lantolf, 2000).

Another most important point for that is to develop and promote autonomous learning within CALL learning environments is a central issue for English language teachers. With learners who are short of autonomous learning abilities, a language teacher's guidance and encouragement can play an important role in promoting their learner autonomy. From this study, the above two important points have enlightened language teachers, whose teaching actions should be 'changed' according to their learners' needs and requirements.

The second implication for language learners is that the systematic combination of learner autonomy, modern technology, CALL environments and internet

learning resources enable them to improve their language proficiency, especially their listening and speaking abilities. There are a large number of interesting learning resources on internet learning websites, so learners can learn something actively rather than passively. This is a constructivist approach in the learning process because it both enhances a learners' language and communicative skills in addition to fostering autonomous learning, social and interactive skills (Can, 2009). One of the most important findings in this study is that Chinese students can create web-based English learning environments in a Chinese context in order to support their language learning and improve their language proficiency effectively. Although these students study English in China, as long as they can make full use of such supportive web-based learning environments, they can quickly improve their language proficiency as well. These learning experiences set a good example to other English language learners in China and possibly to similar contexts in other countries.

Third, as far as the new theory in the field of TESOL is concerned, new English language “teaching and learning models” have been generated from my teaching practice and the research findings in this study. One of them is called “the Comprehensive Learning Methods by Using CALL” (See Section 8.3.2.4, also refer to Section 8.3.1 and Figure 8.1 above). The following is about the new teaching listening approach from an intermediate level to an advanced level (detailed in Chapter 6).

Generally speaking, English teachers use two different teaching approaches to teach advanced listening to intermediate level students. One is to teach them by using listening materials at a slow speaking rate. Although this approach may take learners a longer time to reach a higher level, it allows learners to gain more improvements in their listening comprehension (Zhao, 1997; McBride, 2007). The other approach is to teach using advanced listening resources at a faster speaking speed. As the speed is too fast for learners to understand, their self-confidence is at risk, which may lead to a lower learning efficiency - in most

cases, incomprehensible input. As some comprehensible input is much more effective than a lot of incomprehensible input (Lems et al, 2010), it has been clearly shown that the two approaches have their advantages and disadvantages in listening comprehension. From my teaching practice, I used a TOEFL podcast at a slower speech rate (135 wpm), followed by a faster speech rate (180 wpm). As some of my students pointed out, such a gradual and orderly learning approach helps learners to build their confidence in English listening so that their listening level can be improved step by step. The listening teaching only lasted 6 weeks, but the students made greater progress in their advanced listening comprehension. According to the post-test results of the TOEFL listening, the comprehension marks of both increased by more than 10%, in comparison with the pre-test results. No other approach to teach listening is as effective as this novel one in the English as a second language/foreign language literature. McBride (2011) is a recent example of research on English listening from an intermediate level to an advanced level, a study discussed in Chapter 6 (Section 6.5.2). My teaching approach to listening, however, had more effective results, compared with the other teaching approaches. This approach also contributes to TESOL listening research theories as well. Therefore, such a novel teaching and learning approach is well worth recommending to other English teachers and students in China, and possibly other countries.

8.5 Limitations of this study and suggestions for further research

There are a number of limitations of this study, as follows:

- 1) The duration of the teaching experiment was very short, just 18 weeks (one semester), 36 teaching hours in total. It would be valuable to spend at least two semesters (best of all, two academic years) in teaching the same students with

this kind of action research project, to see if the results continue to improve over this longer timescale and to see if other issues begin to arise.

2) The number of the research participants was low. As the number of the research participants in this study was just 102 students in total, and these came from just two classes in China learning English, the results of this study cannot be generalized in the way that results from a larger representative sample could. However, the findings that have emerged from the rich data collected from these two classes have led to insights that could be useful to other teachers. If possible, in further research, it is suggested that the number of research participants should be increased more than that number as a great range of responses to the innovative teaching might be discovered and impacts on sub-groups of the sample could be explored.

3) There were no speaking sections in the pre-test and post-test in each Action Research cycle. The principal reason was that it was difficult to assess the students' speaking abilities objectively, unlike the listening test. As for the same student or the identical speaking levels of students, different examiners will give different marks. In spite of these difficulties in the evaluation of the speaking tests, it is suggested that there should be oral tests in similar action research projects in the further research. It is better to invite some rich experienced oral English examiners to evaluate students' speaking abilities in order to ensure the higher reliabilities and validities of the pre- and post-test scores.

4) There was no comparison between the different levels of students at the same university or at other universities. As mentioned above, it is better to have a higher number of participants in such a research project and this would allow a comparison between students at different levels at the same university, or between the two different levels students at two different universities. In addition, this study belonged to individual teacher action research. For future research, different researchers or universities can cooperate with each other. Perhaps, the

reliability of the findings may in such a way be increased.

The limitations to this study should be acknowledged when conducting similar research projects in the future, so that the quality of research projects can be guaranteed.

8.6 Significance of This Study

1) In this study, second language teaching and learning theories have been put into teaching practice appropriately and correctly so that the English proficiency of learners could be enhanced. For example, I have found two new teaching and learning models within CALL environments that enabled intermediate level learners to improve to advanced listening levels within a shorter time and achieve their learning outcomes successfully, especially in a Chinese context. Therefore, the combination of the new teaching and learning models along with SLA (Second Language Acquisition) theories allows learners to gain a good command of their target language (such as English).

2) In this study, action research as a general research methodology was used appropriately in English language teaching practice in China so that the teaching practice could be changed and improved. One of the most important points is that the quality of the English language teaching has been improved. Meanwhile, the learners' experience in this study will be helpful and useful to other TESOL teachers not only in China but also in the other countries.

3) The systematic combinations of modern education concepts, such as learner autonomy, and modern technology push English language learners to enhance their English language proficiency and their oral communicative abilities. The improvement of learners' listening and speaking abilities in English language learning may help solve learning problems in English language learning, such as

“deaf and dumb English”, which has been one of the thorniest issues in the field of TESOL in China for many years.

4) This study contributes to the literature on English language teaching and learning research, CALL research and applications. New knowledge and theories in education have been generated by this study: an aim of undertaking research is to create new theories and knowledge (Whitehead & McNiff, 2006).

On the whole, this study makes some positive and significant contributions to the research into TESOL and CALL, as well as practical and theoretical applications.

8.7 Summary of Chapter 8

In the final chapter of this thesis, I described the purposes of this study and the research processes briefly at the beginning. I then summarized the major research findings in this study in relation to the research questions and to the literature reviewed. Several limitations of this study were also pointed out. Additionally, I pointed out some implications and made suggestions and recommendations for future English language teaching and educational research. More significantly, two new English teaching and learning models using CALL or technology-enhanced learning environments have been generated from this study. Finally, the significance of this study has been emphasized. It is believed that this study will have a positive far-reaching influence on future English language teaching and learning in China and possibly in other non-English speaking countries.

Appendices

Appendix I: One example of teaching speaking by the use of brainstorming

The follow topic is to be discussed as one of group work teaching activities, from one of independent essay topics:

TOEFL ESSAY TOPIC 73:

Some people say that computers have made life easier and more convenient. Other people say that computers have made life more complex and stressful. What is your opinion? Use specific reasons and examples to support your opinion.

Firstly, I asked the students to read the question very carefully. I showed them an example:

(If) You agree: Computers have made life easier and more convenient.
(Therefore)Your Idea: Computers have brought more advantages than disadvantages to our life. (thesis statement)

Secondly, I asked them to plan their writing by using brainstorming method after I had shown them an example.

Paragraph 1: Introduction

Paragraph 2: Computers make our life easier and more convenient. (Topic Sentence: main idea of this paragraph)

Some examples to support the main point in this paragraph:

(A). It is very convenient to book e-tickets online such as bus tickets, plane tickets and sport tickets.

(B). Online shopping: you can buy the things that you like or you are interested in more easily and more conveniently. Therefore, you can save a lot of time and energy by using online shopping.

(C). The internet Banking: you can deal with exchange business online such as transferring the money to the others.

(D). Online library: you read a large number of update e-books or articles or research papers and so on from the online library, so you get much more resources than the traditional library.

Then, I asked the students to work in group together to discuss the possible

main ideas of the other paragraphs in addition to the examples to support the main ideas in each paragraph by using the brainstorming method.

The following are the students' outlines and examples to support the main points:

Paragraph 3: (computers can) have communication more convenient: (examples: online communication (QQ, MSN, SKYPE (save International phone fee)); E-mail (Instantly, Much faster than by post); Forum (express different ideas from different people); blog....)

Paragraph 4: (computers can) assist/improve your learning, esp. foreign language learning: (examples: CD/DVD; the internet learning resources; online TV/radio; online chat/talking; learning forum.....)

Paragraph 5: traditional modes of education will be changed (examples: classroom learning---online learning; e-learning; Long-distance education; lifelong learning (possible)....)

Conclusion: brief summary; point out one/two disadvantages; to conclude that the advantages outweigh the disadvantages.

Appendix II: The speaking topic on advertising and its sample speaking outline

The speaking topic (from a TOEFL coaching book (Zhong & Sullivan, 1995:301)):

Advertising is common throughout the world. Some people feel that advertising is generally helpful and others feel that it is generally harmful. Discuss your ideas of the good and bad effects of advertising, and decide whether you think it is generally helpful or harmful. Use specific examples to support your point of view.

The sample speaking outline:

Main ideas	Supporting details
Advertising comes in many forms	TV....
Advertising is helpful	Give me information about products or the other information related to politics and religion.....
Advertising is harmful	1).Disturb me -----too loud on TV 2)..... 3).....
I think that advertising is generally harmful.
Possible words/phrases in use(only for reference): Fake; sham publicity; commodity; deceive (v.); deceitful (adj.); exaggerate (v.)=overstate; exaggeration(n.); unqualified products; discount; effect of celebrities; boastful description	

Appendix III: Homework 3 (Make an oral presentation)

Date: Monday, 17 May 2010

Requirements: 1). Presentation Time: 5-6 minutes (Words: about 300 words)

2). The topic that you are interested in is related to academic area (or your major) or business area or your daily life. For example, you can introduce a product or a company that you are very familiar to. Or: you can introduce a new research finding in scientific technology. Or: Introduce one of the most effective learning methods in your English study or in the other subjects.....

3). Use Power-point to show the audience the main outlines (key words or sentences) relevant background knowledge or relevant pictures or the other relevant materials:

4). The structures of the presentation: Part 1: Brief Introduction, including the main purpose of the presentation; Part 2: Main contents of the presentation. Part 3: Closing (Summary); Give a summary of the presentation.

5). Make sure to give an effective presentation, which is brief, clear, logical, along with appropriate body language such as gestures.

Appendix IV: Assessment Form of an Effective Presentation (Comfort, 1997:56)

		Poor	Satisfactory	Good	Excellent
System	General organization				
	Introduction				
	Ending				
	Connections				
	Relevance				
	Length				
	Level				
Delivery	Tempo				
	Volume				
	Expressiveness				
	Articulation				
Language	Sentence length				
	Register/style				
	Linkers				
	Emphasizers /minimizers				
Manner	Audience contact				
	Interest				
	Assurance/ Confidence				
Body Language	Stance and posture				
	hands				
	Eye contact				
	Facial expression				
	Appearance				
Visual aids	Number				
	Design				
	Relevance				
	Use				
Overall Impression	-----				

Appendix V: Final Assignment (Term Paper)

Requirements:

- 1). Write a paper about your English language learning experience by the use of the modern technology (e.g.: the computer, the internet, MP3/4).
- 2). The number of the Words: around 500 words, at most 1,500.
- 3). Submission date (Deadline): 5:00 PM, Wednesday, 21 July 2010. Please send the WORD attachment to the English teacher's email: liuxh863@hotmail.com

Please NOTE:

- 1). The following outlines are only for reference to you. It is very important for you to propose some novel ideas on relevant topics. Therefore, creativity will be encouraged in your writing.
- 2). Another important thing that you should do is to tell a true and reliable story.
- 3). Please do not plagiarise others' articles or papers from the internet. Otherwise, you will fail in this course !!!

Outlines:

Part I: Briefly introduce your English learning experience in the first 3 semesters (first year and the 1st semester in the second year) in this university by the use of the modern technology (computers, the Internet, MP3/4) autonomously. If necessary, it is better to compare with your English study in your middle school.

Part II: Mainly focus on your learning experience THIS SEMESTER (2nd one in the 2nd Year).

- A). How do you learn English autonomously outside of class by the modern technology?
- B). How do you use the Internet learning environments and resources (including Northeast University BLACKBORAD web resources) effectively to enhance your English proficiency, especially listening and speaking skills?
- C). How do you perform in class? (actively or passively?) why? Please give specific reasons.
- D). Did you often get access to the websites in learning English that the English teacher recommended to you? Why? or why not? (Please give specific reasons).
- E). Did you practise speaking outside of class with your peers, or your classmates, or your Chinese friends? Have you got any chance to communicate

with native speakers of English such as English people and American people? Have you been to an “English Corner” (in the University or in the city) to practise speaking?

F). As far as the Chinese students are concerned, they have done much more listening practice than speaking practice. To what extent, do you think how helpful it is to improve your speaking level?

G). Do you feel it very satisfactory to develop your learner autonomy by the use of the modern technology? Please give the specific details.

H). To what extent, do you feel how satisfactory for you to have made greater progress in your English proficiency, especially in listening and speaking? Please give the specific details.

I). To what extent, do you feel how useful/helpful your English teacher’s suggestions or guidance on your English study are to support your learning or improve your English proficiency? Please give the specific details.

Part III: Summary and reflections

A). Briefly summarize what you have achieved in learning English by the use of the modern technology this semester.

B). Write down your reflections from what you have learnt and your good experience in learning English by the use of the modern technology.

C). Because of no English lessons in the last two years in your degree course, would you like to continue to learn English by self-study? If so, please tell a brief plan.

Appendix VI: The Pre-questionnaire at the start of AR Cycle One

(Note: All the following questionnaires, including the other attached questionnaires are actual questionnaires conducted in the actual teaching practice, but in the data analysis of the thesis, some of them have been chosen to be analyzed and the order of the questions is different from original one. The follow-up interview questions are the same as those of the questionnaires).

I. To what extent do you agree or disagree with each of the following statements about your interests and motivation in learning English. Please check the appropriate box and then choose your suitable choice (from (A), (B), (C), (D) and (E)).

(A)(The Weakest) <----->(E)(The Strongest)

Statements about your interests and motivation in learning English:	Strongly disagree (A)	Disagree (B)	Unsure (C)	Agree (D)	Strongly Agree (E)
1. I am interested in learning English.					
2. Learning English well will be beneficial for my future job-hunting.					
3). I study English in order to pass the examination of the compulsory course and obtain the graduation certificate of the college or the university degree.					
4). Learning English will be helpful in studying abroad.					
5). Learning English will be helpful in working abroad.					
6). Learning English will be helpful in learning advanced science and technology from the western countries such as the UK and the USA.					
7). I would like to learn English because I like to learn English and American cultures.					
8). Others (Please specify)_					

II: Investigate the students' learning problems in English study. (If necessary, you can choose MORE THAN ONE choice).

- 9). When I learn English vocabulary, my trouble is that _____.
- () A. I do not like to memorize the new words.
- () B. I sometimes forget the words after I have learned them if I do not review them.
- () C. I can remember the Chinese meanings of the words, but I cannot use them appropriately and correctly in different contexts.
- () D. I can remember the Chinese meanings of the words, but I cannot spell them correctly.
- () E. I can memorize the words for a few hours, but after that I will forget them completely when I see them next time.
- () F. Others (Please specify)_____.
- 10). My problem in listening is:
- (...)A. I can understand nothing in English when I am listening to a dialogue or a lecture.
- (...)B. When I am listening to a dialogue or a lecture, I can know the meanings of just a few words, but I cannot understand anything about the whole dialogue or a lecture clearly.
- () C. I can understand English spoken by Chinese, but I can not understand English spoken by native speakers of English.
- () D. I can understand a speaker at a slower speed more than the speaker at a normal speed.
- () E. Others (please specify them)_____.
- 11). My problem(s) in English speaking is (are):
- () A. I do not like to speak English because I am afraid of being laughed at my poor pronunciation.
- () B. Although I can speak most of the words correctly, I can not speak the sentences correctly.
- () C. I can just talk about some simple daily conversation, but I cannot talk about the other topics such as politics and economy deeply.
- () D. Others (please specify them)_____.
- 12). General comment(s) on my listening and speaking abilities is (are):
- () A. Both my listening and speaking abilities are very bad.
- () B. Both listening and speaking abilities are just so-so.
- () C. My Listening ability is good, but speaking is bad.
- () D. Listening ability is bad, but speaking is good.
- () E. Others (please specify them)_____.
- 13). The other problems in learning English (please specify them)_____.

III: Investigate the students' learning English by the use of technologies. (If necessary, you can choose MORE THAN ONE choice).

14. What do you do the following when you are using the computer or the Surf the Internet?

(please choose more than ONE choice):

- () A. I watch online TV news.
- () B. I watch learning programs online, especially English study programs.
- () C. I like to play games online.
- () D. I watch CD/DVD movies on the computers.
- () E. I like to listen to the live news from the Internet.
- () F. I like to listen to the radio programmes from VOA, or BBC or the other radio

stations in English.

()G. I use the computer to chat with my friends or the other people.

()H. I use the Internet rich resources to practise my English listening and speaking.

()I. I like to download some English listening materials, then listen to them by the use of the computer or MP3/4.

()J. Others (please specify them)_____.

15 Do you have any other electronic equipment such as MP3/4?

()A. Yes.

()B. No.

If your answer is (A).YES, please choose ONE or MORE from the following choices.

()C. I use MP3/4 to mainly listen to the music.

()D. Sometimes I use MP3/4 to listen to the music; sometimes I use it to practise English listening.

()E. I use MP3/4 to mainly learn English, especially practise listening.

()F. I use MP4 to mainly watch English movies.

()G. I use MP4 to mainly watch Chinese movies.

()H. Others (please specify them)_____.

V. Please answer the following questions briefly.

16. What are your main problems in learning English at present?

17. What do you think of the technology such as the Internet and MP3/4 in learning English? how do you use it to improve your English proficiency, especially in listening and speaking autonomously?

18. Can you give some advice to your English teacher(s) on how to improve English teaching such as listening and speaking teaching? What do you want to learn in this course "Business English"?

Appendix VII: The Questionnaire at the end of AR Cycle

One

I. Select one of the choices below in each question (Put a tick (√) before the capital letter) or answer the questions briefly as required:

1. How do you listen to this podcast? [Please choose the relevant statement(s)]

(A). Save to an MP3 player and listen later

(B). Save to the Laptop/the computer and listen later

(C). Listen realtime online without saving

(D). The others(please specify).

2. When did you listen to this podcast about (business) English [please choose the relevant statement]?
- (A). My free time such as lunch and supper break.
 - (B). Before sleep.
 - (C). After class or during my self-study time
 - (D). when I take a bus or train
 - (E). At the weekend
 - (F). The others (please specify).
-
3. How do you study the topics on this podcast?
- A. Read the article or story first, and then listen to it.
 - B. Read and listen to the article simultaneously online.
 - C. Download the audio file to a MP3/4 player and I will listen to it when I am convenient in my spare time. Then, I will check my listening comprehension.
 - D. The others (please specify).
-
4. How long do you listen to a topic from this podcast? (T=Time(how long))
- A. $T < 0.5$ hour
 - B. $0.5 \text{ hour} \leq T < 1$ hour
 - C. $1 \text{ hour} \leq T < 1.5$ hours
 - D. $1.5 \text{ hours} \leq T < 2$ hours
 - E. $2 \text{ hours} \leq T < 2.5$ hours
 - F. $T > 2.5$ hours
5. To what extent, do you think that the audio files on this podcast are difficult? (D refers to the index of the difficulty).
- A. $0 < D < 0.2$
 - B. $0.2 \leq D < 0.4$
 - C. $0.4 \leq D < 0.6$
 - D. $0.6 \leq D < 0.8$
 - E. $0.8 \leq D < 1$
6. To what extent, do you think that the audio files on this podcast help you improve your oral English (English listening and speaking)? (R represents the rate)
- A. $0 < R < 20\%$
 - B. $20\% \leq R < 40\%$
 - C. $40\% \leq R < 60\%$
 - D. $60\% \leq R < 80\%$
 - E. $80\% \leq R < 100\%$
7. To what extent, do you think that the articles/stories/writing comments help you improve your writing skills in (business) English? (R represents the rate)
- A. $0 < R < 20\%$
 - B. $20\% \leq R < 40\%$
 - C. $40\% \leq R < 60\%$
 - D. $60\% \leq R < 80\%$
 - E. $80\% \leq R < 100\%$

8. To what extent, do you think that the website on (business) English podcasts helps you learn English autonomously out of class? (R represents the rate)

- A. $0 < R < 20\%$
- B. $20\% \leq R < 40\%$
- C. $40\% \leq R < 60\%$
- D. $60\% \leq R < 80\%$
- E. $80\% \leq R < 100\%$

II. Open questions:

- 9. Please tell a few reasons why you like or dislike the website on business English podcasts. Or why you like or dislike one of the learning website that you got access to.
- 10. From your learning experience, how does podcast/podcasting or the Internet help you enhance your listening and speaking skills in English?
- 11. What do you think of the listening test (TOEIC) that the teacher used? Have you heard of it before?
- 12. Is it (TOEIC) easy or difficult to you? Did you understand all the instructions or questions? What did you find it easy or difficult to understand?
- 13. Please tell me something related to the pre-test which went well in the teaching. Or something that you have found is less helpful in the teaching.
- 14. What are your main learning problems in English language basic skills after you have learned the course for 6 weeks?

Appendix VIII: The Questionnaire at the end of AR Cycle Two

I. Select one of the choices below in each question (Put a tick (✓) before the capital letter. Or: answer the questions briefly as required:

1. How do you listen to the English podcasts that you have downloaded? [please choose the relevant statement(s)]
- () (A). Save to an MP3/4 player and listen later
 - () (B). Save to the Laptop/the computer and listen later
 - () (C). Listen realtime online without saving
 - () (D). The others(please specify).

2. How do you watch the English videos (films/cartoons/TV programmes...)that you have downloaded from the Internet? [please choose the relevant statement(s)]

- (A). Save to an MP4 player and watch later
- (B). Save to the Laptop/the computer and watch later
- (C). Watch online without saving
- (D). The others(please specify).

3. What kind of podcasts do you like downloading and listening very much (including online listening)?(you can choose more than one choice).

- (A). English songs and music
- (B). Audio book(s) including stories and novels.
- (C). College English Test (Band 4 and 6) (listening tests) in China
- (D). TOEFL listening Tests, including IBT(Internet-Based Test)
- (E). IELTS Listening Tests
- (F). Radio programmes such as BBC and VOA programmes.
- (G). English news from BBC and VOA or the others such as CNN
- (H). The others(please specify).

4. What kinds of English films or movies do you like downloading and watching very much (including online watching)?(you can choose more than one choice).

- (A). English films or movies only with Chinese caption.
- (B). English films or movies only with English caption.
- (C). English films or movies with both Chinese and English captions.
- (D). English films or movies with no captions.
- (E). Chinese films or movies with English caption.
- (F). The others(please specify).

5. What kinds of animated cartoon do you like downloading and watching very much (including online watching)?(you can choose more than one choice).

- (A). English animated cartoon only with Chinese caption.
- (B). English animated cartoon only with English caption.
- (C). English animated cartoon with both Chinese and English captions.
- (D). English animated cartoon with no captions.
- (E). Chinese animated cartoon with English caption.
- (F). The others(please specify).

6. What kinds of the other videos do you like downloading and watching very much (including online watching)?(you can choose more than one choice).

- (A). College English Test (Band 4 and 6) (Tutoring)
- (B). TOEFL Tutoring
- (C). IELTS Tutoring
- (D). TV programmes from BBC or from the others such as CNN.
- (E). English TV news from BBC or from the others such as CNN.
- (F). Western cultures, or the UK History or the USA History from the English language learning websites.
- (H).The others(please specify).

7. Which English language learning website(s) do you like very much to get access to? (you can choose more than one choice).

- (A). www.businessenglishpod.com
- (B). www.bbc.co.uk
- (C). www.cnn.com
- (D). www.bbc.co.uk/learningenglish
- (E). <http://www.ebigear.com> (Chinese website)
- (H)The others(please specify).

8. How often do you enter **The Course Learning Website of the University (Blackboard Academic Suite)**?

- (A)Once a day.
- (B)once every two days
- (C)Once every three days.
- (D). Once every four days.
- (E). Once a week
- (H). Twice a week
- (I). The others(please specify).

9. What materials do you like very much on **The Course Learning Website of the University (Blackboard Academic Suite)**? (you can choose more than one choice).

- (A) the audio materials (CD1—3)of the course book (*Cambridge Business Benchmark (advanced)*).
- (B) *Communicating in Business* (published by Cambridge University press in 2004) (ebooks (Students'+Teachers')+audio materials)
- (C) *Target Scores* (TOEIC Preparatory book)(Cambridge University press 2007)

(Tests+Answers+audio materials)

() (D). BBC Business English (MP3 Audio materials + Transcripts)

() (E). TOEFL listening podcasts + IELTS 5 (Cambridge University Press 2006, including audio materials).

10. How long do you spend in learning English by the use of the Internet (including BLACKBOARD WEB)/the computer/MP3/4 **EVERY WEEK?** (T=Time (how long))

() (A). $T < 1$ hour

() (B). $1 \text{ hour} \leq T < 2 \text{ hours}$

() (C). $2 \text{ hours} \leq T < 3 \text{ hours}$

() (D). $3 \text{ hours} \leq T < 4 \text{ hours}$

() (E). $4 \text{ hours} \leq T < 5 \text{ hours}$

() (F). $5 \text{ hours} \leq T < 6 \text{ hours}$

() (G). $6 \text{ hours} \leq T < 7 \text{ hours}$

() (H). $7 \text{ hours} \leq T < 10 \text{ hours}$

() (I). The others (please specify)

11. What type of listening materials do you prefer in English?

() (A). English Audio materials without pictures/photos.

() (B). English Video materials only with English captions.

() (C). English Video materials only with Chinese captions.

() (D). English Video materials with both English and Chinese captions.

() (E). English Video materials with no captions.

() (F). The others (please specify)

12. How satisfied are you with your English proficiency in LISTENING since the term began?

() (A). Very dissatisfied.

() (B). Dissatisfied.

() (C). I am not sure about it.

() (D). Satisfied.

() (E). Very satisfied.

13. How satisfied are you with your English proficiency in SPEAKING since the term began?

() (A). Very dissatisfied.

() (B). Dissatisfied.

() (C). I am not sure about it.

() (D). Satisfied.

() (E). Very satisfied.

14. How satisfied are you with your English proficiency in READING since the term began?

() (A). Very dissatisfied.

- ()B. Dissatisfied.
- ()C. I am not sure about it.
- ()D. Satisfied.
- ()E. Very satisfied.

15. How satisfied are you with your English proficiency in WRITING since the term began?

- ()A. Very dissatisfied.
- ()B. Dissatisfied.
- ()C. I am not sure about it.
- ()D. Satisfied.
- ()E. Very satisfied.

16. Overall, how satisfied are you with your English language learning since the term began?

- ()A. Very dissatisfied.
- ()B. Dissatisfied.
- ()C. I am not sure about it.
- ()D. Satisfied.
- ()E. Very satisfied.

II. Open Questions: Read the following questions carefully and then answer them clearly and briefly. If necessary, please answer them in detail.

17. Please list at least two of your favourite English language learning websites. Please explain the reasons why you like them so much, then please tell the teacher how helpful they make you improve your listening and speaking skills.

18. How much have you read and listened to the materials posted by the teacher on **The Course Learning Website of the University (Blackboard Academic Suite)**? Please list two of them and give the reasons. Please tell the teacher how helpful or how useful they are to improve your listening and speaking abilities. Do you want to get more study materials on the WEB? What kinds of them (If possible, please specify)?

19. Do you think whether it is useful and helpful for students to give oral presentations in class? Do you think that making an oral presentation can improve the students' spoken English and develop their autonomy? Please give the specific reasons in detail.

20. Do you feel what progress you have made in your listening and spoken English since the new term began?

21. Do you think which way is more effective to develop learners' basic language skills (listening, speaking, reading and writing), using computer software/internet/MP3 or the traditional ways such as using tape recorders or repeaters? Why? Please give the specific reasons in detail.

22. Please tell the teacher about the advantages and disadvantages of learning English

out-of class using computers (the Internet), compared with the other ways such as tape recorders? How do you use these advantages of the Computers (the Internet) to improve your English skills, especially listening and speaking?

23. Answer the following questions about IELTS Listening Test:

A). Have you heard of it before?

B). Is it (IELTS) easy or difficult to you?

C). Did you understand all the instructions or questions?

D). What did you find it easy or difficult to understand?

E). Please tell the teacher something related to the pre-test (the 1st time IELTS TESTING) which is more helpful in the teaching. Or something that you have found is less helpful in the teaching.

24. What are the main problems in your English study? Do you have any ideas on how your English listening and speaking abilities could be improved through the use of computers (the Internet/MP3/4) autonomously?

25. What else do you require the teacher to do in class? Could you please give the teacher some suggestions on how to reform the teaching in the last month?

Appendix IX: The Questionnaire at the end of AR Cycle

Three

I. The students' evaluation of websites in learning English Language Learning

1. What kinds of the websites do you like to get access to in learning English?(You can choose more than one choice if necessary).

(A). English podcasts can be downloaded or online listening.

(B). English films or the other English videos can be downloaded or online watch.

(C). English learning programs videos or the other videos can be downloaded or online watch.

(D). There are so many learning authentic resources (Listening, speaking, reading, writing, vocabulary, grammar, and so on) without Chinese translation, but some explanations of the some difficult questions in English.

(E). There are so many learning authentic resources (Listening, speaking, reading, writing, vocabulary, grammar, and so on), but some explanations of the some difficult questions in

Chinese.

- (F). There are music, songs and games to be downloaded or be played online.
- (G). There are some forums to discuss the learning methods or share the good learning experience online.
- (H). There are test banks or test centres to measure your English proficiency online or be downloaded.
- (I). The others (please specify).

2. Which of the following websites used in learning English do you like very much? (You can choose more than one choice if necessary).

- (A). www.businessenglishpod.com
- (B). www.bbc.co.uk (including: <http://www.bbc.co.uk/worldservice/learningenglish/>)
- (C). www.cnn.com
- (D). www.ebigear.com
- (E). <http://www.putclub.com/>
- (F). <http://www.hjenglish.com/>
- (G). <http://www.listeningexpress.com/>
- (H). The others (please specify).

3. In Question 2, which aspect in the websites that you have chosen attract your attention firstly?

- (A). visual (video materials)
- (B). text (or written articles in English)
- (C). Audio files
- (D). The others (please specify).

4. Which websites have the best listening activities, which are suitable to your English level? (You can choose more than one choice if necessary).

- (A). www.businessenglishpod.com
- (B). www.bbc.co.uk (including: www.bbc.co.uk/learningenglish)
- (C). www.cnn.com
- (D). www.ebigear.com
- (E). <http://www.putclub.com/>
- (F). <http://www.hjenglish.com/>
- (G). <http://www.listeningexpress.com/>
- (H). The others (please specify).

5. In Question 4, which aspect in the websites that you have chosen helped you improve

your listening and speaking skills? (You can choose more than one choice if necessary).

- (A). visual (video materials)
- (B). text (or written articles in English)
- (C). Audio files
- (D). The others (please specify).

6. Which websites are very useful to you to learn English autonomously after class? (You can choose more than one choice if necessary).

- (A). www.businessenglishpod.com
- (B). www.bbc.co.uk (including: www.bbc.co.uk/learningenglish)
- (C). www.cnn.com
- (D). www.ebigear.com
- (E). <http://www.putclub.com/>
- (F). <http://www.hjenglish.com/>
- (G). <http://www.listeningexpress.com/>
- (H). The others (please specify).

7. Which is very important when you choose an English learning website for listening? (You can choose more than one choice if necessary).

- (A).The content of the listening comprehension is in an authentic context (e.g. real-life conversation, news, story, or academic speeches).
- (B). In listening comprehension, the pronunciation is recognized by most English speakers in the specific area that the website developer is from (note: pronunciation is different between the British/Irish and American/Canadian versions of speech).
- (C) Multimedia-aided listening materials are provided (e.g. pictures, colours, or videos).
- (D). The others (please specify).

8. Which is very important when you choose an English learning website for speaking? (You can choose more than one choice if necessary).

- (A). Authentic examples of sound links are adequately provided.
- (B). Examples of interactive conversation are provided.
- (C) In the speech design, online learners can communicate with each other in English.
- (D).Online feedback is given based on the recorded work of the learners (e.g. learners' frequent mistakes in pronunciation are pointed out).
- (E). The others (please specify).

9. Which is very important when you choose an English learning website for reading? (You can choose more than one choice if necessary).

- (A). Articles are categorized based on their characteristics (e.g. the topics of the articles).

(B). Through various interesting tasks, learners can self-evaluate their reading abilities. (e.g. through a cloze test, multiple-choice test, or crossword).

(C) For new vocabulary, definitions and explanations are provided.

(D). Additional reading resources are provided for learners (e.g. related reading vocabulary, articles, websites).

(E). The others (please specify).

10. Which is very important when you choose an English learning website for writing? (You can choose more than one choice if necessary).

(A). Users are encouraged to communicate in English on the discussion board.

(B). Users can discuss the composition with online advisers (e.g. through email or discussion forums).

(C). A guided composition activity is provided (e.g. writing with pictures or filling in the dialogue of a comic).

(D). Writing resources related to the writing topic are provided (e.g. vocabulary, phrases, sentence structures, or related topics).

(E). Users can view writing from peers, famous writers, journalists, or authors of magazine articles.

(F). The others (please specify).

11. From the above mentioned criteria for language four basic skills (Questions 7—10) to choose English learning websites, which of the following websites would you like to recommend to your peers or the other college students? (You can choose more than one choice if necessary).

(A). www.businessenglishpod.com

(B). www.bbc.co.uk (including: www.bbc.co.uk/learningenglish)

(C) . www.cnn.com

(D). www.ebigear.com

(E). <http://www.putclub.com/>

(F). <http://www.hjenglish.com/>

(G). <http://www.listeningexpress.com/>

(H). The others (please specify).

II. TOEFL podcasts website (<http://www.eslpod.com/toefl/>) investigation:

Answer the following questions (Q12----14)

12. The following is one of the characteristics of the website for TOEFL podcasts:

“The teaching approach is very different from the other courses or the books. Here, the learners will listen to English conversations using the same words or phrases as a native

speaker uses, but more slowly and clearly. This way, they can actually understand and pick up these words. After a couple of times listening to the podcast, they will be able to comprehend up to 80-90% of it. This is a much better and more efficient use of their time. As their English gets better and better by listening, they will be able to understand what native speakers are saying when they speak fast.”

Do you think that it is an effective way or a useful way for you to practise listening and speaking skills? Please give some specific reasons.

13. Another characteristic of the website for TOEFL podcasts is: *The famous expert from one of the USA universities explains the dialogue or the lectures slowly and clearly in detail.*

Do you think that it is useful for you to learn English autonomously after class? Please give some specific reasons.

14. How helpful is it to improve your listening and speaking level on the whole?

III. Open Questions (Q15---24): Please answer them briefly

15. In your learning experience, which websites are very useful to you to develop your learner autonomy?

16. How do you understand the western learning concept “learner autonomy”? How do you learn English autonomously by using the computer or the Internet or MP3/4 after class?

17. Do you like to give an oral presentation in the front of the whole class? Why or why not? Please give some specific reasons.

18. Do you perform actively in class? Why or why not? Please give some specific reasons.

19. How do you do Cooperative learning with other students in class or out of class?

20. What types of classroom teaching is effective one? The teacher-centre methods, the technology-centre methods (e.g. use computers to listen to English, or watch English video) or the student-centre teaching methods? Or sometimes the combinations of the above three or the above two methods together.

21. TOEFL test (pre-test) investigation (please answer the following questions briefly):

(A). Is it (TOEFL) difficult to you?

(B). Did you understand all the instructions and questions?

(C). What part did you find it easy to understand?

(D). What part did you find it difficult to understand?

(E).Please tell the teacher something related to the pre-test (the 1st time TOEFL TESTING) (1). which is more helpful in the teaching. (2). something that you have found is less helpful in the teaching.

22. How do you accept the other referential experience in learning English by the use of the Internet or the computer in order to enhance your learning?

23. Could you give the English teacher some suggestions on how to reform English language teaching by using the computer/the Internet in class in the future?

24. After the post-test (TOEFL listening), how great progress did you feel that you have improved your listening proficiency in English by using the TOEFL podcast website?

Appendix X: A sample of data analysis trail

The following sample is about the thematic analysis trail in this research project. The example cited here is from Section 7.5.1.2 (Promotion of learner autonomy by using CALL in Semester Four) (mainly see Table 7.17), Chapter 7.

The stages to conduct thematic analysis are mainly based on Braun and Clarke (2006) in addition to Norton (2009), which describes them in detail as follows:

Stage 1: Data familiarity

The raw data is from the students' final assignments (see Appendix V). I read and reread all the assignments a couple of times while I was taking notes about some main points or ideas in relation to the research questions. For example, here I just focused on the development of learner autonomy by using modern technology. The students' relevant ideas or their good learning experiences were noted down (see Table 7.17).

Stage 2: Generating initial codes

I coded some interesting or relevant features of the raw data systematically

across the entire data set and then sorted out the data relevant to each code.

Stage 3: Searching for themes

I collated the codes into some potential themes such as teachers' guidance and online learning (see Table 7.17). In addition, it is very helpful to use tables to list the students' similar ideas or comments or experiences so that I could summarize their main points or experiences exactly (see an example in Table Appendix X (1)).

Table Appendix X (1): The teacher's guidance and suggestions are really useful and helpful

Original Raw Data (from the Students' Assignments)	Similar comments from Class One	Similar comments from Class Two
"I feel my English teacher's suggestions and guidance on my English study are very useful and helpful. They have helped me take a short cut in learning English. The teacher advised us to go to the learning website of Business English as it was rich in resources, and use with the content of the textbook. It truly helps improve my listening abilities." (S3, Class One)	S8;S12;S15; S21; S39;S46	S18;S20;S44; S56
"Our English teacher indeed brings me a new horizon, a new view and a new space in learning English. Without his help and guidance, I could not make so great progress in learning English so quickly." (S5, Class Two)	S36; S42	S17;S24;S27;S48

Stage 4: Reviewing themes

I checked in the themes work in relation to the coded extracts and the entire data set, especially the set of 'similar comments' as identified, for example, in Table Appendix X (1). This generated the themes related to the research questions.

Stage 5: Defining and naming themes

I identified the "essence" of what each theme is about. For each individual theme, I conducted and wrote some detailed comments (or analysis) in relation to the

research question (RQ4 here) (see Table 7.17).

Stage 6: Producing the report (Braun & Clarke, 2006) or Presenting findings (Norton, 2009)

In this stage, general analysis on the selected extracts in relation to the research question, were provided. The finding according to the detailed analysis have been discovered. The conclusion was also drawn from the analysis: “On the whole, from the above students’ learning experiences, they not only developed autonomous learning but also improved their English proficiency, especially speaking, using technology”.

In short, the Braun and Clarke’s (2006) recommended stages to conduct thematic analysis are really useful to help researchers understand and make deeper sense of the qualitative data, which will lead to the generation of the research findings by using interpretative approaches.

Appendix XI: The ethical certificate of this research project



Graduate School of Education

Certificate of ethical research approval

STUDENT RESEARCH/FIELDWORK/CASEWORK AND DISSERTATION/THESIS

You will need to complete this certificate when you undertake a piece of higher-level research (e.g. Masters, PhD, EdD level).

To activate this certificate you need to first sign it yourself, and then have it signed by your supervisor and finally by the Chair of the School's Ethics Committee.

For further information on ethical educational research access the guidelines on the BERA web site: <http://www.bera.ac.uk/blog/category/publications/guidelines/> and view the School's statement on the 'Student Documents' web site.

**READ THIS FORM CAREFULLY AND THEN COMPLETE IT ON YOUR
COMPUTER** (the form will expand to contain the text you enter). **DO
NOT COMPLETE BY HAND**

Your name: Xianghu LIU

Your student no: 550027355

Return address for this certificate:

Room 1-5-1
No. 53 Bawangsi Street
Dadong District
Shenyang City 110041, P.R.China

Degree/Programme of Study: 4 Year PhD Education Programme

Project Supervisor(s): Prof. KEITH POSTLETHWAITE and Ms. SARAH RICH

Your email address: x|217@exeter.ac.uk

Tel: 0086—15242022283

I hereby certify that I will abide by the details given overleaf and that I undertake in my ~~dissertation~~ / thesis (delete whichever is inappropriate) to respect the dignity and privacy of those participating in this research.

I confirm that if my research should change radically, I will complete a further form.

Signed:



date: 1 September 2009

NB For Masters dissertations, which are marked blind, this first page must **not be included** in your work. It can be kept for your records.

Certificate of ethical research approval

Your student no: 550027355

Title of your project: Action Research on the Effects of an Innovative Use of CALL (Computer Assisted Language Learning) on the Listening and Speaking Abilities of Chinese University Intermediate Level English Students.

Brief description of your research project:

This research aims to explore the effective use of modern technology and the encouragement of learner autonomy in support of English language teaching and learning at a university in Northeastern China in order to address a number of learning and teaching problems, in particular, the so-called “time-consuming, low efficiency” and “deaf and dumb English” problems. Action research will be employed as a research methodology in this study. The action research project consists of three cycles: the teaching time of each cycle was six weeks, with two teaching hours each week in each class. All the lessons will be taught by the researcher (myself).

Give details of the participants in this research (giving ages of any children and/or young people involved):

All the participants majoring in computer science are the second-year university students at the age of more than 18 years old.

Give details regarding the ethical issues of informed consent, anonymity and confidentiality (with special reference to any children or those with special needs) a blank consent form can be downloaded from the SELL student access on-line documents:

A consent form will be distributed to each participant. Before conducting this research project, the researcher will explain its purposes to his students (participants) clearly and in detail. They will be told of their rights in participating in the research; that they will take part in the research project voluntarily; and that they can withdraw at any time or at any research instrument (whether questionnaires or interviews). Although there are no risks by participating in this study, the participants will be told about the drawbacks and benefits of participation. Also, Participants' information and their responses are confidential. Only information relevant to the research questions will be used.

Give details of the methods to be used for data collection and analysis and how you would ensure they do not cause any harm, detriment or unreasonable stress:

The methods to be used for data collection include questionnaires, pre-testing and post-testing, interviews, classroom observation, learning diaries and research journal. All the data will be analyzed using qualitative and quantitative techniques as appropriate. SPSS (Statistical Package for the Social Sciences) will be used for statistical analysis. The research findings, which can answer

research questions, will be based on the thematic analysis, content analysis, in addition to interpretative approach and statistical analysis. Also, the students' interviews will be conducted in a non-threatening manner. The interviews would be stopped if it were evident that any participant was finding it unreasonably stressful.

Give details of any other ethical issues which may arise from this project (e.g. secure storage of videos/recorded interviews/photos/completed questionnaires or special arrangements made for participants with special needs etc.):

All the data collected through the action research, including the questionnaire, the transcriptions of the interviews, the students' test papers and their assignments and so on, will be stored safely in my locked drawer at home and in my own computer. That is to say, all the data are kept securely and are available to the researcher (myself).

Give details of any exceptional factors, which may raise ethical issues (e.g. potential political or ideological conflicts which may pose danger or harm to participants):

This study is irrelevant to any political or ideological issues, which can pose no danger or harm to the participants. On the contrary, this research project will be very useful and helpful to the participants' improvements for their English language proficiency.

This form should now be printed out, signed by you on the first page and sent to your supervisor to sign. Your supervisor will forward this document to the School's **Research Support Office** for the Chair of the School's Ethics Committee to countersign. A unique approval reference will be added and this certificate will be returned to you to be included at the back of your dissertation/thesis.

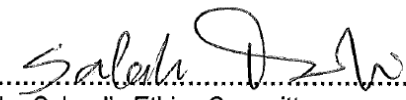
N.B. You should not start the fieldwork part of the project until you have the signature of your supervisor

This project has been approved for the period: September 2009 until: July 2010

By (above mentioned supervisor's signature):  **date:** 4/09/2009

N.B. To Supervisor: *Please ensure that ethical issues are addressed annually in your report and if any changes in the research occurs a further form is completed.*

SELL unique approval reference:.....

Signed:  **date:** 5/09/2009
Chair of the School's Ethics Committee

This form is available from <http://education.exeter.ac.uk/students/>

References

- Alderson, J. C. (2005). *Diagnosing foreign language proficiency: the interface between learning and assessment*. London: Continuum.
- Allwright, D. (1990). *Autonomy in Language Pedagogy*. CRILE Working Paper 6. Centre for Research in Education, the University of Lancaster, the UK.
- Ally, M. (2008). Foundations of Educational Theory for Online Learning. In Anderson, T. (ed.). (2008). *The Theory and Practice of Online Learning* (2nd edition) (pp. 15–44). New York and London: Routledge.
- Alm, A. (2006). CALL for autonomy, competence and relatedness: Motivating language learning environments in Web 2.0. *The JALT CALL Journal*, 2006, Vol. 2, No. 3, pp. 29–38.
- Andersen, L. (2011). Podcasting, Cognitive Theory, and Really Simple Syndication: What is the Potential Impact When Used Together? *Journal of Educational Multimedia and Hypermedia*, (2011) 20 (3), 219–234.
- Anthony, A. R. B. (2008). Output Strategies for English-Language Learners: Theory to Practice. *The Reading Teacher*, March 2008, Vol. 61, Issue 6, pp. 472–482.
- Artyushina, G., O. Sheypak, A. Khovrin & V. Spektor. (2011). *How to Improve Listening Skills for Technical Students*. 14th International Conference on Interactive Collaborative Learning (ICL 2011), 11th International Conference Virtual University, Slovakia.
- Ary, D., L. C. Jacobs & C. Sorensen. (2010). *Introduction to Research in Education*. Wadsworth, the USA: Cengage Learning.
- Ashraf, H., S. Noroozi & M. Salami. (2011). E-listening: The Promotion of EFL Listening Skill via Educational Podcasts. *Proceedings of the International Conference on e-Learning*, 2011, pp. 10–16.
- Atkinson, P. & Hammersley, M. (1994). "Ethnography and participant observation." In Denzin, N. K. & Y. S. Lincoln (Eds.) *Handbook of Qualitative Research* (pp. 248–261). Thousand Oaks: Sage Publications.
- Ausubel, D. P. (1968). *Educational Psychology: A Cognitive View*. New York: Holt, Rinehart & Winston.
- Ayres, L. (2008). Thematic coding and analysis (Main entry). In Given (2008) (pp. 867–868).
- Baillie, S. & R. Miller. (2003). Paradigm (Main Entry). In Miller & Brewer (2003) (pp. 220–222).
- Balacheff, N., Ludvigsen, S., De Jong, T., Lazonder, A., & S. Barnes. (Eds.). (2009). *Technology-Enhanced Learning (Principles and Products)*. London and New York: Springer.
- Barron, L. (2006). Paradigm (Entry). In Jupp (2006) (pp. 212–213).
- Bates, T. (2005). *Technology, E-learning and Distance Education*. London and New York: Routledge.

- Bax, S. (2003). CALL—past, present and future. *System*, Vol.31 (1): 13-28.
- Baxter, A. (1997). *Evaluating your Students*. London: Richmond Publishing.
- Beatty, K. (2003). *Teaching and Researching Computer-assisted Language Learning*. London: Pearson Education Limited.
- Benson, P. & P. Voller. (Eds.). (1997). *Autonomy and Independence in Language Learning*. London and New York: Addison Wesley Longman Limited.
- Benson, P. (1997). The philosophy and politics of learner autonomy. In Benson & Voller (1997) (pp. 18–34).
- Benson, P. (2001). *Teaching and Researching autonomy in Language Learning*. London and New York: Pearson Education Limited.
- Benson, P. (2007). Autonomy in language teaching and learning. *Language Teaching*, Volume 40, Number 1 (January 2007), pp. 21–40.
- Berg, B. L. (2001). *Qualitative Research Methods for the Social Sciences*. Needham Heights, MA, the USA: Pearson Education Company.
- Berne, J. E. (1998). Examining the Relationship Between L2 Listening Research, Pedagogical Theory and Practice. *Foreign Language Annals*, 31, No. 2, 1998, pp. 169 –190.
- Bhattacharya, H. (2008). Interpretive research (Main Entry). In Given (2008) (pp. 464–467).
- Biesta, G. (2007). Why “What Works” won’t Work: Evidence-Based Practice and the Democratic Deficit in Educational Research. *Educational Theory*, Volume 57, Number 1 (February 2007), pp. 1–22.
- Blin, F. (2005). *CALL and the development of learner autonomy: an activity theoretical study*. Unpublished PhD thesis. The Open University, the UK.
- Block, D. (2003). *The Social Turn in Second Language Acquisition*. Edinburgh, the UK: Edinburgh University Press.
- Bot, K.D., Lowie, W. & M. Verspoor. (2005). *Second Language Acquisition (An Advanced Resource Book)*. London and New York: Taylor & Francis Group, Routledge.
- Bouchard, P. (2009). Some Factors to Consider When Designing Semi-Autonomous Learning Environments. *Electronic Journal of e-Learning*, 2009, Vol. 7, Issue 2, pp. 93–99.
- Bower, G. H. (2000). “A Brief History of Memory Research,” in Tulving, E. & F. I. M. Craik (Eds.). (2000). *The Oxford Handbook of Memory*, New York: Oxford University Press, pp. 3–32.
- Bradford, P., M. Porciello, N. Balkon & D. Backus. (2007). The Blackboard Learning System: The Be All and End All in Educational Instruction? *Journal of Educational Technology Systems*, Volume 35, Number 3 / 2006-2007, pp. 301–314.
- Braun, V. and Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3 (2). pp. 77–101.
- Brett, P. (1998). Using Multimedia: A descriptive Investigation of Incidental Language Learning. *Computer Assisted Language Learning*, Volume 11, Number 2 (1998), pp. 179–200.
- Broady, E. & M. Kenning (Eds.). (1996). *Promoting Learner Autonomy in University Language Teaching*. London: Association for French Language

Studies.

- Brook-Hart, G. (2007a). *Business Benchmark Advanced (Student's Book)*. Cambridge: Cambridge University Press.
- Brook-Hart, G. (2007b). *Business Benchmark Advanced Higher (Teacher's Resource Book)*. Cambridge: Cambridge University Press.
- Brophy, J. (1986). Teacher influences on student achievement. *American Psychologist*, Vol. 41(10), October 1986, 1069–1077.
- Brown, H. D. (2000). *Principles of Language Learning and Teaching* (4th edition). White Plains, NY: Pearson Education Company, Addison Wesley Longman, Inc.
- Brown, J. D. (2001). *Using Surveys in Language Programs*. Cambridge: Cambridge University Press.
- Brown, S. & D. McIntyre. (1993). *Making Sense of Teaching*. Buckingham, England: Open University Press.
- Brown, S. (ed.). (1996). *British Philosophy and the Age of Enlightenment (Routledge History of Philosophy, Volume V)*. London and New York: Routledge Group.
- Bruner, J. (1996). *The Culture of Education*. Cambridge, MA: Harvard University Press.
- Bryman, A. (1988). *Quantity and Quality in Social Research*. London: Allen & Unwin.
- Budd, J. M. (2008). Critical Theory. (Entry). In Given (2008) (pp.174–8).
- Burns, A. (2010). *Doing Action Research in English Language Teaching*. London and New York: Routledge.
- Burton, D. M. & S. Bartlett. (2005). *Practitioner Research for Teachers (A Guide for Practitioners)*. London: Paul Chapman Educational Publishing.
- Cairncross, S. & Mannion, M. (2001). Interactive Multimedia and Learning: Realizing the Benefits. *Innovations in Education & Teaching International*, May 2001, Vol. 38 Issue 2, pp. 156–164.
- Canning-Wilson, C. (2000). Practical Aspects of Using Video in the Foreign Language Classroom, *The Internet TESL Journal*, Vol. VI, No. 11, November 2000. Available from: <http://iteslj.org/Articles/Canning-Video.html> (Accessed: 26 April 2012).
- Carliner, S. (1999). *Overview of online learning*. Amherst, MA: Human Resource Development Press.
- Carlton, S. M. (2010). *Listening to teachers: Teachers' perceptions of reflective practices in a metropolitan school district*. (The dissertation of the Degree of Doctor of Education). The USA: Walden University.
- Carr, W. and Kemmis, S. (1986). *Becoming Critical: Knowing Through Action Research*, Lewes: Falmer Press.
- Carspecken, P. F. (2008). Critical Research. (Entry). In Given (2008). (pp.170–174).
- Chan, W. H. W. (2011). Learner Autonomy and the Out-of-Class English Learning of Proficient Students in Hong Kong. *The International Journal of Learning*, Volume 17, Number 11, 2011, pp. 45–62.
- Chapelle, C. A. (1998). Multimedia CALL: Lessons to be learned from research on

- instructed SLA. *Language Learning & Technology*, 2(1), 22–34.
- Chapelle, C. A. (2001). *Computer applications in second language acquisition: Foundations for teaching, testing and research*. Cambridge: Cambridge University Press.
- Chapelle, C. A. (2005). Interactionist SLA theory in CALL research. In Egbert & Petrie (2005) (pp. 53–63).
- Chapelle, C. A. (2009). The Relationship Between Second Language Acquisition Theory and Computer-Assisted Language Learning. *The Modern Language Journal*, 93, Focus Issue, pp. 741–753.
- Chapelle, C. A. (2002). Computer-Assisted Language Learning (pp. 498–501). In Kaplan, R. B. (2002). (Ed.). *The Oxford Handbook of Applied Linguistics*. Oxford and New York: Oxford University Press.
- Chaudron, C. (1988). *Second language classrooms*. Cambridge: Cambridge University Press.
- Chen, C. & C. Chung. (2008). Personalized Mobile English Vocabulary Learning System Based on Item Response Theory and learning memory cycle. *Computers & Education*, September 2008, Vol. 51 Issue 2, pp. 624–645.
- Cheung, K.-S., J. Y.-C. Lam & J. F.-K. Yau. (2009). A review on functional features of e-learning platforms in the continuing education context. *International Journal of Continuing Education & Lifelong Learning*, 2009, Vol. 2 Issue 1, pp.103–116.
- Choi, F. -M. & M. -L. Chen. (2008). Enhancing English Listening Skills by Using MP3. *International Journal of Learning*, 2008, Vol. 14, Issue 12, pp. 193–200.
- Clark, S., Taylor, L. & M. Westcott. (2007). Using short podcasts to reinforce lectures. UniServe Science Teaching and Learning Research Proceedings.
- Cohen, L., Manion, L. & K. Morrison. (2000). *Research Methods in Education* (5th Edition). London and New York: Routledge.
- Cohen, L., Manion, L. & K. Morrison. (2007). *Research Methods in Education* (Sixth Edition). London and New York: Routledge.
- Comfort, J. (1997). *Effective Presentations* (Student's Book). Oxford: Oxford University Press.
- Copley, J. (2007). Audio and video podcasts of lectures for campus-based students: Production and evaluation of student use. *Innovations in Education and Teaching International*, 44(4), 387–399.
- Corti, L. (2003). Diaries and self-completion. (Main Entry). In Miller & Brewer (2003), p 69.
- Costello, P. J. M. (2003). *Action Research*. New York: Continuum.
- Costello, P. J. M. (2011). *Effective Action Research: Developing Reflective Thinking and Practice* (2nd Edition). London and New York: Continuum.
- Creswell, J. W., R. Shope, V. L. P. Clark & D. O. Green. (2006). How Interpretive Qualitative Research Extends Mixed Methods Research. *RESEARCH IN THE SCHOOLS*, Spring 2006, Vol. 13, No. 1, 1–11.
- Creswell, J.W. (2007). *Qualitative Inquiry & Research Design (Choosing Among Five Approaches)*. London and Thousand Oaks: SAGE Publications, Inc.
- Crotty, M. (1998). *The Foundations of Social Research*. London: SAGE

Publications Ltd.

- Crow, I. (2006). Inferential Statistics. (Main Entry). In Jupp (2006) (pp. 147–149).
- Cunningsworth, A. 1995. *Choosing your coursebook*. Oxford: Heinemann.
- Davies, P. (2006). Interview (Main entry). In Jupp (2006) (pp. 157–158).
- Davis, C. S. (2008). Empowerment (Main Entry). In Given (2008) (p 260).
- Denscombe, M. (2007). *The Good Research Guide (for small-scale social research projects)* (Third Edition). Buckingham, England: Open University Press.
- Denzin, N. K. (1989). *Interpretive interactionism*. Newbury Park, CA: Sage Publications.
- Dickinson, L. (1987). *Self Instruction in Language Learning*. Cambridge: Cambridge University Press.
- Dickinson, L. (1995). Autonomy and Motivation: a Literature Review. *System*. 23/2: 165–174.
- Donmoyer, R. (2008). Paradigm (Main Entry). In Given (2008) (pp. 591–595).
- Dörnyei, Z. (1998). Motivation in second and foreign language learning. *Language Teaching* (1998), Vol. 31, pp. 117–135.
- Dörnyei, Z. (2001a). *Motivational Strategies in the Language Classroom*. Cambridge: Cambridge University Press.
- Dörnyei, Z. (2001b). *Teaching and Researching Motivation*. Harlow, England: Pearson Education Limited.
- Dörnyei, Z. (2003). *Questionnaire in Second Language Research (Construction, Administration, and Processing)*. Mahwah (New Jersey, the USA) and London: Lawrence Erlbaum Associates, Publishers.
- Dörnyei, Z. (2005). *The Psychology of the Language Learner Individual Differences in Second Language Acquisition*. Mahwah, New Jersey and London: Lawrence Erlbaum Associates, Inc.
- Douglas, N. (2008). *Reading Explorer 1* (Student's book, Audio, Video). The USA: Heinle/(ELT).
- Doyle, T. (2008). *Helping Students Learn in a Learner-centred Environment: a Guide to Facilitating Learning in Higher Education*. Sterling, Virginia, the USA: Stylus Publishing, LLC.
- Edirisingha, P., Rizzi, C., Nie, M. & L. Rothwell. (2007). Podcasting to provide teaching and learning support for an undergraduate module on English language and communication. *Turkish Online Journal of Distance Education—TOJDE*, July 2007, Volume: 8 Number: 3 Article: 6, 87–107.
- Egbert, J. & E. Hanson-Smith. (Eds.). (1999). *CALL Environments: Research, Practice, and Critical Issues*. Alexandria, VA, the USA: Teachers of English to Speakers of Other Languages, Inc.
- Egbert, J. (2005b). *CALL Essentials: Principles and Practice in CALL Classrooms*. Alexandria, VA, the USA: Teachers of English to Speakers of Other Languages, Inc.
- Egbert, J. L. & G. M. Petrie. (Eds.). (2005). *CALL Research Perspectives*. Mahwah, New Jersey, the USA: Lawrence Erlbaum Associates, Publishers.
- Egbert, J. L. (2005a). Conducting research on CALL. In Egbert & Petrie (2005)

- (pp. 3–8).
- Egbert, J., Chao, C., & E. Hanson-Smith. (1999). Computer-enhanced language learning Environments: An overview. In Egbert & Hanson-Smith (1999) (pp. 1–13).
- Ellis, R. (1994). *The Study of Second Language Acquisition*. Oxford: Oxford University Press.
- Ellis, R. (1997). *Second Language Acquisition*. Oxford: Oxford University Press.
- Erben, T., Ban, R. & M. Castañeda. (2009). *Teaching English Language Learners through Technology*. New York and London: Routledge.
- Eun, B. (2010). From learning to development: a sociocultural approach to instruction. *Cambridge Journal of Education*, December 2010, Vol. 40, Issue 4, pp. 401–418.
- Evans, C. (2008). The effectiveness of m-learning in the form of podcast revision lectures in higher education. *Computers & Education*, Vol. 50, Issue 2 (February 2008), pp. 491–498.
- Evans, M. J. (Ed.). (2009). *Foreign-Language Learning with Digital Technology*. London and New York: Continuum International Publishing Group.
- Fang, Y. (2002). Promoting Learner Autonomy Through CALL Projects in China's EFL Context. *Teaching English with Technology*, Vol. 2, No. 5, pp. 3–38. (October 2002), available from: http://www.iatefl.org.pl/call/j_article11.htm (accessed: 16 January 2009).
- Fang, Y. (2006). Learner Autonomy in a Computer-assisted EFL Context. In Gu (2006) (pp.192–212).
- Ferrance, E. (2000). *Action Research (themes in education)*. The USA: Brown University.
- Field, J. (2004). An insight into listeners' problems: too much bottom-up or too much top-down? *System*, Volume 32, Number 3 (2004), pp. 363–377.
- Field, J. (2007). Looking outwards, not inwards. *ELT Journal*, Volume 61, No.1, January 2007, pp. 30–38.
- Figura, K. & H. Jarvis. (2007). Computer-based materials: A study of learner autonomy and strategies. *System*, December 2007, Vol. 35 Issue 4, pp. 448–468.
- Flick, U. (1998). *An Introduction to Qualitative Research*. London: SAGE.
- Flowerdew, J. & L. Miller. (2005). *Second Language Listening: Theory and Practice*. Cambridge: Cambridge University Press.
- Flowers, J. & S. Cotton. (2003). Master of Arts in Career and Technical Education —Now 100% Online. *Tech Directions*, September 2003, Vol. 63, Issue 2, pp. 22–23.
- Fulcher, G. & Davidson, F. (2007). *Language Testing and Assessment*. London and New York: Routledge, Taylor & Francis Group.
- Gao, X. & T. Lamb. (2011). Chapter 1: Exploring Links between Identity, Motivation and Autonomy. In Murray, G., X. Gao & T. Lamb. (2011). *Identity, Motivation and Autonomy in Language Learning*. Bristol, the UK: Multilingual Matters.
- Gardner, R. & W. Lambert. (1972). Attitudes and motivation in Second Language acquisition. *Canadian Journal of Psychology*, 13:266–72.

- Gass, S. & A. Mackey. (2006). Input, interaction and output: an overview. In K. Bardovi-Harlig and Z. Dörnyei. (Eds.), *AILA Review* (pp. 3–17). Amsterdam: John Benjamins.
- Gass, S. (1997). *Input, Interaction and the Second Language Learner*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Gass, S. M. & L. Selinker. (2008). *Second Language Acquisition (An Introductory Course)* (Third Edition). New York and London: Taylor & Francis Group, Routledge.
- Gilakjani, A. P. & M. R. Ahmadi. (2011). A Study of Factors Affecting EFL Learners' English Listening Comprehension and the Strategies for Improvement. *Journal of Language Teaching and Research*, Vol. 2, No. 5, September 2011, pp. 977–988.
- Gilmore, A. (2007). Authentic materials and authenticity in foreign language learning. *Language Teaching*, April 2007, Vol. 40, pp. 97–118.
- Given, L. S. (Ed.). (2008). *The SAGE Encyclopedia of Qualitative Research Methods (Volumes 1 & 2)*. London and Los Angeles: SAGE Publications.
- Greenfield, R. (2003) Collaborative e-mail exchange for teaching secondary ESL: A case study in Hong Kong. *Language Learning & Technology*, 7(1): 46–70.
- Griffiths, C. (2004). Language Learning Strategies: Theory and Research. *Occasional Paper*, No. 1, February 2004. Available from: <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.138.7807&rep=rep1&type=pdf>. (Accessed: 16 September 2011).
- Griffiths, R. (1990). Speech rate and NNS comprehension: A preliminary study in time-benefit analysis. *Language Learning*, 40(3), 311–336.
- Gu, P. & Z. Xu. (1999). Improving EFL Learning Environment through Networking. In R. Debski & M. Levy (1999) (Eds.), *World CALL: Global perspectives on computer assisted language learning* (pp. 169–184). The Netherlands: Swets & Zeitlinger Publishers.
- Gu, P. (2003). Vocabulary Learning in a Second Language: Person, Task, Context and Strategies. *TESL–EJ* (Teaching English as Second Language–Electronic Journal), September 2003, Volume 7, Number 2. Available from: <http://www.tesl-ej.org/wordpress/issues/volume7/ej26/ej26a4/> (Accessed: 16 March 2012).
- Gu, P. (Ed.). (2006). *CALL Theory and Practice*. Shanghai, China: Fudan University Press.
- Guariento, W., & J. Morley. (2001). Text and task authenticity in the EFL classroom. *ELT Journal*, Vol. 55, No. 4, October 2001, pp. 347–353.
- Haager, D., Klingner, J. K. & Aceves, T.C. (2010). *How to Teach English Language Learners (Effective Strategies from Outstanding Educators)*. San Francisco, CA, the USA: Jossey-Bass.
- Haas, C. (1996). *Writing technology: Studies on the materiality of literacy*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Haggarty, L. & K. Postlethwaite. (2003). Action Research: a strategy for teacher change and school development? *Oxford Review of Education*, 29(4), pp. 423–448.
- Harmer, J. (2001). *The Practice of English Language Teaching* (3rd Edition). London: Longman Group Limited.

- Harris, H. & S. Park. (2008). Educational usages of podcasting. *British Journal of Educational Technology*, 39(3), 548–551.
- Harvard, G. (1997). The key ideas of Vygotsky and their implications for teaching and schooling. In R. Fox. (Ed.). (1997). *Perspectives on constructivism, Perspectives series No. 56*, 38–56. (The University of Exeter, School of Education).
- Hawke, P. (2010). Using internet-sourced podcasts in independent listening courses: Legal and pedagogical implications. *Jalt CALL Journal*, 6(3), 219–234.
- Healey, D. (1999). Theory and Research: Autonomy in Language Learning. In Egbert & Hanson-Smith (1999) (pp. 391–402).
- Heaton, J. B. (1988). *Writing English Language Tests*. London and New York: Longman Group UK Limited.
- Henn, M., Weinstein, M. & N. Foard. (2006). *A Short Introduction to Social Research*. London and Thousand Oaks: SAGE Publications.
- Henning, J. E., Stone, J. M. & J. L. Kelly. (2009). *Using Action Research to Improve Instruction (An Interactive Guide for Teachers)*. New York and London: Routledge, Taylor & Francis Group.
- Henning, J. E., Stone, J. M. & Kelly, J. L. (2009). *Using Action Research to Improve Instruction (An Interactive Guide for Teachers)*. New York and London: Routledge, Taylor & Francis Group.
- Herron, C, Corrie, C, Dubreil, S., & Cole, S. P. (2002). A classroom investigation: Can video improve intermediate-level French language students' ability to learn about a foreign culture? *The Modern Language Journal*, 86 (1), 36–53.
- Hew, K. F. (2009). Use of audio podcast in K-12 and higher education: a review of research topics and methodologies. *Educational Technology Research and Development*, Volume 57, Number 3 (June 2009), pp. 333–357.
- Hitchcock, G. & D. Hughes. (1995). *Research and the Teacher (A Qualitative Introduction to School-Based Research)* (second edition). London and New York: Routledge.
- Hite, C. E. & L. S. Evans. (2006). Mainstream first-grade teachers' understanding of strategies for accommodating the needs of English Language Learners. *Teacher Education Quarterly*. Spring, 2006, Vol. 33, Issue 2, pp. 89–110.
- Holec, H. (1981). *Autonomy in Foreign Language Learning*. Oxford: Pergamon.
- Hollenbeck, C., Zinkhan, G. & W. French. (2005). Distance Learning Trends and Benchmarks: Lessons from an online MBA Program. *Marketing Education Review*, Summer 2005, Vol. 15 Issue 2, pp. 39–52.
- Howe, K. R. (2004). A critique of experimentalism. *Qualitative Inquiry*, 10(1), 42–61.
- Hsu, M.-H. (2010). Proposing an interactive speaking improvement system for EFL learners. *Expert Systems with Applications*, 37 (1), pp. 414–418.
- Hu, J. (2007). On the Role of ICT in the Teaching of College English Reading in China. *Changing English*, Vol. 14, No. 3, December 2007, pp. 343–347.
- Hu, Q. (2008). Correlation between the senses of achievement and students' motivations at tertiary level in China. *Sino-US English Teaching*, 2008, Vol. 5 Issue 2, pp.5–12

- Hughes, A. (2003). *Testing for Language Teachers* (2nd edition). Cambridge: Cambridge University Press.
- Hult, M. & S. Lennung. (1980) Towards a definition of action-research: a note and bibliography. *Journal of Management Studies*, 17 (2), 241–50.
- Hurd, S. and T. Lewis. (Eds.). (2008). *Language Learning Strategies in Independent Settings*. Bristol: Multilingual Matters.
- Hurt, J. (2008). The Advantages and Disadvantages of Teaching and Learning online. *Delta Kappa Gamma Bulletin*, Summer 2008, Vol. 74, Issue 4, pp. 5–11.
- Hutchinson, T. & E. Torres. (1994). The Textbook as Agent of Change. *ELT Journal*, Volume 48/4, October 1994, pp. 315–328.
- Ip, K. F. R., R. Y. K. Lau, M. T. Chan, Y. W. E. Wong, W. M. S. Wong & C. F. J. So. (2008). Enhancing Student's Learning with Podcasting, a Newly Emergent Social Technology. *Pacific Asia Conference on Information Systems (PACIS)*, PACIS 2008 Proceedings.
- Jacklin, L. and R. Jacklin. (2006). *The IELTS Tutor* (video). Cross-Link Productions.
- Jamieson, J., Chapelle, C. A. & S. Preiss. (2004). Putting principles into practice. *ReCALL*, 16 (2): 396–415.
- Jamieson, J., Chapelle, C. A. & S. Preiss. (2005). CALL Evaluation by Developers, a Teacher, and Students. *CALICO Journal*, 23(1), pp. 93–138.
- Jensen, E. D. & T. Vinther. (2003). Exact Repetition as Input Enhancement in Second Language Acquisition. *Language Learning*, Volume 53, Number 3 (01 September 2003), pp. 373–428.
- Jin, Y. & H. Yang. (2006). 'The English Proficiency of College and University students in China: As Reflected in the CET', *Language, Culture and Curriculum*, 19: 1, 21–36.
- Johnson, D. W., & Johnson, R. T. (1996). Cooperation and the use of technology. In D. H. Jonassen (Ed.), *Handbook of research for educational communications and technology* (pp. 170–198). New York: Simon & Schuster Macmillan.
- Johnson, D. W., Johnson, R. T. and Smith, K. A. (1991). Cooperative Learning: Increasing College Faculty Instructional Productivity. *ASHE-FRIC Higher Education Report*, No.4. Washington, D.C.: School of Education and Human Development, George Washington University.
- Johnson, D. W., R. T. Johnson & E. J. Holubec. (1998). *Cooperation in the Classroom*. (Seventh edition). Edina, MN: Interaction Book Company.
- Johnson, M. (2004). *A Philosophy of Second Language Acquisition*. New Haven & London: Yale University Press.
- Johnson, R. T. & D. W. Johnson. (1994). AN OVERVIEW OF COOPERATIVE LEARNING. Originally published in: J. Thousand, A. Villa & A. Nevin (Eds.). (1994). *Creativity and Collaborative Learning*. Baltimore, the USA: Brookes Press.
- Jones, J. (2001). CALL and the Teacher's Role in Promoting Learner Autonomy. *CALL-EJ Online*, Vol. 3, No. 1, June 2001. Available from: <http://callej.org/journal/3-1/jones.html>

- Julien, H. (2008). Content Analysis (Main Entry). In Given (2008) (pp.120–122).
- Jupp, V. (Ed.). (2006). *The SAGE Dictionary of Social Research Methods*. London and Thousand Oaks: SAGE Publications.
- Kalof, L., A. Dan & T. Dietz. (2008). *Essentials of Social Research*. Maidenhead, Berkshire, England: Open University Press.
- Kaltenböck, G. (2001). 'Learner autonomy: a guiding principle in designing a CD-ROM for intonation practice', *ReCALL*, 13 (2): 179–190.
- Kao, P.-L. (2010). EXAMINING SECOND LANGUAGE LEARNING: TAKING A SOCIOCULTURAL STANCE. *Annual Review of Education, Communication & Language Sciences*, October 2010, Vol. 7, pp. 113–131.
- Katz, Y. J. (2002). Attitudes affecting college students' preferences for distance learning. *Journal of Computer Assisted Learning*, March 2002, Vol. 18, Issue 1, pp. 2–9.
- Kavaliauskienė, G. (2008). Podcasting: A Tool For Improving Listening Skills. *IATEFL Poland, Computer Special Interest Group, Teaching English with Technology, A Journal for Teachers of English*. Vol. 8, No. 4, October 2008. Available from: http://www.iatefl.org.pl/call/j_techie33.htm (Accessed: 16 February 2010).
- Keller, J. (1984). 'Motivational design of instruction' in Reigeluth (Ed.) (1984). *Instructional Design Theories and Models*. Hillsdale, N.J.: Lawrence Erlbaum.
- Kember, D. (2000). *Action Learning and Action Research: Improving the Quality of Teaching and Learning*, London: Kogan Page.
- Kemmis, S. & R. McTaggart. (Eds.). (1992). *The Action Research Planner* (third edition). Geelong, Victoria, Australia: Deakin University Press.
- Kern, R. & M. Warschauer. (2000). Theory and practice of network-based language teaching. In M. Warschauer & R. Kern (Eds.), *Network-based Language Teaching: Concepts and Practice*. New York: Cambridge University Press, (pp. 1–193).
- Kern, R. (2006). Perspectives on technology in learning and teaching languages. *TESOL Quarterly*, March 2006, 40, 1, 183–210.
- Kern, R., Ware, P., & Warschauer. M. (2004). Crossing frontiers: New directions in online pedagogy and research. *Annual Review of Applied Linguistics*, 24, 243–260.
- Khan, B. (1997). Web-based instruction: What is it and why is it? In B. H. Khan (Ed.), *Web-based instruction* (pp. 5–18). Englewood Cliffs, NJ: Educational Technology Publications.
- Kincheloe, J. L. (2003). *Teachers as Researchers* (2nd edition). London and New York: Routledge, Taylor & Francis Group.
- Klassen, J. & P. Milton. (1999). Enhancing English Language Skills Using Multimedia: Tried and Tested. *Computer Assisted Language Learning*, Vol. 12, No. 4, pp. 281–294.
- Kothari, C. R. (2004). *Research Methodology (Methods & Techniques)*. New Delhi: New Age International (P) Limited, Publishers.
- Krashen, S. D. (1982). *Principles and Practice in Second Language Acquisition*. Oxford: Pergamon Press.

- Krashen, S. D. (1985). *The input hypotheses: Issues and Implications*. White Plains, N.Y.: Longman
- Kumaravadivelu, B. (2006). *Understanding Language Teaching (from Method to Postmethod)*. Mahwah, New Jersey and London: Lawrence Erlbaum Associates, Inc., Publishers.
- Kwan, R., Fox, R., Chan, FT., & P. Tsang. (Eds.). (2008). *Enhancing Learning through Technology (Research on Emerging Technologies and Pedagogies)*. London and Singapore: World Scientific Publishing Co Pte. Ltd.
- Lai, C.-C. & W.A. Kritsonis. (2006). The Advantages and Disadvantages of Computer Technology in Second Language Acquisition. (*DOCTRAL FORUM*) NATIONAL JOURNAL FOR PUBLISHING AND MENTORING DOCTORAL STUDENT RESEARCH, VOLUME 3, NUMBER 1, 2006.
- Lam, W. S. E. (2000). Second language literacy and the design of the self: A case study of a teenager writing on the internet. *TESOL Quarterly*, 34, 457–482.
- Lamanauskas, V. (2008). Effective ICT Implementation as a Precondition for Developing General and Vocational Education. *Problems of Education in the 21st Century*, 2008, Vol. 5, pp. 5–8.
- Lantolf, J. P. (2006). Sociocultural theory and L2: State of the Art. *Studies in Second Language Acquisition*, 28(01), 67–109.
- Lantolf, J. P. (Ed.). (2000). *Sociocultural theory and second language learning*. Oxford: Oxford University Press.
- Larsen-Freeman, D. (2000). *Techniques and Principles in Language Teaching (Second Edition)*. Oxford: Oxford University Press.
- Lavadenz, M. (2010/2011). From Theory to Practice for Teachers of English Learners. *The CATESOL Journal*, 22.1, (2010/2011), pp. (18–47).
- Lee, C. K. (2010). An Overview of Language Learning Strategies. *Annual Review of Education, Communication & Language Sciences*, October 2010, Vol. 7, pp. 132–152.
- Lems, K., L. D. Miller & T. M. Soro. (2010). *Teaching Reading to English Language Learners: Insights from Linguistics*. New York and London: The Guilford Press.
- Leonard, M. (2003). Interviews (main entry). In Miller & Brewer (2003) (pp.166–171).
- Leontiev, A.N. (1978). *Activity, consciousness and personality*. Englewood Cliff, H.: Prentice Hall.
- Levin, I. P. (1999). *Relating Statistics and Experimental Design*. London and Thousand Oaks: SAGE Publications, Inc.
- Levy, M. (1997). *Computer-Assisted Language Learning: Context and Conceptualizations*. Oxford: Oxford University Press.
- Levy, M. (2009). Technologies in Use for Second Language Learning. *The Modern Language Journal*, Volume 93, Supplement 1 (December 2009), pp. 769–782.
- Li, Y. (2009). How Can I Help My Students Promote Learner Autonomy in English Language Learning? *Educational Journal of Living Theories*, 2009, Vol. 2 Issue 3, pp. 365–398.

- Lightbown, P. M. & N. Spada. (2006). *How Languages are Learned* (Third edition). Oxford: Oxford University Press.
- Lin, L.-F. (2010). English Learners' Incidental Vocabulary Acquisition in the Video-based CALL Program. *Asian EFL Journal*, December 2010, Vol. 12, Issue 4, pp. 51–66.
- Little, D. (1990). 'Autonomy in language learning.' In Ian Gathercole (ed.) *Autonomy in Language Learning*, London: CILT, pp. 7–15.
- Little, D. (1991). *Learner Autonomy 1: Definitions, Issues and Problems*. Dublin: Authentik.
- Little, D. (1995). Learning as Dialogue: the Dependence of Learner Autonomy on Teacher Autonomy. *System*, Vol. 23, No. 2, pp. 175–181.
- Littlewood, W. (1997). Self-access: Why do we want it and what can it do? In Benson & Voller (1997) (pp. 79–92).
- Liu, D & D. Yu. (2006). "300 million Chinese currently learning English." Available from: <http://www.cunews.edu.cn/html2006/qxtt/140916956.html> (accessed: 16 July 2006).
- Lockheed, M. & H. Levin. (1991). "Creating Effective Schools." In H. Levin and M. Lockheed (eds.) *Effective Schools in Developing Countries*. (pp. 1–20). Washington, DC: The World Bank, Education and Employment Division, Population and Human Resources Department.
- Long, M. (1996). The role of the linguistic environment in second language acquisition. In W. C. Ritchie & T. K. Bhatia (Eds.), *Handbook of language acquisition, volume 2: Second language acquisition* (pp. 413–468). New York: Academic Press.
- Lowenthal, P. R. & R. Muth. (2009). Constructivism (Main Entry). In Provenzo, E. F., Renaud, J. P. & A. B. Provenzo. (Eds.). (2009). *Encyclopedia of the Social and Cultural Foundations of Education (Volumes 1–3)*. (pp. 177–179). Thousand Oaks and London: SAGE Publications.
- Lu, Z., Hou, L. & X. Huang. (2010). A research on a student-centred teaching model in an ICT-based English audio-video speaking class. *International Journal of Education & Development using Information & Communication Technology*, 2010, Vol. 6, Issue 3, pp. 101–123.
- Lu, Z., Li, P. & P. Du. (2009). Interactive Patterns in an English Audio-Video Speaking Class in CALL Environments. *International Journal of Pedagogies & Learning, (supplement): Working with Computer-Assisted Language Learning* 5. 2 (December 2009): pp. 49–66.
- Luo, M.-L. (2012). The Problems of Senior Three Students' "Mute-Crux" in English Learning in China. *Sino-US English Teaching*, May 2012, Vol. 9 Issue 5, 1139–1144.
- Macaro, E. (1997). *Target language, collaborative learning and autonomy*. Clevedon: Multilingual Matters.
- Mackey, A. (1999). Input, interaction, and second language development. *Studies in Second Language Acquisition*, 21, 557–587.
- Mackey, A. (2002). Beyond production: learners' perceptions about interactional processes. *International Journal of Educational Research*, 2002, Vol. 37, Issue 3/4.

- Marczyk, G., D. DeMatteo & D. Festinger. (2005). *Essentials of Research Design and Methodology*. Hoboken, New Jersey, the USA: John Wiley & Sons, Inc.
- Markham, P. L., & M. Latham. (1987). The influence of religion-specific background knowledge on listening comprehension of adult second language students. *Language Learning*, 37, 157–170.
- Marty, F. (1981). Reflections on the use of computers in second language acquisition. *System*, 9, 2: 85-98.
- Mason, R. & F. Rennie. (2006). *Elearning (The Key Concepts)*. London and New York: Routledge Taylor & Francis Group.
- Maxom, M. (2009). *Teaching English as a Foreign Language for Dummies*. Chichester, West Sussex, England: John Wiley & Sons, Ltd.
- Mayring, P. (2004). Qualitative content analysis. In U. Flick, E. von Kardoff & I. Steinke (Eds.). *A Companion to Qualitative Research*. London: SAGE.
- Mcauley, C. (2003). Ethics (Main Entry). In Miller & Brewer (2003) (pp.95–99).
- McBride, K. (2009). Podcasts and second language learning: Promoting listening comprehension and intercultural competence. In Abraham, L. B., & Williams, L. (Eds.). *Electronic discourse in language learning and language teaching* (pp. 153–167). Amsterdam: John Benjamins.
- McBride, K. (2011). The effect of rate of speech and distributed practice on the development of listening comprehension. *Computer Assisted Language Learning*, April 2011, Vol. 24 Issue 2, pp. 131–154.
- McBride, K. A. (2007). *The Effect of Rate of Speech and CALL Design Features on EFL Listening Comprehension and Strategy Use (PhD Dissertation)*. The USA: The University of Arizona.
- McGarr, O. (2009). A review of podcasting in higher education: Its influence on the traditional lecture. *Australasian Journal of Educational Technology*, 2009, 25(3), 309–321.
- McIntyre, D. (2005). Bridging the gap between research and practice, *Cambridge Journal of Education*, 35:3, 357–382.
- McKernan, J. (1991). *Curriculum Action Research*. London: Kogan Page.
- McLaughlin, B., T. Rossman & B. McLeod. (1983). Second Language Learning: An Information-Processing Perspective. *Language Learning*, 1983, Vol. 33, No. 2, pp. 135–158.
- McNiff, J. & J. Whitehead. (2002). *Action Research: Principles and Practice (2nd edition)*. London: Routledge Falmer.
- McNiff, J., Lomax, P. & J. Whitehead. (1996). *You and Your Action Research Project*. London and New York: Routledge & Hyde Publications.
- McQuail, D. (2005). *Mcquail's Mass Communication Theory* (5th edition). London: SAGE Publications.
- Mee, M. Y. (1991). Notetaking – An Overview. *The English Teacher*, Vol. XX, October 1991.
- Miller, G. A. (1956). The magical number seven, plus or minus two: Some limits on our capacity for processing information. *Psychological Review*, 63, 81–97.
- Miller, R. L., & J. D. Brewer. (Eds.). (2003). *The A–Z of Social Research (A Dictionary of Key Social Science Research Concepts)*. London and Thousand Oaks: SAGE Publications.

- Ministry of Education. (2007). *The college English teaching requirement*. Retrieved from <http://www.moe.edu.cn>
- Mitchell, R. & F. Myles. (2004). *Second Language Learning Theories* (Second edition). London and New York: Arnold Publishers.
- Morrison, K. R. B. (1993). *Planning and Accomplishing School-centred Evaluation*. Norfolk: Peter Francis Publishers.
- Motschnig-Pitrik, R. (2002). Supporting Student-Centred Teaching with New Media: Case Study and Experience Report. *Proceedings of the 3rd International Conference on Networked Learning (NLC 2002)*, 26–28 March, Sheffield, the UK.
- Mott, V. W. (1996). Knowledge Comes from Practice: Reflective Theory Building in Practice. *New Directions for Adult and Continuing Education*, No. 72, Winter 1996, pp. 57–63.
- Murray, N. & G. Hughes. (2008). *Writing up your University Assignments and Research Projects (A practical handbook)*. Maidenhead, Berkshire, England: Open University Press.
- Nagata, N. (1998). The Relative Effectiveness of Production and Comprehension Practice in Second Language Acquisition. *Computer Assisted Language Learning*, Volume 11, Number 2 (1998), pp. 153–177.
- Nassaji, H. (2012). The relationship between SLA research and language pedagogy: Teachers' perspectives. *Language Teaching Research*. July 2012, Vol. 16 Issue 3, 337–365.
- Nation, I. S. P. & J. Newton. (2009). *Teaching ESL/EFL Listening and Speaking*. New York and London: Routledge, Taylor & Francis Group.
- Norton, L. S. (2009). *Action Research in Teaching and Learning (A Practical Guide to Conducting Pedagogical Research in Universities)*. London and New York: Routledge.
- Nowlan, A. G. P. (2008). Motivation and Learner Autonomy: Activities to Encourage Independent Study. *The internet TESL Journal*, Vol. XIV, No. 10, October 2008. Available from: <http://iteslj.org/Techniques/Nowlan-Autonomy.html>
- Nunan, D. & C. Lamb. (2001). Chapter 2: MANAGING THE LEARNING PROCESS. In Hall, D. R. & A. Hewings (Eds.). (2001). *Innovation in English Language Teaching (A Reader)*. London and New York: Routledge.
- Nunan, D. (1997). Designing and adapting materials to encourage learner autonomy. In Benson & Voller (1997) (pp. 192–203).
- Nunan, D. (2004). *Task-Based Language Teaching*. Cambridge: Cambridge University Press.
- O'Neill, R. (1982). Why Use Textbooks? *ELT Journal*, Volume 36/2, January 1982, pp. 104–111.
- O'Malley, J. M. & A. U. Chamot. (1990). *Learning Strategies in Second Language Acquisition*. Cambridge: Cambridge University Press.
- Oppenheim, A. N. (1992). *Questionnaire Design, interviewing and Attitude Measurement (New Edition)*. London and New York: Continuum.
- Osterman, K. F. (1990). "Reflective Practice: A New Agenda for Education." *EDUCATION AND URBAN SOCIETY* 22, No. 2 (February 1990): 133–152.
- Owen, H. (2005). Chapter 12: Socio-Cultural Theory—An Interpretive Framework

- for Computer Assisted Language Learning? In Son, J.-B. & S. O'Neill (Eds.). (2005). *Enhancing Learning and Teaching: Pedagogy, Technology and Language*. (pp.195–214). Flaxton, Qld.: Post Pressed.
- Oxford, R. & D. Crookall. (1990). Vocabulary Learning: A Critical Analysis of Techniques. *TESL CANADA JOURNAL*, Vol. 7, No.2, March 1990, pp. 9–30.
- Oxford, R. (1989). 'Use of language learning strategies: a synthesis of studies with implications for teacher training'. *System*, 17: pp.535–547.
- Oxford, R. L. (1990). *Language Learning Strategies: What Every Teacher Should Know*. Boston: Heinle & Heinle.
- Oxford, R. L. (2003a). Language Learning Styles and Strategies: An Overview. *GALA 2003*. Available from: <http://web.ntpu.edu.tw/~language/workshop/read2.pdf>
- Oxford, R. L. (2003b). Toward a more systematic model of L2 learner autonomy. In D. Palfreyman and R.C. Smith (Eds.). (2003). *Learner Autonomy Across Cultures: Language Education Perspectives* (pp. 75–91). London: Palgrave Macmillan.
- Oxford, R. L. (2008). Hero With a Thousand Faces: Learner Autonomy, Learning Strategies and Learning Tactics in Independent Language Learning. In Hurd & Lewis (2008) (pp.41–66).
- Paley, J. (2008). *Positivism* (Main entry). In Given (2008) (pp. 646–650).
- Palfreyman, D. (2003). Introduction: Culture and Learner Autonomy. In Palfreyman, D. and Smith, R. C. (eds.). (2003). *Learner Autonomy across Cultures (Language Education Perspectives)*, pp. 1–19. New York: Palgrave Macmillan.
- Pallant, J. (2001). *SPSS Survival Manual*. Maidenhead, England: Open University Press.
- Palloff, R. M., & Pratt, K. (1999). *Building learning communities in cyberspace*. San Francisco, CA: Jossey-Bass.
- Pan, X., Guo, J.-Y. & H. Liu. (2008). Research on promoting students' learning autonomy through network. *US-China Foreign Language*, June 2008, Vol. 6, Issue 6, pp. 12–15.
- Petty, G. (2009). *Teaching Today (A Practical Guide)* (4th edition). Cheltenham, England: Nelson Thornes Ltd.
- Phillips, R. (1998). What research says about learning on the Internet. In C. McBeath and R. Atkinson (Eds.), *Planning for Progress, Partnership and Profit. Proceedings EdTech'98*. Perth: Australian Society for Educational Technology. Available from: <http://www.aset.org.au/confs/edtech98/pubs/articles/phillips.html>
- Piaget, J. (1974). *The child's construction of quantities: Conservation and atomism* (Trans. A. J. Pomerans). London: Routledge & Kegan Paul.
- Postlethwaite, K. (2007). Boundary crossings in research: towards a cultural understanding of the research project 'Transforming Learning Cultures in Further Education'. *Educational Review*, 59/4: 483–499.
- Postlethwaite, K. (2008). IM (Interpretive Methodologies) Action Research Lecture. Exeter, England: The University of Exeter. Available from: <http://education.exeter.ac.uk/students/index.php?id=159> (accessed: 8

- June 2009).
- Prathibha, J. (2010). Computer Assisted Language Learning: Benefits and Barriers. *Journal of Literature, Culture and Media Studies*, Vol.-II 3 Jan-June (Summer) 2010, pp. 59–71.
- Pritchard, A. & J. Woollard. (2010). *Psychology for the Classroom: Constructivism and Social Learning*. London and New York: Routledge.
- Pritchard, A. (2007). *Effective Teaching with Internet Technologies (Pedagogy and Practice)*. London: Paul Chapman Publishing.
- Pritchard, A. (2009). *Ways of Learning (Learning Theories and Learning Styles in the Classroom)* (2nd Edition). London and New York: Routledge, Taylor & Francis Group.
- Rahimi, M. (2008). Using Dictation to Improve Language Proficiency. *Asian EFL Journal*, March 2008, Vol. 10 Issue 1, pp.33–47.
- Rao, Z. (2007). Training in brainstorming and developing writing skills. *ELT Journal*, April 2007, Vol. 61, Issue 2, pp.100–106.
- Reed, M. S., A. C. Evely, G. Cundill, I. Fazey, J. Glass, A. Laing, J. Newig, B. Parrish, C. Prell, C. Raymond, & L. C. Stringer. (2010). What is social learning? *Ecology and Society*, 15(4): r1. [online] URL: <http://www.ecologyandsociety.org/vol15/iss4/resp1/>
- Reid, G. (2007). *Motivating Learners in the Classroom: Ideas and Strategies*. London: Paul Chapman Publishing.
- Reinders, H. & C. White. (2011). Learner autonomy and new learning environments. *Language Learning & Technology*, October 2011, Volume 15, Number 3, pp. 1–3.
- Reinders, H. (2011). Chapter 13: Materials Development for Learning beyond the Classroom. In Benson, P. & H. Reinders. (Eds.). (2011). *Beyond the Language Classroom* (pp. 175–189). Basingstoke, Hampshire, the UK: Palgrave Macmillan.
- Richards, J. C. & R. Schmidt. (2002). *Longman Dictionary of Language Teaching and Applied Linguistics*. London and New York: Pearson Education Limited.
- Richards, J. C. & R. Schmidt. (2010). *Longman Dictionary of Language Teaching and Applied Linguistics*. London and New York: Pearson Education Limited.
- Richards, J. C. (2001). *Curriculum Development in Language Teaching*. Cambridge: Cambridge University Press.
- Richards, J. C. (2008). *Teaching Listening and Speaking (From Theory to Practice)*. Cambridge: Cambridge University Press.
- Rivera-Mills, S. V. & L. Plonsky. (2007). Empowering Students with Language Learning Strategies: A Critical Review of Current Issues. *Foreign Language Annals*, Fall 2007, Vol. 40, Issue 3, pp. 535–548.
- Rivers, W.M. (1981). *Teaching Foreign-Language Skills* (2nd edition). Chicago: The University of Chicago Press.
- Robinson, S. & J. Ritzko. (2009). Podcasts in Education: What, Why and How? Allied Academies International Conference: *Proceedings of the Academy of Educational Leadership (AEL)*. April 2009, Vol. 14, Issue 1, pp. 38–43.
- Rohleder, P., V. Bozalek, R. Carolissen, B. Leibowitz & L. Swartz. (2008). Students' evaluations of the use of e-learning in a collaborative project

- between two South African universities. *Higher Education*, July 2008, Vol. 56 Issue 1, pp. 95–107.
- Roller, C. M. & A. B. Matambo. (1992). Bilingual Readers' Use of Background Knowledge in Learning from Text. *TESOL Quarterly*, Spring 1992, Vol. 26 Issue 1, pp129–141.
- Rosell-Aguilar, F. (2007). Top of the Pods—In Search of a Podcasting “Podagogy” for Language Learning. *Computer Assisted Language Learning*, Vol. 20, No. 5, December 2007, pp. 471 – 492.
- Rost, M. (2002). *Teaching and researching listening*. London: Pearson Education.
- Rost, M. (2006). Areas of research that influence L2 listening instruction. In Usó-Juan, E. & A. Martínez-Flor (Eds). (2006). *Current trends in the development and teaching of the four language skills*. Berlin: Walter de Gruyter GmbH & Co. KG.
- Ruan, Q. (2008).The future of CALL research frame work in China. *Sino-US English Teaching*, 2008, Vol. 5 Issue 2, pp. 36–40.
- Ruan, Y. & W. J. Jacob. (2009). The Transformation of College English in China. *Frontiers of Education in China*, Volume 4, Issue 3 (September 2009), pp. 466–487.
- Rubin, J. (1994). A review of second language listening comprehension research. *The Modern Language Journal*, 78, 2: 199–221.
- Rüschhoff, B. & M. Ritter. (2001).Technology-Enhanced Language Learning: Construction of Knowledge and Template-Based Learning in the Foreign Language Classroom. *Computer Assisted Language Learning*, Volume 14, No.3 (2001), pp. 219–232.
- Salaberry, M. R. (2001). The use of technology for second language learning and teaching: A retrospective. *The Modern Language Journal*, 85 (1), 39–56.
- Salas, R. M. (2005). Grouping techniques in an EFL classroom. *Número Extraordinario*, Volume 5, No. 3, 2005, pp. 1–14. Retrieved 16 July 2010, available from <http://revista.inie.ucr.ac.cr/articulos/extra-2005/archivos/techniques.pdf>
- Salkind, E. J. & K. Rasmussen. (Eds.). (2007). *Encyclopedia of Measurement and Statistics* (Volumes 1 to 3). Thousand Oaks and London: SAGE Publications.
- San, N. Y. (2007). The Efficacy of Computer Assisted Language Learning (CALL) in Fostering Autonomous Learning Among ESL Upper Secondary School Students. *Internet Journal of e-Language Learning & Teaching*, 4(1), January 2007, pp. 32–45.
- Scarcella, R. & R. Oxford. (1992). *The Tapestry of Language Learning: The Individual in the Communicative Classroom*. Boston: Heinle & Heinle.
- Schmenk, B. (2005). Globalizing Learner Autonomy. *TESOL Quarterly*, Vol. 39, No. 1, March 2005, pp. 107–118.
- Schmidt-Rinehart, B. C. (1994). The effects of topic familiarity on second language listening comprehension. *Modern Language Journal*, 78 (2), 179–189.
- Schofield, J. W. & A. L. Davidson. (2003). The Impact of internet Use on Relationships Between Teachers and Students. *Mind, Culture & Activity*, 2003, Vol. 10, Issue 1, pp.62–79.
- Schön, D. (1983). *The Reflective Practitioner*. New York: Basic Books.

- Schreiber, J. B. & K. Asner-Self. (2011). *Educational Research (The Interrelationship of Questions, Sampling, Design and Analysis)*. Hoboken, NJ, the USA: JOHN WILEY & SONS, INC.
- Schunk, D. H. (2012). *Learning Theories: An Educational Perspective* (Sixth Edition). Boston, MA, the USA: Pearson Education, Inc.
- Sellitz, C., Wrightsman, L. S. & S. W. Cook. (1976). *Research Methods in Social Relations*. New York: Holt, Rinehart & Winston.
- Sherman, J. (2003). *Using authentic video in the language classroom*. Cambridge: Cambridge University Press.
- Shin, M. & Y. Lee. (2009). Changing the Landscape of Teacher Education Via Online Teaching and Learning. *Techniques: Connecting Education & Careers*, Jan 2009, Vol. 83 Issue 9, pp. 32–33.
- Siddiek, A. G. (2010). Evaluation of the Sudan School Certificate English Examinations. *English Language Teaching*, Vol. 3, No. 2, June 2010.
- Sinclair, C. (2003). Mentoring Online about Mentoring: possibilities and practice. *Mentoring & Tutoring: Partnership in Learning*, April 2003, Vol. 11, Issue 1.
- Skinner, B. F. (1938). *The behavior of organisms: An experimental analysis*. Upper Saddle River, NJ: Prentice Hall.
- Slade, L. A. & M. C. Rush. (1991). Achievement Motivation and the Dynamics of Task Difficulty Choices. *Journal of Personality and Social Psychology*, 1991, Vol. 60, No.1, 165–172.
- Smith, B. (2004). Computer-mediated Negotiated Interaction and Lexical Acquisition. *Studies in Second Language Acquisition*. September 2004, Vol. 26 Issue 3, pp. 365–398.
- Smith-Sullivan, K. (2008). Diaries and Journals (Main Entry). In Given (2008) (pp. 213–215).
- Snauwaert, F. (2010). *How to Learn English: A guide to speaking English like a native speaker*. Publisher: CreateSpace.
- Snodgrass, L. (2009). Peace Education in Multicultural Schools: An Action Research Approach. *International Journal of Learning*. 2009, Vol. 16 Issue 8, pp. 157–168.
- Somekh, B. & C. Lewin. (Eds.). (2005). *Research Methods in the Social Sciences*. London and Thousand Oaks: SAGE Publications.
- Somekh, B. (2008). Action Research (Main Entry). In Given (2008) (pp.4–6).
- Son, J.-B. (2005). Exploring and evaluating language learning Web sites. In Son, J.-B. & S. O'Neill. (Eds.). (2005). *Enhancing learning and teaching: pedagogy, technology and language* (pp. 215–227). Flaxton, Australia: Post Pressed.
- Soureshjani, K. H. (2011). The Inevitable Role of Cultural Background on the Iranian EFL Learners' Reading and Listening Skills. *US-China Foreign Language*, June 2011, Vol. 9, No. 6, 390–397.
- Southworth, H., K. Cakici, Y. Vovides & S. Zvacek. (2006). *Blackboard for Dummies*. Indianapolis, Indiana, the USA: Wiley Publishing, Inc.
- Spratt, M., G. Humphreys & V. Chan. (2002). Autonomy and motivation: which comes first? *Language Teaching Research*, Vol. 6, No. 3 (July 2002), pp. 245–266.

- Stanley, G. (2005). Podcasting for ELT. Retrieved 17 January 2007, available from: <http://www.teachingenglish.org.uk/think/resources/podcast.shtml>
- Stockwell, G. (2007). A review of technology choice for teaching language skills and areas in the CALL literature. *ReCALL*, (2007), Vol. 19, No.2, pp. 105–120.
- Stringer, E.T. (2007). *Action Research*. Los Angeles and London: SAGE Publications.
- Sullivan, N. & E. Pratt. (1996). A comparative study of two ESL writing environments: a computer-assisted classroom and a traditional oral classroom. *System*, Volume 24, Number 4 (1996), pp. 491–502.
- Sutherland, R., Lindström, B. & L. Lahn. (2009). Chapter 3: Sociocultural Perspectives on Technology-Enhanced Learning and Knowing. In Balacheff, N., Ludvigsen, S., de Jong, T., Lazonder, A. & S. Barnes. (Eds.). (2009). *Technology-Enhanced Learning (Principles and Products)*. (pp. 39–53). Berlin and Heidelberg: Springer.
- Swain, M. & Suzuki, W. (2008). Chapter 39: Interaction, Output and Communicative Language Learning. In Spolsky, B. & F. M. Hult (eds.). (2008). *The Handbook of Educational Linguist* (pp. 557–570). Malden, MA and Oxford: Blackwell Publishing.
- Swain, M. (1985). Communicative competence: Some roles of comprehensible input and comprehensible output in its development. In Gass, S. & C. Madden. (Eds.), *Input in Second Language Acquisition*, pp. 235–256. New York: Newbury House.
- Swain, M. (2005). The Output Hypothesis: Theory and Research. In E. Hinkel (Ed.). (2005). *Handbook of research in second language teaching and learning* (pp. 471–483). Mahwah, NJ: Lawrence Erlbaum Associates
- Sweeney, S. (2004a). *Communicating in Business* (Student's Book) (Second Edition). Cambridge: Cambridge University Press.
- Sweeney, S. (2004b). *Communicating in Business* (Teacher's Book) (Second Edition). Cambridge: Cambridge University Press.
- Syllabus for College English Test. (2006). *National College English Testing Committee*. Shanghai, China: Shanghai Language Education Press.
- Sze, P. M. (2006). Developing Students' Listening and Speaking Skills through ELT Podcasts. *Education Journal*, Vol. 34, No. 2, Winter 2006
- Talcott, C. & G. Tullis. (2007). *Target Score (a Communicative Course for TOEIC Test Preparation)* (Second Edition). Cambridge: Cambridge University Press.
- Tauroza, S. & D. Allison. (1990). Speech Rates in British English. *Applied Linguistics*, Vol. 11, No. 1, 1990, pp. 90–105.
- Thornbury, S. (2006). *An A-Z ELT*. Oxford: Macmillan Education
- Tian, S.-H. & A.-L. Yang. (2008). Exploration of campus-network-based listening and speaking. *Sino-US English Teaching*. 2008, Vol. 5 Issue 10, 1–7.
- Toffler, A. (1970). *Future Shock*. New York: Bantam Books, Inc.
- Tsai, C.-J. & S. C. Huang. (2009). *Target Language Subtitles for Comprehensible Film Language Input*. Available from: <http://120.107.180.177/1832/9901/099-1-11p.pdf> (Accessed: 16 March 2010).

- Tsukamoto, M., Nuspliger, B. & Y. Senzaki. (2009). Using Skype© to connect a classroom to the world: Providing students an authentic language experience within the classroom. *CamTESOL Conference on English Language Teaching: Selected Papers*, Volume 5, 2009, pp. 162–168. Available from http://etec.hawaii.edu/otec/classes/645/skype_2009_camtesol.pdf
- Tynan, B. & S. Colbran. (2006). Podcasting, Student Learning and Expectations. *Proceedings of the 23rd Annual Ascilite Conference: Who's learning? Whose technology?* Sydney: The University of Sydney.
- Ulitsky, H. (2000). Language Learner Strategies with Technology. *Journal of Educational Computing Research*, Volume 22, Number 3 (2000), pp. 285–322.
- Ur, P. (1996). *A Course in Language Teaching: Practice and Theory*. Cambridge: Cambridge University Press.
- Vandergrift, L. (2006). Second Language Listening: Listening Ability or Language Proficiency? *The Modern Language Journal*, Volume 90, Number 1 (March 2006), pp. 6–18.
- VanPatten, B. & A. G. Benati. (2010). *Key Terms in Second Language Acquisition*. London and New York: Continuum.
- Villada, E. G. (2009). CALL Evaluation for Early Foreign Language Learning: A Review of the Literature and a Framework for Evaluation. *CALICO Journal*, 26(2), pp. 363–389.
- Voller, P. (1997). Does the teacher have a role in autonomous language learning? In Benson & Voller (1997) (pp. 98–113).
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Wang, L. (2005). The Advantages of Using Technology in Second Language Education. *T.H.E. Journal*, May 2005, Vol. 32, Issue 10. available from: http://www.thejournal.com/articles/17296_1 (accessed: 16 January 2009)
- Wang, Q. & C. D. Castro. (2010). Classroom Interaction and Language Output. *English Language Teaching*. June 2010, Vol. 3, Issue 2, pp.175–186.
- Wang, X. (2010). Promoting language Learners' Autonomy in Cooperative Learning. *Sino-US English Teaching*. 2010, Vol. 7 Issue 2, 1–6.
- Wangpipatwong, T. & B. Papisatorn. (2007). The Influence of Constructivist E-Learning System on Student Learning Outcomes. *International Journal of Information and Communication Technology Education*, Volume 3, Issue 4, October–December 2007, pp. 21–33.
- Warschauer, M. (1996). Comparing face-to-face and electronic discussion in the second language classroom. *CALICO Journal*, 13(2), 7–26.
- Warschauer, M. (1999). *Electronic literacies: Language, culture, and power in online education*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Warschauer, M. (2000). The death of cyberspace and the rebirth of CALL. *English Teachers Journal*, Vol. 53: 61-67.
- Warschauer, M. (2005). Sociocultural perspectives on CALL. In Egbert & Petrie (2005) (pp. 41–51).
- Watson, J. B. (1919). *Psychology from the standpoint of a behaviorist*. Philadelphia: Lippincott.

- Wellington, J. (2000). *Educational Research*. London and New York: Continuum
- Wellington, J., A.-M. Bathmaker, C. Hunt, G. McCulloch & P. Sikes. (2005). *Succeeding with your Doctorate*. London and Thousand Oaks: SAGE Publications Ltd.
- Wertsch, J. V. (1991). *Voices of the mind: A sociocultural approach to mediated action*. Cambridge, MA: Harvard University Press.
- Westwood, P. S. (2008). *What Teachers Need to Know about Teaching Methods*. Camberwell, Victoria, Australia: ACER Press.
- Whipple, K. (2008). Are you Listening? *Interpreter* (National Association for Interpretation), March 2008, Vol. 4 Issue 2, pp.16–17.
- White, C. (2008). Language Learning Strategies in Independent Language Learning: An Overview. In Hurd & Lewis (2008) (pp. 3–24).
- Whitehead, J. & J. McNiff. (2006). *Action Research Living Theory*. London and Thousand Oaks: SAGE Publications.
- Williams, M. & R. L. Burden. (1997). *Psychology for Language Teachers: A Social Constructivist Approach*. Cambridge: Cambridge University Press.
- Williams, M. & R. L. Burden. (2009). *Psychology for Language Teachers: a Social Constructivist Approach* (13th edition). Cambridge: Cambridge University Press.
- Williams, M. (2006). Positivism (Main Entry). In Jupp (2006) (pp. 229–231).
- Winch, C. & J. Gingell. (2008). *Philosophy of Education (The Key Concepts)* (Second edition). London and New York: Routledge.
- Wong, T. T. S. (2001). Group work in science learning---international scenarios and implications for teaching and learning in Hong Kong. *Asia-Pacific Forum on Science Learning and Teaching*, Volume 2, Issue 2, Article 9, pp.1–20 (December 2001).
- Wright, A., D. Betteridge & M. Buckby. (1984). *Games for Language Learning* (New Edition). Cambridge: Cambridge University Press.
- Wu, L. (2008). On cultivation of learner autonomy in EFL classroom. *US-China Foreign Language*. March 2008, Vol. 6 Issue 3, 43–46.
- Wu, S., I. H. Witten, A. Edwards, D. M. Nichols & R. Aquino. (2007). A Digital Library of Language Learning Exercises. *International Journal of Emerging Technologies in Learning (iJET)*, Vol. 2, No. 1, March 2007.
- Wu, S.-Y. (2009). A study of network-based multimedia college English autonomous teaching and learning model. *US-China Foreign Language*, July 2009, Vol. 7, Issue 7, pp.38–55.
- Wu, W.-C. V. & P.-H. N. Wu. (2008). Creating an Authentic EFL Learning Environment to Enhance Student Motivation to Study English. *Asian EFL Journal*, December 2008, Vol. 10, Issue 4, pp. 211–226.
- Yang, N.-D. (1998). Exploring a role for teachers: promoting learner autonomy. *System*, Volume 26, Number 1 (1998), pp. 127–136.
- Yang, Y.-T. C. & C.-Y. Chan. (2008). Comprehensive evaluation criteria for English learning websites using expert validity surveys. *Computers & Education*, Volume 51, Number 1 (August 2008), pp. 403–422.
- Yates, S. (2004). *Doing Social Science Research*. London and Thousand Oaks: Open University Press.

- York-Barr, J., Sommers, W. A., Ghere, G. S. & Montie, J. (2006). *Reflective Practice to Improve Schools: An Action Guide for Educators* (2nd edition). Thousand Oaks, CA: Corwin Press.
- Yu, R. (2007). Motivating English Students in Class. *Sino-US English Teaching*, 2007, Vol. 4, Issue 4, pp.11–14.
- Zhao, Y. (1997). The effects of listener's control speech rate on second language comprehension. *Applied Linguistics*, 18 (1), pp.49–68.
- Zhao, Y. (2003). Recent developments in technology and language learning: A literature review and meta-analysis. *CALICO Journal*, 21(1), pp. 7–27.
- Zhong, G. Y. Q. & P. N. Sullivan. (1995). *ARCO TOEFL Super Course* (Third Edition). Foreign Language Press, Shanghai Far East Publishers and Simon & Schuster Inc.
- Zhou, W. (2008). Motivation and language learning in the context of China. *Sino-US English Teaching*, 2008, Vol. 5, Issue 4, pp. 7–11.
- Zou, X. (2011). What happens in different contexts and how to do learner autonomy better? *Teacher Development: An international journal of teachers' professional development*, 15:4, 421–433.