

**COMPUTERS
AND TECHNOLOGY
FOR LANGUAGE
TEACHING**



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**Computers and Technology
for Language Teaching**

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Preface

This book is used as a supplementary material for TE5112: Computers and Technology for Language Teaching, a compulsory course in Master of Arts (Teaching English to Speakers of Other Languages) at Udon Thani Rajabhat University. This book can also be used for other related courses and as a self-learning material for learners and teachers of English whose interest is in using technology in English learning and teaching.

This book is written based on three assumptions. First, technology is, nowadays, more affordable. For example, the majority of learners and teachers of English in Thailand can get access to the target language through their mobile devices such as smart phones and laptop computers. Second, integration of technology in second language learning does not depend merely on the sophistication of the technology. The body of knowledge that we have found in the field of Second Language Acquisition and pedagogy must be applied in order to enhance the full potentials of technology in second language learning. Third, technology changes rapidly. What is the most advanced technology today might be outdated in the next few months. As a result, the focus of this book is not on the introduction of highly sophisticated technology but rather on the theoretical background and practice so that learners and teachers of English could benefit from the available technology they can afford.

This book will never be possible without supports from Udon Thani Rajabhat University, my students and colleagues from the Faculty of Humanities and Social Sciences and the Faculty of Graduate Studies, and my family. Thank you very much.

Worawoot Tutwisoot

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Table of Contents

Preface	i
Table of Contents	iii
List of Table	ix
List of Figures	xi
Part I: Introduction	1
Introduction	3
Chapter I: Introduction	5
1.1 Computer-Assisted Language Learning (CALL)	5
1.2 A Brief History of CALL	7
1.3 Issues	12
1.4 Conclusion	15
Part II: Theoretical Backgrounds	17
Introduction	19
Chapter II: Second Language Acquisition	21
2.1 Introduction	21
2.2 Behaviourism	23
2.2.1 Contrastive Analysis	24

2.2.2 Language Transfer	25
2.3 Monitor Theory	26
2.3.1 The Acquisition-Learning Hypothesis	27
2.3.2 The Monitor Hypothesis	28
2.3.3 The Natural Order Hypothesis	29
2.3.4 The Input Hypothesis	29
2.3.5 The Affective Filter Hypothesis	30
2.4 Interaction Hypothesis	30
2.5 Application	32
2.6 Conclusion	37
Chapter III: Learner Autonomy	39
3.1 Learner Autonomy in Language Learning and Teaching	40
3.2 Political Dimension of Learner Autonomy	42
3.2.1 Is Autonomy a Universal Concept?	43
3.2.2 Degrees of Autonomy	44
3.3 Autonomy and Motivation	44
3.3.1 Three Basic Innate Psychological Needs	46
3.3.2 Cognitive Evaluation Theory	47

3.3.3 Organismic Integration Theory	48
3.3.4 Causality Orientation Theory	50
3.4 Fostering Learner Autonomy	51
3.4.1 Making Decision	51
3.4.2 Active Roles	52
3.4.3 Learning Management	53
3.5 Conclusion	53
Chapter IV: Sociocultural Theory	55
4.1 Introduction	55
4.2 Mediation and Artefacts	57
4.3 Social Sources of Cognitive Development	59
4.4 Zone of proximal development	61
4.5 Cultural-Historical Activity Theory (CHAT)	64
4.6 Application	68
4.6.1 Mediating Artefacts	68
4.6.2 Social Interaction	69
4.6.3 Zone of Proximal Development	69
4.6.4 Activity Theory	70

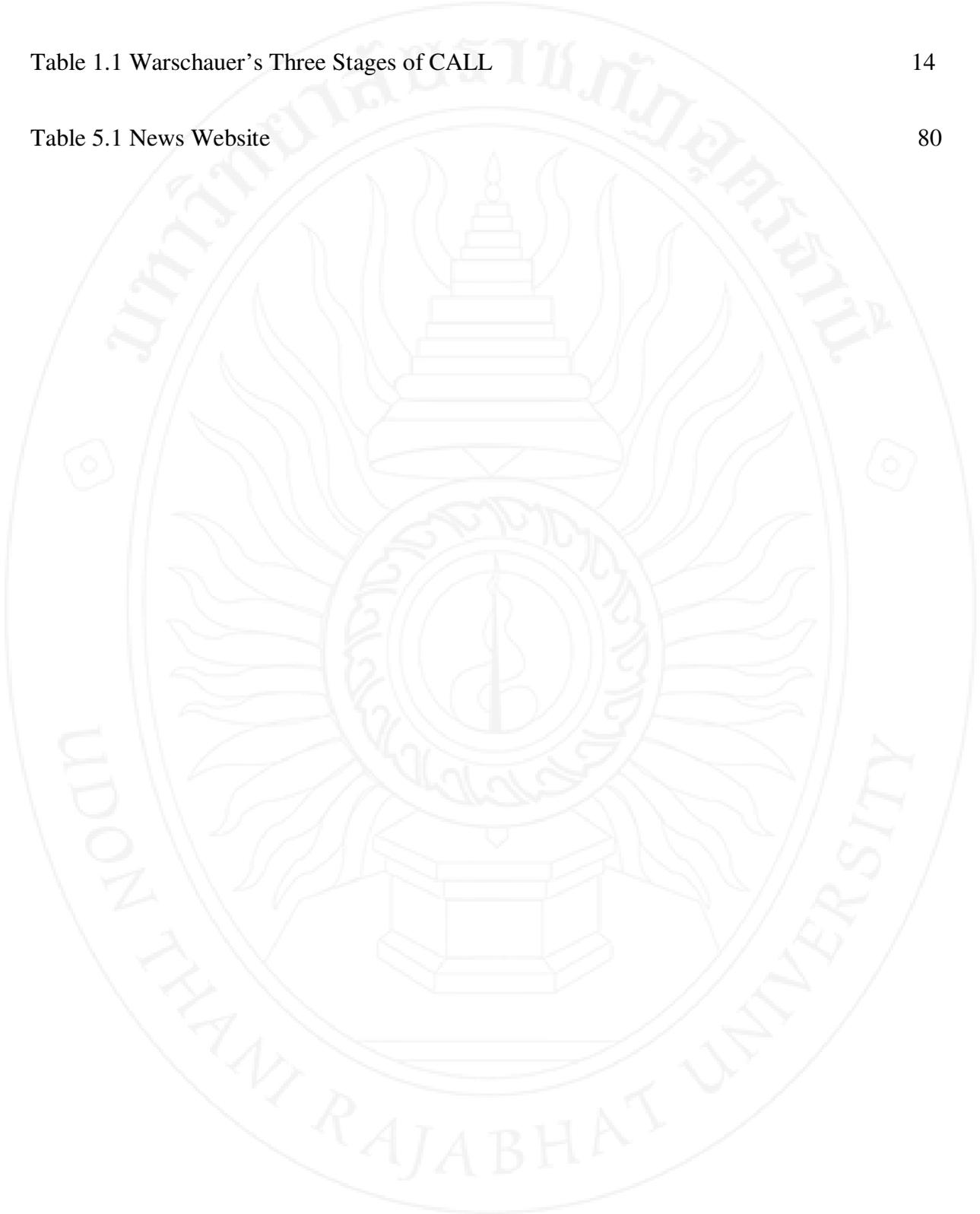
4.7 Conclusion	71
Part III: Technology	73
Introduction	75
Chapter V: Technological Tools (1)	77
5.1 Introduction	77
5.2 Technology as a Resource of Authentic Materials	78
5.2.1 Text-Based Materials	79
5.2.2 Audio and Video-Based Materials	84
5.3 Technology as a Communication Tool	87
5.4 Technology as a Reference Tool	90
5.4.1 Corpus-Based Tools	90
5.4.2 Grammar and Spell Checker	93
5.4.3 Search Engine	94
5.4.4 Machine Translation	96
5.5 Conclusion	98
Chapter VI: Technological Tools (2)	98
6.1 Introduction	99
6.2 Technology as a Virtual Community	99

6.3 Technology as an Educational Tool	102
6.3.1 Youtube downloader and Clip Slowdown	103
6.3.2 Text to Speech	105
6.3.3 Quiz	106
6.4 Technology as a Virtual Classroom	108
6.4.1 Online Lessons	109
6.4.2 Learning Management System	110
6.5 Conclusion	112
Part IV: Practice	113
Introduction	115
Chapter VII: Second Language Teaching and Technology	117
7.1 Introduction	117
7.2 Teaching Receptive Skills	118
7.2.1 Intensive Listening/ Reading	119
7.2.1.1 Pre-Listening/ Reading Activities	119
7.2.1.2 While-Listening / Reading Activities	121
7.2.1.3 Post-Listening/ Reading Activities	126
7.2.2 Extensive Listening/ Reading	129

7.2.3 Technology and Receptive Skills	130
7.3 Teaching Productive Skills	132
7.3.1 Teaching Speaking Skills	132
7.3.1.1 Information Gap Activities	132
7.3.1.2 Role-Playing	134
7.3.1.3 Language Games	134
7.3.1.4 Technology and Speaking Skills	136
7.3.2 Teaching Writing Skills	138
7.4 Task-Based Language Teaching	143
7.5 Conclusion	145
References	147

List of Tables

Table 1.1 Warschauer's Three Stages of CALL	14
Table 5.1 News Website	80



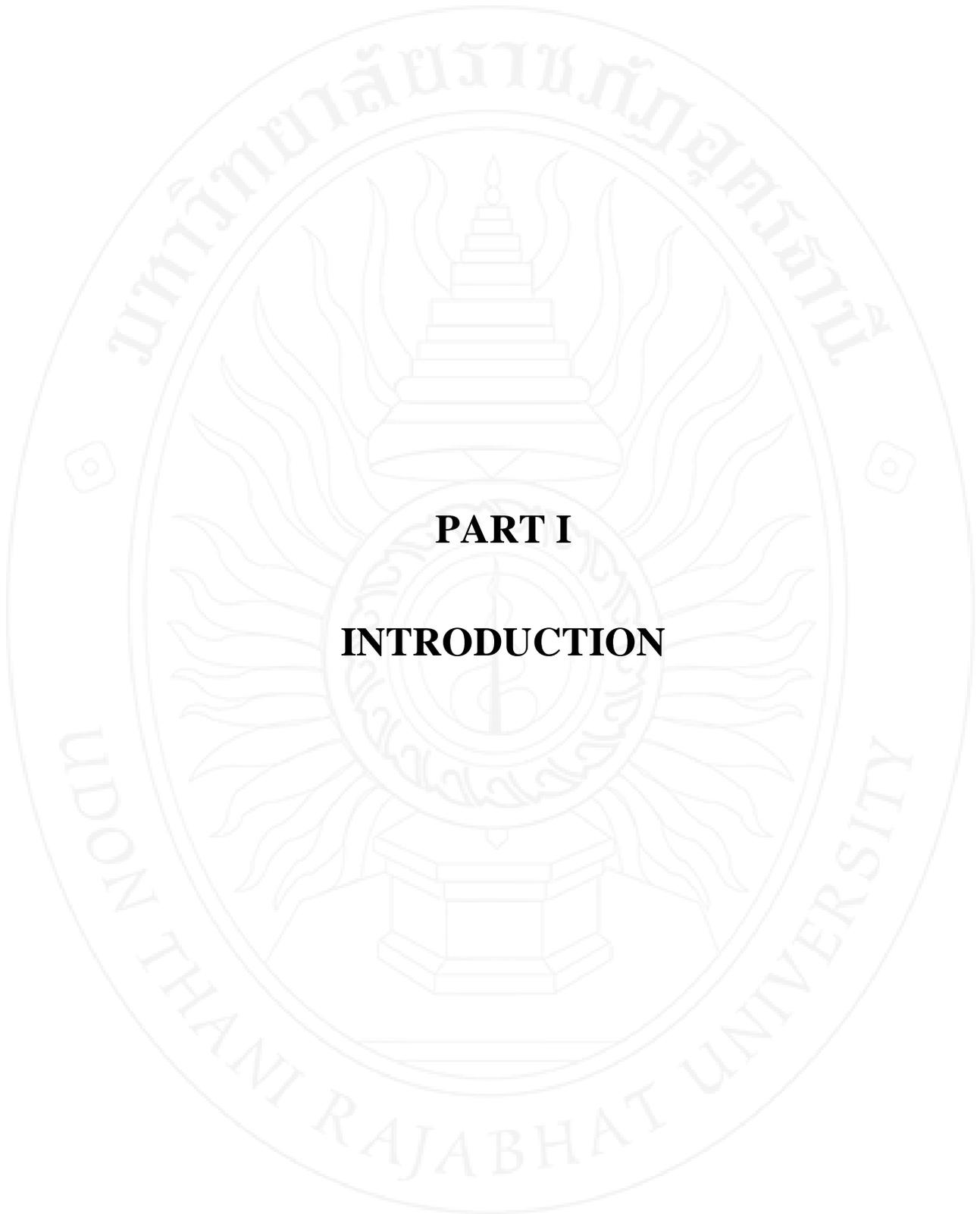


List of Figures

Figure 3.1 Self-determination Continuum of Types of Motivation	49
Figure 4.1 First Generation of Activity Theory	65
Figure 4.2 The Structure of Human Activity System	67
Figure 5.1 Wikipedia	81
Figure 5.2 Project Gutenberg	82
Figure 5.3 Book Excerpt	84
Figure 5.4 Book Excerpt from Amazon	84
Figure 5.5 Podcast	86
Figure 5.6 Youtube	86
Figure 5.7 Online Dictionary	91
Figure 5.8 Collocations	92
Figure 5.9 Spell Checker	93
Figure 5.10 Search Results for “I must to go now”	96
Figure 5.11 Mistranslation from Google Translate	97
Figure 6.1 iSLCOLLECTIVE	100
Figure 6.2 English Club	100
Figure 6.3 Printable Materials	101

Figure 6.4 ESL Forum	102
Figure 6.5 Youtube Downloader Program	103
Figure 6.6 How to Download Video Clips	104
Figure 6.7 Video Editor Program	105
Figure 6.8 Text-to-Speech Program	106
Figure 6.9 Hot Potatoes Program	107
Figure 6.10 Kahoot	108
Figure 6.11 VOA Online Lessons	110
Figure 6.12 Learning Management System	111
Figure 7.1 Original Text	122
Figure 7.2 A Worksheet for Listen and Restore	122
Figure 7.3 Original Text for Listen/ Reading and Sort	123
Figure 7.4 Example of Scrambled Dialogue	124
Figure 7.5 Worksheet for Listen/ Reading and Compare	125
Figure 7.6 Worksheet for Listen/ Reading and Compare for Beginners (1)	126
Figure 7.7 Worksheet for Listen/ Reading and Compare for Beginners (2)	126
Figure 7.8 A Graphic Organiser for Summary	128
Figure 7.9 Reading Log	130

Figure 7.10 Information Gap Activity	133
Figure 7.11 Find someone who...	135
Figure 7.12 Bingo	136
Figure 7.13 Voice Search	137
Figure 7.14 Grouping Ideas for Writing	139
Figure 7.15 Graphic Organiser for Writing	140
Figure 7.16 Organisation Form	140
Figure 7.17 Correction Code for Writing	141
Figure 7.18 Worksheet for Collocations	142
Figure 7.19 Track Change	143



PART I

INTRODUCTION



Part I

Introduction

This section provides you an introduction to the field of Computer-Assisted Language Learning (CALL). Chapter I discusses the reasons why the term “CALL”, among others, is generally used in the field of Applied Linguistics, English Language Teaching (ELT), Language Education, Teaching English as a Foreign/ Second Language (TEFL/TESL), and Teaching English to Speakers of Other Languages (TESOL). Subsequently, a brief history of CALL is provided. You will learn how technology has been integrated in second language classrooms. Finally, some issues of the integration of technology and second language learning and teaching are discussed.



CHAPTER I

Introduction

Questions for Reflection

- **What are the advantages of technology in language learning and teaching?**
- **Do we need technology in language teaching?**
- **Can technology replace teachers?**

We are in the era when technology has influenced almost any aspects of our lives at least in two dimensions. First, technology is equipped in the majority of devices and appliances we use such as televisions, refrigerators, microwave ovens, washing machines, and cars to make these tools more efficient. In the second dimension, technology has changed the way we do activities. For example, nowadays, we watch the whole episodes of our favourite series from our smart phones, listen to our favourite songs through *YouTube*, and talk to our friends through *Skype*, *Line*, and *Facebook*. Language education is no exception. English learning and teaching have also been influenced by technology. This chapter provides you the historical background and some issues in the field of language learning and teaching and technology.

1.1 Computer-Assisted Language Learning (CALL)

The use of technology in language learning and teaching has attracted language teachers and researchers in the field of language education and applied linguistics for

decades. In addition, technology has become one of the most popular educational tools for both inside and outside classroom activities.

There are many professional associations working in the field such as Asia-Pacific Association for CALL (APACALL), Asia Association of Computer Assisted Language Learning (Asia CALL), Computer Assisted Language Instruction Consortium (CALICO), European Association for Computer Assisted Language Learning (EUROCALL), International Association for Language Learning Technology (IALLT), International Association of Teachers of English as a Foreign Language (IATEFL), and World CALL. These professional associations organise conferences and publish academic journals so that researchers who are interested in the field of language learning and teaching and technology can share their research findings. Apart from these specific associations, research papers related to the field of technology and language learning and teaching have been presented and published in the conferences and journals in the more general field of language education and applied linguistics.

Several terms have been coined to call the integration of technology in language learning and teaching such as CAI (Computer-Aided Instruction), CAL (Computer-Assisted Learning), CALI (Computer-Assisted Language Teaching), TELL (Technology-Enhanced Language Learning), WELL (Web-Enhanced Language Learning), and CALL (Computer-Assisted Language Teaching) (Beatty, 2010, pp. 10-11). Among those different terms, CALL is one of the most well-known ones in the field of language education and applied linguistics. However, the term has been defined differently by many researchers and experts in the field. For example, Levy (1997) defines CALL as “the search for and study of applications on the computer in language teaching and learning” (p. 1). Beatty (2010) proposes that CALL refers to “*any process in which a learner uses a*

computer and, as a result, improves his or her language" (p. 7). In this book, CALL basically refers the integration of any forms of computer technologies in any process of language learning and teaching.

1.2 A Brief History of CALL

The integration of technology in language teaching is not new. Actually, non-sophisticated technological tools such as chalk and blackboards have been used in the language classroom for centuries. More sophisticated technologies such as tape recorders, language laboratories and videos have been used in language education for decades. However, the use of advanced computer technologies to assist language learning and teaching, known as CALL, is "a young branch of applied linguistics" (Beatty, 2010, p. 2) and "a recent area of instruction" (Thomas, Reinders, & Wascahuer, 2013, p. 3). As a result, the history of CALL has been well documented. This section discusses a brief history of the integration of technology in language learning and teaching to provide you a historical background of the field. You can see more detailed discussion about the histories of CALL somewhere else (Beatty, 2010; Blake, 2008; Chapelle, 2001; Davies, Otto, & Ruschoff, 2013; Sandra Fotos & Browne, 2004).

In the early days of CALL (1960s to 1970s), the applications of computer technology in language teaching were implemented on mainframe computers connected to terminals on a single campus or by telephone lines to terminals off campus (Chapelle, 2001, p. 3). One of the most significant applications for the teaching and learning of second languages during that period was Programmed Logic/Learning for Automated Teaching Operations (PLATO). The PLATO project was a Computer-Assisted Instruction (CAI), offering a variety of activities for students to practice vocabulary, grammar and translation over a course of 16 lessons requiring seventy hours to complete (Beatty, 2010).

The program provided students with both corrective and diagnostic feedback, spell checkers, and grammar checkers (Blake, 2008, p. 50).

Pedagogically, the use of technology in language learning and teaching in that period was within behaviourist framework of cognitive theory. It was believed that learning was a habit formation: through repetitive practice and negative and positive feedback. In other words, it was believed that students can improve their language skills through drill and practice. The computer programs created within this approach are linear in nature. It is assumed that the mastery of the target language results directly from a cumulative investment of time and practice and that the contents can be broken into subunits and arranged in a linear fashion (Blake, 2008).

In 1980s, the affordability of microcomputers dramatically changed the application of technology in language learning and teaching because “microcomputers did not require users to be attached to a mainframe computer maintained by a university or business” (Chapelle, 2001, pp. 7-8). In the early era of microcomputers, they had limited graphic options and monochrome displays. Pedagogically, the computer programs were created mostly for the practice of grammar and vocabulary although the communicative approach was well established at that time (Davies et al., 2013, p. 25). Later, the application of technology in language learning and teaching was gradually created based on more communicative approach such as task-based learning (TBL) and cognitive-constructivism focusing on authentic contents, contexts, and tasks (Davies et al., 2013, p. 26). Authentic tasks in CALL-enhanced learning practice enable students to explore the target language in its forms and functions while doing the assigned tasks (Davies et al., 2013, p. 27).

During this period, generic programs such as word-processors, databases, desktop publishing software, spreadsheets and communications software were invented and

allowed teachers to discover innovative ways of using technology in their teaching such as the production of electronic text and printed materials (Davies et al., 2013, p. 28).

Thanks to the advance of technology, many software packages in the form of videodisc-based simulations were created aiming at providing immersion experiences in the target language (Davies et al., 2013, p. 29). The increase of speed and storage capacity allowed the application of technology in language learning and teaching to go beyond behaviourist models (Beatty, 2010, p. 26). The non-linear interactive learning programs encouraged students to involve in the storyline by making choices that branched off in different directions (Blake, 2008, p. 51). The most well-known projects were *Montevidisco* for learners of Spanish, and *A la rencontre de Philippe*, for learners of French. The learners would take a role and must interact with other people using the target language to complete the tasks. However, the videodisc technology was later replaced by more sophisticated technologies such as Compact Disk Read-Only Memory (CD-ROMs) and Digital Video Disk (DVDs).

In 1990s, the first professional CALL associations such as CALICO and EUROCALL were established (Davies et al., 2013, p. 25). As a result, CALL began to reach a wider audience. In addition, the use of Information and Communications Technology (ICT) in language learning and teaching was firmly established. Moreover, the more advanced multimedia Personal Computer (PC) allowed users to record and play back sound. The technology of CD-ROMs, despite the limited capacity, “offered new opportunities for students to engage in listen/respond/playback activities” (Davies et al., 2013, p. 31). The World Wide Web, one of the most important innovations in ICT, also appeared in this period.

In early 2000s, the quality of audio and video on the Web began to improve. Although there were online language courses available, 'blended learning'--a course that combines online and traditional modes of learning, was introduced because "Web-based activities in a traditional self-study mode could not 'replace' classroom practice and social interaction on language learning but would support and extend it " (Davies et al., 2013, p. 32).

One more significant development in ICT appearing in the period is Web 2.0. It refers to "a social platform for collaboration, knowledge sharing and networking" (Davies et al., 2013, p. 32) such as blogs, wikis, podcasts and social networking websites. Collaborative knowledge construction, authenticity, and task orientation were the current pedagogy in language learning and teaching (Davies et al., 2013, p. 33). In addition, nowadays, we can get access to and share information through mobile devices such as smartphones and tablets. There are countless of resources and tools that can be used or applied in language learning and teaching. These open up new possibilities that will be discussed throughout the book.

There is an alternative approach of defining the history of CALL. Kern & Warschauer (2000) and Warschauer (2000) identified three stages or phases of CALL, impacted by their underlying pedagogical paradigms: structural CALL, communicative CALL, and integrative CALL (see Table 1.1).

Table 1.1 illustrates the impact of pedagogical and methodological approaches on the use of technology in language teaching and learning. In Structural CALL, the use of technology in language learning and teaching is based on the audio-lingual focusing on oral skills and grammar-translation method emphasising on the learning and teaching of grammar. As a result, the use of technology, influenced by this "functional literacy

paradigm”, is viewed as a device for drill-and-practice exercises in specific areas such as grammar, spelling and reading comprehension and perceived as “a vehicle for literacy” rather than “a medium of literacy practices” (Warschauer, 1999, p. 16). In communicative CALL, influenced by the communicative language teaching, technology was mainly used to encourage communication in the target language. Although this approach of teaching and learning is a more effective way to develop communicative competence, the activities were usually conducted in a linear fashion leaving students with less opportunity to control their learning processes. In integrative CALL, influenced by constructivism, technology was used as a tool and a resource that students can use to complete the tasks or projects assigned. As a result, technology was used in a more integrated and holistic approach such as task-based and project-based learning.

In conclusion, technology has been integrated into language learning and teaching for decades. It can be noticed that the application of computer technologies for language education are influenced by both the advance of technology and the theoretical underpinning of pedagogy.

<i>Stage</i>	1970s-1980s: Structural CALL	1980s-1990s: Communicative CALL	21 st Century: Integrative CALL
<i>Technology</i>	Mainframe	PCs	Multimedia and Internet
<i>English-Teaching Paradigm</i>	Grammar- Translation & Audio-Lingual	Communicate Language Teaching	Content-Based, ESP/EAP
<i>View of Language</i>	Structural (a formal structural system)	Cognitive (a mentally- constructed system)	Socio-cognitive (developed in social interaction)
<i>Principal Use of Computers</i>	Drill and Practice	Communicative Exercises	Authentic Discourse
<i>Principal Objective</i>	Accuracy	And Fluency	And Agency

Table 1.1 Warschauer's Three Stages of CALL (Warschauer, 2000)

1.3 Issues

The integration of technology in language learning and teaching is not as simple as it seems. This section explores some issues in CALL. The issues will be discussed in more details throughout the book.

1.3.1 What is ‘Computer’ in Computer-Assisted Language Learning?

The word ‘computer’ is sometimes misinterpreted. In the field of Computer-Assisted Language Learning, ‘computer’ is not limited to personal computers but includes “any form of electronic, chip-driven technology and the software that makes it run” (Egbert, 2005, p. 5) such as smart phones, *iPod*, *iPad*, computer games, movie DVDs, and the Internet because they can be applied, both explicitly and implicitly, in language learning. In this book, technology is perceived metaphorically as a resource of authentic materials, a communication tool, and a reference tool, an educational tool, a virtual community, and a virtual classroom. (see Part III for more detailed discussion).

1.3.2 How does computer ‘assist’ language learning and teaching?

It is argued that technology is just a kind of educational tools like a blackboard and chalk. The use of any kinds of tools, including technology, is influenced by the pedagogical paradigm. For example, within an old-fashioned teaching approach, technology might be used merely as a new exciting way of drills and practice of grammatical features. On the other hand, a blackboard, perceived as a not sophisticated tool, can be used in a more communicative activity. As a result, the integration of technology in language learning and teaching requires much more than the knowledge of the sophistication of technology. We, teachers, need to understand how our students acquire a second (or foreign) language. In Part II, you will learn some important theories and research findings in the field of Second Language Acquisition. Later, you will learn how to applied them for classroom practice in Part IV

1.3.3 What are the benefits of technology in language learning and teaching?

Technology can be of benefit to many aspects of second language learning and teaching. Richards (2015) proposed many potential benefits of technology to English language learners. For example, technology provides wider exposure to English, increases the opportunities for authentic interaction, enables flexible learning, supports different ways of learning, encourages learner autonomy, provides a stress-reduced environment, provides a social context for learning, and increases motivation (Richards, 2015, pp. 641-642). Richards (2015, p. 635) argued that there are three ways that technology can be used in language teaching. First, it can be integrated in the classroom. Second, some parts of the lesson can be moved to outside of classroom hours, known as blended learning. Finally, the entire course is taken off-site, known as distance learning.

1.3.4 Do we, teachers, really need it?

It is argued that technology per se cannot guarantee the success of language teaching. Of course, it is possible for a language classroom without sophisticated technology to be successful in case teachers are proficient in both linguistics and pedagogy. However, in many cases, technology can facilitate learning and teaching process. For example, the Internet gives students more opportunities to be exposed and get access to the target language and communicate with speakers of the target language.

Some teachers may fear that technology will replace them especially when they mention completely virtual online courses (Blake, 2008, p. 13). In fact, technology should be used as a tool to facilitate the learning and teaching process. No matter how sophisticated the technology is, human interaction, in any kinds and platforms, is still important in order to learn a new language. Even in a courseware program, teachers may

be needed to encourage and motivate students, facilitate the learning process, and provide advice, guideline, and assistance.

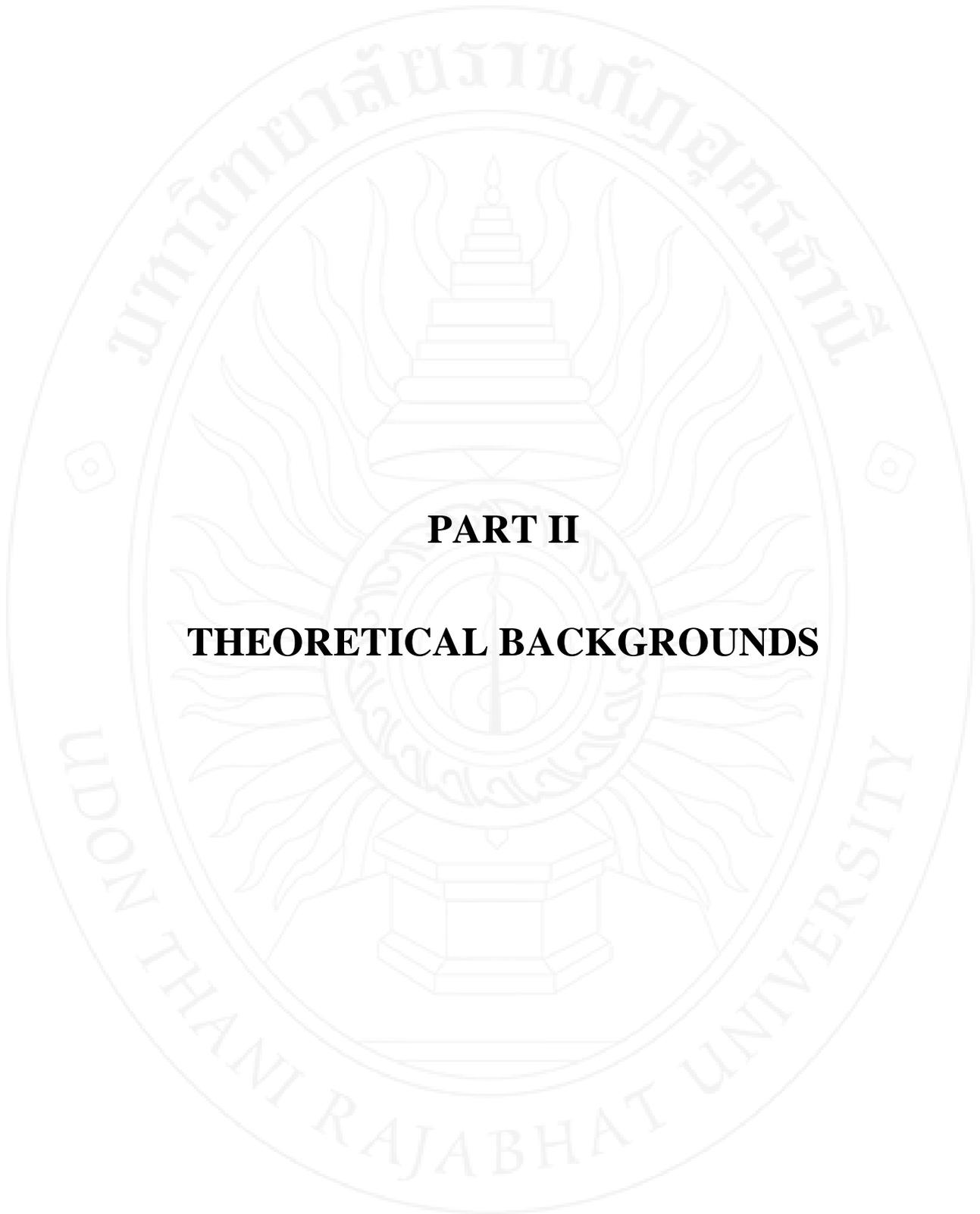
1.3.5 Does the availability of online resources and tools guarantee the success of autonomous language learning?

Technology, notably the Internet, provides students with the opportunities to be exposed to the target language. This makes it possible for autonomous learning after class. There are many successful autonomous learners who self-direct, self-regulate, and self-determine their own learning. However, a successful autonomous learning requires much more than the available resource of the target language. In Chapter III and IV, important theories in autonomous learning in technology-rich environments which are Learner Autonomy, Self-Determination Theory, Sociocultural Theory will be discussed, respectively.

1.4 Conclusion

Technology has been integrated in learning and teaching English as a second language for decades. Technology changes rapidly and has become an important part of almost all aspects of our lives. As a result, there is no need to discuss whether or not we should use technology but ‘how’ we can use the available technology we have in our context to facilitate the learning and teaching process. As discussed earlier, the sophistication of the technology per se cannot guarantee the success of second language learning and teaching. The integration of technology must be based on pedagogical and theoretical frameworks. The next section discusses some essential theories in second language learning and teaching.





PART II
THEORETICAL BACKGROUNDS



Part II

Introduction

Technology influences the way we teach and the way students learn a second language. On the other hand, the way we integrate technology in our classroom (or beyond the classroom) is also influenced by the theoretical frameworks and research findings in the field of general education, language education, applied linguistics, and Second Language Acquisition (SLA). As a result, this section provides you some essential theoretical backgrounds so that you can use them as theoretical frameworks for the integration of technology in language learning and teaching. In Chapter II, some important theories in SLA are discussed. After that, the applications of the findings in SLA for classroom practice are elaborated. In Chapter III, the concept of autonomy in language learning and teaching and Self-determination Theory are discussed. These would help us understand how fostering the autonomy of learners and motivation are important for second language learning. In addition, these can be used to understand how we can provide autonomy-supportive learning environments in the classroom and prepare students for autonomous learning after class. Chapter IV discusses the roles of social interaction in language learning and teaching based on the framework of Sociocultural Theory.



CHAPTER II

Second Language Acquisition

Questions for Reflection

- **How do we learn a second language?**
- **Is the knowledge from Second Language Acquisition important for language teachers? How?**
- **How can technology affect the process of second language acquisition?**

Nowadays, it is not unusual to speak more than one language. Globalisation and the advance of technology enhance the opportunity to communicate with people from other countries. In addition, the ability to speak more than one language may open up more opportunities in one's life. For these reasons, the number of second language learners has increased for the past decades. Although this book focuses on the integration of technology in language learning and teaching, the practice should be based on theories and findings from empirical studies in the field of Second Language Acquisition. This chapter discusses some essential theories in the field of Second Language Acquisition and its applications for classroom practice.

2.1 Introduction

Second Language Acquisition is one of the most important branches in the field of Applied Linguistics. Basically, it is the study of how learners acquire a second language not a field of language teaching or language pedagogy. However, the research findings in

the field of Second Language Acquisition have become the foundation of language education and related fields such as English Language Teaching (ELT), English as a Second Language Teaching (ESL), and Teaching English to Speakers of Other Languages (TESOL).

Before we discuss further the theories in Second Language Acquisition, two terms should be defined and explained. First of all, the second language in the field refers to any language other than a learner's first language. Although a distinction between 'second' and 'third' (or fourth) language is sometimes made, the second language is a more preferable term. In addition, it should be noted that the researchers in the field are aware of the differences between 'second' and 'foreign' language. For example, English is regarded as a second language when it is used as a medium of communication on a daily basis such as in Singapore and Malaysia. On the other hand, English is perceived as a foreign language when it is just a subject to study, and the opportunity to use the language for communication outside the classroom is rare. However, despite the differences, 'second' language is used as "an all-inclusive term for learning *any* language after the first that can take place in both second and foreign language contexts" (R. Ellis, 2015, p. 6).

Next, what is acquisition? It is argued that 'acquisition' is different from 'learning'. According to Krashen, there are two systems in second language development: "subconscious language acquisition and conscious language learning" (Krashen, 1981, p. 1). Language acquisition refers to the process of acquiring the target language through meaningful and natural communication (Krashen, 1981). In other words, acquisition is the process in which learners 'pick up' a language without making any conscious effort to master it" (R. Ellis, 2015, p. 7). On the other hand, learning refers to the process of learning a language in a more formal setting that requires intentional effort to study.

However, in the field of Second Language Acquisition, the terms acquisition and learning are often used interchangeably.

In conclusion, Second Language Acquisition is a general term “for the acquisition or learning of any language other than a learner’s first language that can take place in both second and foreign language contexts” (R. Ellis, 2015, p. 7). The next sections discuss some essential theories in Second Language Acquisition.

2.2 Behaviourism

In the first period of Second Language Acquisition, the research studies in the field were influenced by theories from other fields including behaviourism. Actually, behaviourism is a theory in psychology attempting to explain animal and human behaviour. However, it has influenced many related fields of study including First and Second Language Acquisition.

Behaviourists argue that behaviour is a result of a response to environmental stimuli. In one of the most well-known experiments, Ivan Pavlov, a Russian physiologist, demonstrated how the stimulus influenced the behaviour of the dogs. In his experiment, whenever the dogs were fed, they heard a sound. After repeating this condition many times, the dogs began salivating whenever they heard the sound because they anticipated a meal. This is called “classical conditioning”. In addition, behaviourists believed that reinforcement can encourage continuation of the response while punishment can discourage continuation of the response (VanPatten & Williams, 2007a).

According to behaviourism, learning, including learning a second language, is the acquisition of a new behaviour through the responses to environmental stimuli. If the responses receive positive reinforcement, they will become habits. On the other hand, if

the responses receive punishment, they will be abandoned (VanPatten & Williams, 2007a). In other words, learning is a habit formation. From the point of view of behaviourists, a child learns her first language by imitating sounds and structures that she hears in the environment. If she speaks and receives a positive response, she tends to do so again. On the other hand, if she receives no response or a negative feedback, she tends not to repeat the utterance. Language learning, like any other kind of learning, requires “imitation of models in the input, practice of the new behavior, and the provision of appropriate feedback” (VanPatten & Williams, 2007a, p. 19).

It should be noted that behaviourists believe that the acquisition of the first and the second language shares a similar process. Learners should be exposed to the target language and receive appropriate feedback. It is argued that this process should be repeated until it becomes a new habit (VanPatten & Williams, 2007a, p. 20).

However, second language learners already have a set of habits (their first language) that they need to overcome in order to form a new set of habits (second language). As a result, there was a general assumption that the first language plays an important role in the second language acquisition. The following sections discuss two important areas of studies: Contrastive Analysis and Language Transfer

2.2.1 Contrastive Analysis

The early stage of Second Language Acquisition was concerning with the assumption that the second language learners rely on their native language. Lado (1957) proposes that “individuals tend to transfer the forms and meanings and the distribution of forms and meanings of their native language and culture to the foreign language and culture” (Lado, 1957, p. 2). As a result, the researchers study and analyse the similarities

and the differences between students' native language and the second (the target) language. Then, teachers can use the information derived from the analysis to design teaching materials and lessons to improve the areas that the two languages are different.

Contrastive Analysis is criticised for not being able to explain and predict all types of errors that students make. In other words, "some errors that are predicted to occur do not and some errors that are not predicted to occur actually do" (Murray & Christison, 2011, p. 156). However, one of the concepts of Contrastive Analysis that old knowledge and skills are transferred to a new situation remains an important concept in Second Language Acquisition.

2.2.2 Language Transfer

The concept of Language Transfer, closely related to the concept of Contrastive Analysis, is based on psychology and the theory of behaviourism. According to Language Transfer, students' native language influences negatively and positively the acquisition of the second language. Negative transfer, often referred to as interference, is the situation when students' first language interferes the second language learning. In other words, if the linguistic features between the two languages are different, students may find them difficult to learn. For example, the absence of final sounds in the Thai language may influence students' pronunciation and result in the absence of final sounds in the English language. In addition, some different syntactic structures between Thai and English can result in ungrammatical errors when students produce the target language. For example, in the Thai language, an adjective is normally put after a noun. As a result, it is sometimes found that some Thai students say "car big" instead of "a big car". On the other hand, if the linguistic features between the two languages are similar, students can learn them more easily. This is called positive language transfer. For example, both languages have

“Subject + Verb + Object” pattern. This similarity results in syntactically correct language production. It should be noted that the acquisition of the second language is complex in nature. The language transfer may not be the only factor that influences students’ language proficiency. However, the concept of language transfer is still important for some areas in the field of Second Language Acquisition.

In conclusion, behaviourism has influenced the research in the field of Second Language Acquisition and the practice in second language pedagogy in several aspects. It emphasises the important role of input. The reason is that, according to behaviourism, learning is a habit formation and a process of imitation and repetition of what was heard and seen. It also emphasises the role of both positive and negative feedback in second language development. In addition, it is believed that learning a second language is the process of forming a new set of habits. As a result, the former set of habits (first language) can positively and negatively influence the acquisition of the second language.

2.3 Monitor Theory

Monitor Theory (Krashen, 1981, 1982, 1985) is one of the most influential theories in the field of Second Language Acquisition. Basically, Monitor Theory attempts to explain various phenomena in language learning. It is based on an assumption that we are uniquely endowed with an innate language acquisition faculty. What we need is the triggering data in the input in order for language acquisition to take place (VanPatten & Williams, 2007a, p. 19). In addition, Monitor Theory can be used to explain the influence of learner differences and learning context on the outcome and the differences between learning and acquisition.

Monitor Theory consists of five interrelated hypotheses: the Acquisition-Learning Hypothesis, the Monitor Hypothesis, the Natural Order Hypothesis, the Input Hypothesis, and the Affective Filter Hypothesis. Each hypothesis is in turn discussed in the following sections.

2.3.1 The Acquisition-Learning Hypothesis

According to Monitor Theory, ‘acquisition’ and ‘learning’ are different ways of developing competence in a second language. The distinction between the two systems is the most fundamental of Krashen’s hypotheses. In Krashen’s words,

“Monitor Theory hypothesizes that adults have two independent systems for developing ability in second languages, subconscious language *acquisition* and conscious language *learning*, and that these systems are interrelated in a definite way: subconscious acquisition appears to be far more important (Krashen, 1981, p. 1).

According to Krashen (1981), ‘acquisition’ takes place naturally when learners engage in meaningful interaction in the target language. Through such natural communication, speakers focus on meaning rather than forms. Acquirers are not aware that they are acquiring the language since acquisition is a subconscious process (Krashen, 1982). In addition, explicit instruction of grammatical rules is not relevant to language acquisition. The linguistic competence gained from this system is also subconscious. Acquirers can tell if the utterances sound correct or wrong even if they cannot explain the rules. It can be noticed that the acquisition process is similar to the first language acquisition.

‘Learning’, on the other hand, refers to the process of gaining conscious knowledge about a second language through formal learning or explicit instruction. Learners may

know the grammatical rules, be aware of them, and be able to talk about them. In addition, 'learning' requires consciousness and effort through the process.

According to Monitor Theory, the knowledge gained from acquisition and learning is stored separately. The knowledge learned, such as grammatical rules, may not be converted into acquired knowledge. This explains why learners may not be able to draw on the grammatical rules they have learned in spontaneous communication.

The distinction between acquisition and learning is similar to the concept of implicit and explicit learning. Implicit learning refers to "acquisition of knowledge about the underlying structure of a complex stimulus environment by a process which takes place naturally, simply and without conscious operations" (N. Ellis, 1994, p. 1). On the other hand, explicit refers to a "more conscious operation where the individual makes and tests hypotheses in search of structure (N. Ellis, 1994, p. 1)". The concept has influenced the field of language learning and resulting in applications in language pedagogy.

2.3.2 The Monitor Hypothesis

The Monitor Hypothesis differentiates the roles of acquisition and learning in second language performance. According to Krashen (1982), acquisition initiates and is responsible for the fluency of language production in communication in the target language. On the other hand, conscious learning plays a limited role in second language performance. Learning functions as a Monitor or editor when learners make changes their utterance (self-correction) before or after they produce the language to improve accuracy. The performer must have time, be focused on form, and know the rules in order to use the Monitor--to apply conscious grammatical rules into second language performance. Krashen (1982) argues that performers can use conscious learning only when all three

conditions are satisfied such as in a grammar test. As a result, according to Krashen (1982), it is difficult to apply conscious knowledge to produce utterances successfully.

2.3.3 The Natural Order Hypothesis

Research in both first and second language acquisition discovers that learners follow predictable orders and sequences in the acquisition of specific forms. Research reveals that learners do not necessarily learn specific morphemes in the order that they are taught. For example, it is found that the acquisition of plural -s occurs before the acquisition of third-person -s. According to Monitor Theory, these predictable sequences occur because all language acquisition is guided by the innate language acquisition faculty (VanPatten & Williams, 2007a). Krashen (1982) argues that the natural order can be perceived as a manifestation of the acquired system without interruption from Monitor.

2.3.4 The Input Hypothesis

According to Acquisition-Learning Hypothesis, we acquire a second language through acquisition. The Input Hypothesis attempts to explain 'how' we acquire a language. Krashen (1982) claims that acquirers need to understand input (comprehensible input) that is a little beyond their current level in order to improve their language proficiency. Krashen (1982) referred to *i* as the current level of acquirers, and *i+1* as a level just slightly beyond the current level. As a result, it is believed that the ability to speak a language cannot be taught directly. Rather, it emerges over time through being exposed to comprehensible input. According to the Input Hypothesis, comprehensible input is not just a necessary condition, it is the sufficient condition for the acquisition of the second language (VanPatten & Williams, 2007a).

2.3.5 The Affective Filter Hypothesis

The Affective Filter attempts to explain how affective factors, such as motivation, self-confidence, and anxiety, relate to the second language acquisition process. For example, those who have positive attitudes towards the target language or feel comfortable with the tasks tend to have their filters set low. This allows the input to reach the innate language acquisition device and results in more successful language acquisition. On the other hand, those who are forced to speak before they feel ready or comfortable tend to raise the affective filter. This will block the process of input and may result in unsuccessful language acquisition.

In conclusion, Monitor Theory has influenced the research and practice in second language learning and teaching for decades. It is believed that the best way or the only way to acquire a second language is the exposure to comprehensible input. It is also suggested that the acquisition system facilitates the production of utterances while the learning system functions only as a Monitor to check the accuracy of the utterances. Finally, it also recognises the roles of affective factors in the process of language acquisition.

2.4 Interaction Hypothesis

Interaction Hypothesis is perceived as one of the most important models in the field of Second Language Acquisition. Basically, Interaction Hypothesis emphasises the role of conversational interaction in learning a second language. It is hypothesised that “language learning is stimulated by communicative pressure”(Swain, 2003, p. 224). Interaction Hypothesis refers to input, interaction, and output model. It has its roots in the Input Hypothesis (Krashen, 1981, 1982, 1985) and the Output Hypothesis (Swain, 1985, 1995, 2005).

The term 'input' refers to the samples of the oral or written language learners are exposed to and work with in order to construct their interlanguage (R. Ellis, 2015, p. 12). In the field of Second Language Acquisition, input plays an important role in the language acquisition process. According to Krashen's (1985) comprehensible input is all learners need to activate their innate language acquisition faculty. In other words, second language acquisition is entirely input-driven, and output plays no role in the process of language acquisition.

However, it is found, from research findings, that comprehensible input alone is not enough for language development. Swain (1985) observes that in spite of years of second language input, learners fail to use accurate grammatical structures. This might be because they did not have enough opportunities to produce output in the target language. As a result, she advanced Comprehensible Output Hypothesis to explain the role of output in the second language acquisition process in addition to comprehensible input. It is hypothesised that learners would benefit from the opportunity to produce output in the target language. She proposed that when learners are exposed to input, they can rely primarily on semantic cues to understand an utterance. However, when they produce output, they need to pay attention on grammatical features. In addition, they have the opportunity to test their grammatical knowledge by producing utterances. It is also believed that the feedback they receive from their interlocutors can assist learners to notice the gap between their current knowledge and the norms of the target language (Loewen & Reinders, 2011).

Second language learners can benefit from interaction with more proficient language users or native speakers when the language is modified. According to Krashen (1985), input can be modified to make it 'comprehensible' for learners. Many research

studies investigate the role of modified input, such as ‘foreigner talk’, in second language learning. Foreigner talk refers to the modified utterances that native speakers produce when talking to non-native speakers. They tend to speak more slowly, pause more, use simpler high-frequency words, use full forms rather than contractions, move topics to the front of a sentence, and avoid complex structures (R. Ellis, 2015). Apart from the modification of input, negotiation of meaning is another strategy to facilitate comprehension. When the interlocutors do not understand each other in a communication, one may expand on what the other said, or provide words the other needs, or ask questions to clarify what the other has said (Richards, 2015).

In conclusion, based on the research findings in the field of Second Language Acquisition, input, output and interaction are important factors in the process of second language acquisition.

2.5 Application

The theories and hypotheses discussed in this chapter are selected because they are important and influential in the field of Second Language Acquisition. The discussions and overviews of other theories and hypotheses can be found elsewhere (R. Ellis, 2008, 2015; Gass & Mackey, 2012; Gass & Selinker, 2008; Johnson, 2004; Ortega, 2009; Ritchie & Bhatia, 2009; VanPatten & Williams, 2007c). As discussed earlier, Second Language Acquisition is a theory of learning not a theory of teaching. However, theories, hypotheses, and the research findings derived from the field can be and have been applied in the field of language teaching. The followings are what we have learned from Second Language Acquisition (adapted from VanPatten & Williams, 2007b, pp. 9-12).

1) Exposure to input is necessary for second language acquisition.

It is found that second language learners cannot acquire a second language without being exposed to the input in the target language. It should be noted that learners must understand input that they are exposed to. Although input is necessary for second language acquisition, it may be not sufficient.

2) A good deal of second language acquisition happens incidentally.

It is found that second language learners acquire a second language incidentally. During communicative interaction, they focus on the meaning of the messages contained in the input and pick up linguistic features.

3) Learners come to know more than what they have been exposed to in the input.

It is found that second language learners attain some unconscious knowledge that cannot come from the input alone. In other words, learners have the knowledge that is not taught and does not appear in the input they are exposed to.

4) Learner's output (speech) often follows predictable paths with predictable stages in the acquisition of a given structure.

It is found that learners from all first language backgrounds follow some developmental sequences such as the acquisition of negation, and inflections.

5) Second language learning is variable in its outcome.

It is found that even under the same conditions of exposure, not all learners achieve the same level of unconscious knowledge about the target language. In addition, it is also found that most learners do not achieve native-like ability in a second language.

6) Second language learning is variable across linguistic subsystems.

A language consists of a number of components such as the sound system, the lexicon, syntax, and pragmatics. It is found that learners may vary in the development of the components of the second language.

7) There are limits on the effects of frequency on second language acquisition.

It was believed that frequency of occurrence of a linguistic feature in the input influences the acquisition of that feature. However, it is found that frequency is not an absolute predictor.

8) There are limits on the effect of a learner's first language on second language acquisition.

It was believed that the first language influenced the acquisition of the second language. However, currently it is found that the influence does not have massive effects on the process and outcomes of the acquisition of the second language.

9) There are limits on the effects of instruction on second language acquisition.

It is believed, by many teachers, that students will learn what they are taught. However, it is found that although learners can benefit from instruction, the effects are not direct. For example, it is found that instruction has no effect on developmental sequence or alters acquisition orders.

10) There are limits on the effects of output (learner production) on language acquisition.

It is believed that the more learners produce the language, the better they would become. However, it is found that it is not always true because the opportunity to produce the language has limited effects on the acquisition of the second language.

It can be noticed that the research findings reveal the roles and the limitations of various factors in the process of acquiring a second language such as input, interaction, learners' first language, and instruction. The knowledge that we learn from the field of Second Language Acquisition can be applied in the practice of language learning and teaching. The followings are some principles of learning a second language (Peréz, 2008, p. 90).

Second language (SL) is learned, based on current theories of SLA, when:

- a) learners are exposed to comprehensible input;
- b) language is used for communicative purposes;
- c) learners interact with each other to negotiate meaning; and
- d) learning about the language follows learners' meaning construction (Peréz, 2008, p. 90).

It is found that the exposure to the target language is essential for language acquisition. As a result, we should encourage our students to participate in the activities that require them to be exposed to the target language. In addition, the opportunity to communicate or interact with others in the target language is essential for second language development. As a result, students should be encouraged to engage in the tasks that they need to use the target language for communication. In the field of language teaching, this approach is called Communicative Language Teaching. It is believed that communicative and

meaningful activities can enhance students' input, interaction, and output in the target language.

Peréz (2008, p. 90) also proposes the principles of effective ways in second language teaching as follows:

Second language teaching is effective when: a) tutors make content more understandable to learners; b) tutors delay the teaching of grammar in the early stages of SL learning; c) tutors grammar explanations are context, meaning and use-focus; and d) tutors provide learners with opportunities for interaction which allows learners to use their language for communication with the purpose of negotiating meaning in real life situations (Peréz, 2008, p. 90).

Based on Krashen's Input Hypothesis, input must be 'comprehensible'. As a result, teachers should make sure that the contents that students are learning are understandable. Moreover, Communicative Language Teaching is a more preferable approach since it is believed that students can develop their language proficiency by using the target language to do meaningful tasks. It should be noted that although Communicative Language teaching is the current trend, the teaching of grammar or sentence structures is still important. However, it is suggested that grammar should not be taught at early stages of learning. In addition, grammar should be taught in contexts so that students know how to use the grammatical knowledge in communication.

Peréz (2008, p. 90) also suggested the characteristics of engaging learning and teaching materials as follows:

Second language learning and teaching materials engage learners when: a) materials are authentic, meaningful and relevant to learners; b) materials focus on providing learners with meaningful tasks; c) materials offer learners grammar explanations in a context of language use rather than isolated language practice; and d) materials call for learner interaction and negotiation of meaning (Peréz, 2008, p. 90).

It is believed that the materials that students are learning should be authentic because they contain the real language used by native speakers. Moreover, the learning and teaching materials should be meaningful and relevant to students. Fortunately, the advance of technology makes authentic materials more accessible. Teachers and students can find countless of authentic materials in the target language from the Internet.

2.6 Conclusion

In this chapter, you have learned some essential theories and issues in the field of Second Language Acquisition. Some of them are still in the mainstream of the field while others have faded from prominence. The knowledge we have learned from the field of Second Language Acquisition should be used as a theoretical background when we design learning and teaching activities with or without the integration of technology. The next chapter discusses the concept of learner autonomy in language learning and teaching. The concept is also helpful for teachers to integrate technology into the language classroom and beyond.



CHAPTER III

Learner Autonomy

Questions for Reflection

- **To what extent should we allow students to make decisions about their learning?**
- **How can we motivate students to learn?**
- **How can technology facilitate autonomous learning?**

In many traditional classrooms, teachers take control over almost everything that happens in the classroom. Students rarely take responsible for their own learning. They rarely have the opportunity to be part of the decision making process, such as the teaching materials, the learning activities, and the contents of the lessons. Moreover, students are supposed to learn new knowledge and skills from their teacher, the textbook, and the activities in the classroom. However, in technology-rich environments, the learning and teaching process does not always occur restrictedly in the classroom. In addition, teachers, materials, the activities, and the contents chosen are not the only sources of knowledge. The availability of countless of learning resources through technology allow us to rethink about the political power in the classroom and the autonomous learning beyond the classroom. This chapter discusses a historical and theoretical background of learner autonomy, the political dimension of learner autonomy, Self-Determination Theory, and some practical tips for fostering autonomy of students.

3.1 Learner Autonomy in Language Learning and Teaching

Over recent decades, learner autonomy has been one of the most interesting concepts and has attracted many researchers in language education and applied linguistics. It is argued that fostering autonomy of learners is one of the ultimate goals in second language teaching. Benson (2011) argues that “the changing landscape of language teaching and learning, the globalization of educational policy, changing assumptions about the nature of work and competence, the rise of self-improvement culture, and changing conceptions of social and personal identity” are the factors that influence the spread of interest in autonomy (Benson, 2011, p. 19). However, the concept of autonomy has been interpreted variously, resulting in confusion among newcomers. As a result, the following sections provide you some historical and theoretical background of learner autonomy.

Learner autonomy was introduced through the Council of Europe’s Modern Languages Project and its outcomes: Centre de Recherches et d’Applications en Langues (CRAPEL) (Benson, 2001). The main objective of CRAPEL was to “provide adults with opportunities for lifelong learning” (Benson, 2011, p. 10). Since then, a lot of research has been done in many parts of the world to foster the autonomy of learners. Numerous publications on learner autonomy and related topics have been published. In addition, many professional associations and research networks consisting of researchers and practitioners from all over the world have been established.

Learner autonomy, in the field of language education and applied linguistics, generally refers to “the ability to take charge of one’s own learning” (Holec, 1981, p. 3). Although this definition is frequently cited in the literature, it has been criticised for being too broad. However, Benson (2009, p. 15), among others, argues that it is not necessary to define learner autonomy too precisely so that researchers can interpret the concept to suit

their particular context. Moreover, learner autonomy is “a multidimensional capacity that will take different forms for different individuals, and even for the same individual in different contexts or at different times” (Benson, 2001, p. 47) depending on many factors such as the age, progress, and perception of learning of students (Little, 1991, p. 4).

However, such a broad definition leads to various interpretations and misinterpretations. Little (1991) warns us that learner autonomy is *not* learning without a teacher since teachers’ role is still important. Moreover, learner autonomy is *not* another teaching method, *not* “a single, easily described behaviour” (pp. 3-4), and *not* “a steady state achieved by certain learners” (p. 4). Benson and Voller (1997) observes that there are at least five ways that the term autonomy has been used in language education:

1. for *situations* in which learners study entirely on their own;
 2. for a set of *skills* which can be learned and applied in self-directed learning;
 3. for an inborn *capacity* which is suppressed by institutional education;
 4. for the exercise of *learners’ responsibility* for their own learning;
 5. for the *right* of learners to determine the direction of their own learning
- (Benson & Voller, 1997, pp. 1-2).

Since the concept of learner autonomy has been interpreted variously, Benson (1997) observes that there are at least three versions of learner autonomy: political, psychological, and technical. A political version of learner autonomy refers to the “control over the processes and content of learning” (Benson, 1997, p. 19). It is argued that teachers

should allow their students to make their own decisions about their own learning or at least allow them to take parts in the decision making process.

Secondly, a psychological version of learner autonomy refers “a capacity—a construct of attitudes and abilities—which allows learners to take more responsibility for their own learning” (Benson, 1997, p. 19). It is argued that affective factors, including motivation, can lead to successful more autonomous learning.

Finally, a technical version of learner autonomy is defined as “the act of learning a language outside the framework of an educational institution and without the intervention of a teacher” (Benson, 1997, p. 19). This version is sometimes called ‘autonomous learning’, ‘learning beyond the classroom’, ‘self-regulated learning’, and ‘self-directed learning’. Fostering autonomy, from this perspective, is to prepare learners with skills, knowledge, and strategies for their autonomous learning such as how to set goals for their learning, how to search for the learning materials to suit their current proficiency and their interests, how to seek assistance, and how to evaluate their own progress.

3.2 Political Dimension of Learner Autonomy

Political dimension is perceived as the root of learner autonomy. It focuses on the political power between teachers and students in the classroom. From political perspective, autonomy refers to the right of students to take control over their own learning. In traditional approaches to language teaching, there are a lot of emphasis on teachers and teaching activities in the classroom. Students are often regarded as passive recipients of knowledge in the language learning and teaching process (Richards, 2015). Currently, we are aware that not all learners are the same. They may have different beliefs, level of language proficiency, background knowledge, interests, learning styles, etc. In addition, it

is found that such individual differences are important factors in the process of learning a second language. As a result, fostering autonomy of students is to allow them to choose, for example, the content, the place, the time, the pace, and the method of learning to suit his/her own style, need, and situation. This section discusses the cultural issues and the various degrees of political dimension of learner autonomy.

3.2.1 Is Autonomy a Universal Concept?

There have been debates on whether or not learner autonomy is a universal concept regardless of cultural contexts (Holliday, 2003; Palfreyman & Smith, 2003; Schmenk, 2005). As a matter of fact that the root of autonomy originated from Western context, it is controversial whether or not the concept is appropriate for some non-Western contexts. For example, in some Asian contexts, some students may prefer collectivism to individualism. They may feel more comfortable working in group than working individually. When they are asked to express their opinions or involved in the decision making process, they may prefer staying quiet and let their teacher decide. In other words, some cultural traits may influence the perception of the values of autonomy and affect the attempt to foster the autonomy of students in the classroom.

On the other hands, for many researchers, “learner autonomy is a natural attribute” (Benson, 2011, p. 73). It is argued that we are born self-directed learners, but this natural attribute is suppressed by formal education. We gradually give up our autonomy and prefer to be directed by teachers. One of the reasons for being dependent might be that they are used to being led by their teacher. In traditional classroom, it is believed that teachers is supposed to be the person who makes all decisions and takes control over everything.

3.2.2 Degrees of Autonomy

In the classroom context, there are various types and degrees of autonomy. For example, Littlewood (1999) proposed two types of autonomy: *proactive* and *reactive*. Proactive autonomy refers to the situation when students fully self-direct their own learning. In other words, they create and set up their own directions without being controlled or guided by teachers. On the other hand, reactive autonomy, refers to the situation when students do not create or set up the direction by themselves, but “once a direction has been initiated”, they can “organize their resources autonomously in order to reach their goal” (Littlewood, 1999, p. 75).

A similar concept of various degrees of political dimension of autonomy is proposed by Ribé (2003). He contends that there are three pedagogical perspectives of autonomy: convergence, divergence-convergence, and convergence-divergence. In the convergence position, students are not allowed to make their own decisions because they are constrained and controlled by ‘pre-established curriculum or course of action’ (Ribé, 2003, p. 13). In divergence-convergence position, students are allowed to take parts in the decision making process about some important parts of the learning process. In the convergence-divergence position, students are allowed to make decisions and self-direct their own learning.

3.3 Autonomy and Motivation

Motivation is one of the most important aspects in psychological dimension of learner autonomy and also an important attribute for successful learners of any sciences including English as a second language. Motivation generally refers to “[w]hat moves a person to make certain choices, to engage in action, to expend effort and persist in action”

(Dörnyei & Ushioda, 2011, p. 3). In other words, it is the reason we do what we do. In the field of English as a Second Language Teaching, integrative/ instrumental paradigm (Gardner & Lambert, 1972) has dominated the research for many years. Students with integrative motivation are motivated to learn a second language because they want to better understand and get to know the speakers of the target language and the cultures of the target language community. On the other hand, students with instrumental motivation want to learn a second language because of more functional reasons such as to get a better job and to pass the examination. In general education, there are many theories of motivation such as Attribution Theory, Self-Worth Theory, Self-Efficacy Theory, Expectancy Value Theory, and Self-Determination Theory. In this section, Self-Determination Theory is discussed since it helps us understand the relationship between autonomy and motivation.

Self-Determination Theory (Edward L. Deci & Flaste, 1995; Edward L. Deci & Ryan, 1985; Edward L. Deci & Ryan, 2002; Reeve, Deci, & Ryan, 2004; Reeve, Ryan, Deci, & Jang, 2008) is one of the most important, comprehensive and empirically supported theories in motivation. Basically, Self-Determination Theory is an organismic theory of human behavior and personality development concerning with differentiating types of motivation along a continuum from controlled to autonomous and how social-contextual factors support or undermine people's satisfaction of their basic psychological needs for competence, relatedness, and autonomy (Ryan & Deci, 2017, p. 3).

According to Self-Determination Theory, people have two different orientations toward motivation: intrinsic and extrinsic motivation. Students with intrinsic motivation learn a second language because they find it interesting or enjoyable. On the other hand, students with extrinsic motivation may learn a second language because some other

reasons such as to gain rewards and to avoid punishments. As a matter of fact that not all students are intrinsically motivated by the second language itself, Self-Determination Theory provides us an approach to understanding how sociocultural factors, such as teachers, peers, and technology impact students' motivation to learn. The four mini-theories: basic needs theory, cognitive evaluation theory, organismic integration theory and causality orientation theory are discussed below.

3.3.1 Three Basic Innate Psychological Needs

According to Self-Determination Theory, there are three fundamental psychological needs that underlie human behaviours: the needs for autonomy, competence, and relatedness (Reeve et al., 2004; Ryan & Deci, 2000, 2002). Autonomy refers to being the origin or source of our own behaviours rather than being initiated by forces or events with which we do not identify (Reeve et al., 2004; Ryan & Deci, 2002). In other words, the action can be called autonomy if it is “self-endorsed, or congruent with one’s authentic interests and values” (Ryan & Deci, 2017, p. 10). Autonomy is the need to self-regulate, self-direct, or self-determine our own actions, including our own second language learning process. Reeve, Deci, and Ryan (2004, p. 34) argue that when the need for autonomy is satisfied, “students perceive an internal locus of causality, feel high freedom and low pressure, and perceive a sense of choice or value about whether or not to engage in a given course of action” (Reeve et al., 2004, p. 34). Practically, once students have the autonomy to make their own decisions about their own learning or endorse those decisions, their motivation in learning increases and may result in better learning.

In addition to autonomy, all individuals need to be competent and also need to have the opportunities to exercise and express their abilities (Ryan & Deci, 2002, p. 7). The second psychological need is called ‘competence’. The need for competence leads us to

seek out and master appropriate challenges that test, inform, develop, stretch, extend, and help them diagnose their developing abilities (Reeve et al., 2004, pp. 34-35).

Finally, apart from autonomy and competence, we all need to be connected to others. The third psychological need is called 'relatedness'. According to Self-Determination Theory, all individuals need to be related to and cared for by others and their community (Ryan & Deci, 2002, p. 7). In addition, relatedness includes belonging and feeling of importance among others and also experiencing oneself as contributing to others (Ryan & Deci, 2017, p. 11).

In conclusion, according to Self-Determination Theory, once the three basic innate psychological needs are satisfied, the motivation increases. As a result, the basic needs theory is a useful framework since it can be used to explain why some students are passive while others are more motivated during learning activities. Moreover, it explains how social conditions sometimes satisfy the three psychological needs and lead to the increase of students' motivation and sometimes neglect and thwart the needs and decrease students' motivation (Reeve et al., 2004, p. 35).

3.3.2 Cognitive Evaluation Theory

Cognitive evaluation theory is also a sub-theory of Self-Determination Theory. This sub theory explains how motivation is influenced by social contexts (Ryan & Deci, 2000). According to cognitive evaluation theory, external events have two functional aspects of external events: a controlling and an informational aspect (Reeve et al., 2004). Once individuals are highly controlled by external factors, their need for autonomy is not satisfied. Therefore, their motivation decreases. On the other hand, once they are not controlled by external conditions, their need for autonomy is satisfied. Once they feel

autonomous, their motivation increases. Informational aspects of an external events provide feedback in a noncontrolling way (Reeve et al., 2004, p. 36). However, the feedback can either increase or decrease motivation. If the feedback is positive, it satisfies individuals' competence and increases motivation. On the other hand, the negative feedback can undermine the feeling of competence and decrease motivation.

In conclusion, cognitive evaluation theory complements the basic needs theory. Basic needs theory explains the source of intrinsic motivation while cognitive evaluation theory explains how sociocultural conditions can support or undermine intrinsic motivation.

3.3.3 Organismic Integration Theory

Basically, Self-Determination Theory is concerned with intrinsic motivation. It is believed that intrinsic motivation, such as interests and pleasure, leads to self-determined and autonomous behaviours of individuals. However, some activities, such as learning a new language, are not always motivated by intrinsic motivation. For example, some students may not find learning English interesting but they have to learn it because it is important for their future. As a result, extrinsic motivation is also important to promote self-regulated behaviours. Ryan and Deci (2002, p. 15) argue that "it is possible to be autonomously extrinsically motivated".

Organismic integration theory explains the process of internalisation by transforming from external regulation into internal regulation. In other words, extrinsic motivation can internalise and lead to self-determined behaviours. According to organismic integration theory, there are four types of extrinsic motivation: external, introjected, identified, and integrated regulation (see Figure 3.1).

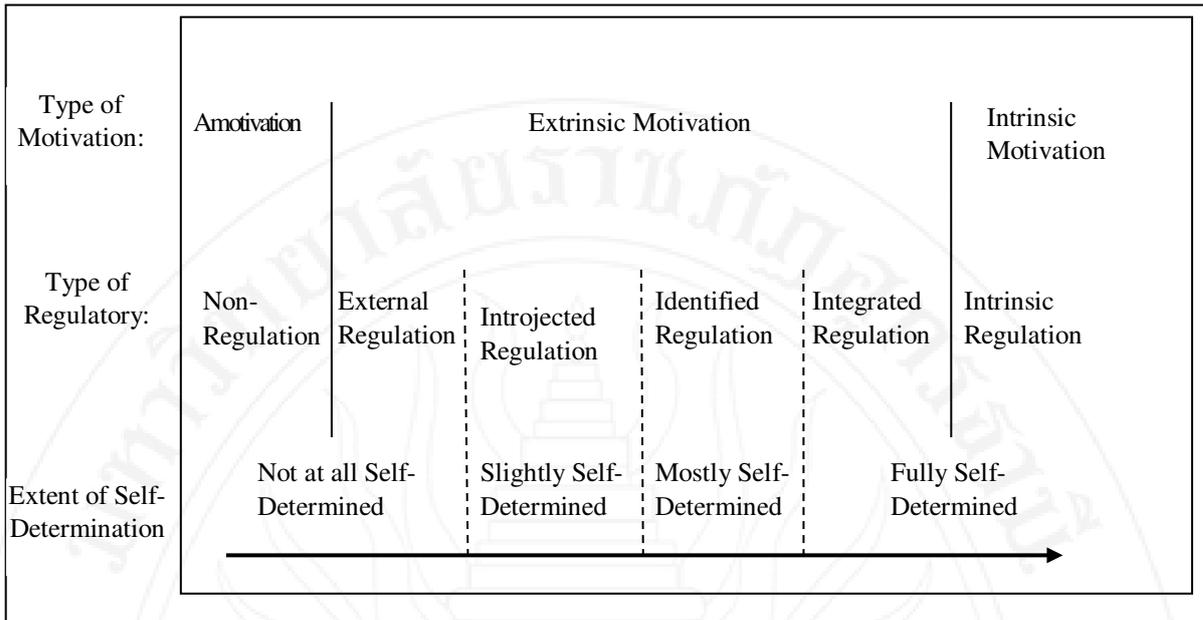


Figure 3.1 Self-determination Continuum of Types of Motivation (adapted from Reeve et al., 2004, p. 39)

Figure 3.1 illustrates the types of motivation, the types of regulatory style, and the extent of self-determination. Basically, the figure illustrates the self-determination continuum between amotivation and intrinsic motivation. People with amotivation do not intend to act or act passively. People with extrinsic motivation have different degrees of self-determination depending on their style of regulatory. For example, those who are extrinsically motivated by external regulation (e.g. to obtain rewards or to avoid punishments) are the least self-determined because they do not see the value of or endorse the actions. They may be extrinsically motivated to act to “satisfy an external command or a socially constructed contingency” (Ryan & Deci, 2002, p. 17).

Introjected regulation is a kind of external regulation that has been partially internalised. People act to avoid guilt and shame or to maintain self-esteem and feelings of worth. As a result, they tend to lose intrinsic motivation because this type of regulation is controlling (Ryan & Deci, 2002, p. 17).

Identified regulation is a more self-determined form of extrinsic motivation and an important aspect of the process of transforming external regulation into self-regulation because this type of regulation tends to have an internal perceived locus of causality (Ryan & Deci, 2002, p. 17). People are extrinsically motivated to act because they personally see the value of and endorse the action.

The most self-determined type of extrinsic motivation is integrated regulation. People are extrinsically motivated to act because they evaluate and endorse values, goals, and needs of the action. It should be noticed that integrated regulation and intrinsic motivation share many similar characteristics. However, people act with integrated extrinsic motivation volitionally in order to obtain some personally endorsed goals rather than for their interest or enjoyment (Ryan & Deci, 2002, p. 18).

3.3.4 Causality Orientation Theory

Ryan and Deci (2002, p. 21) summarise that causality orientation theory differentiates three types of orientation of human behaviours: autonomous, controlled, and impersonal. These three orientations relate to the types of regulatory style, mentioned in organismic integration theory. Autonomous orientation refers to regulating behaviour based on interests and self-endorsed values. This orientation relates to intrinsic motivation and integrated extrinsic motivation. Controlled orientation involves behaviours that are influenced, directed, or controlled by sociocultural factors. This orientation relates to external and introjected regulation. Finally, impersonal orientation refers to ineffectance and not behaving intentionally. This orientation relates to amotivation.

In conclusion, Self-Determination Theory provides a useful framework to explain the differences between intrinsic and extrinsic motivation and the relationship between

autonomy and motivation. It explains not only the root of intrinsic motivation but also the various types of extrinsic motivation. According to Self-Determination Theory, intrinsic motivation increases once the basic innate psychological needs, which are autonomy, competence, and relatedness, are satisfied. The theory also illustrates how different types external factors or sociocultural conditions, which are autonomous, controlled, and impersonal, influence different types of regulation and the extent of self-determination.

3.4 Fostering Learner Autonomy

We have learned from the previous sections that autonomy supportive learning environments can result in better learning outcomes. In order to foster learner autonomy, we need to allow, encourage, and prepare students to take control over their own learning. However, fostering learner autonomy requires a change of mindset and behaviours of all stakeholders in the pedagogical context. In this section, some practical tips on how to foster learner autonomy are provided.

3.4.1 Making Decision

An autonomy supportive environment is quite different from a traditional one. Traditionally, teachers have the authority to control and make all decisions in the classroom. The learning materials, the learning activities, and the contents are generally chosen by teachers because it is believed that they know best what is appropriate for their students. However, those materials, activities, and contents chosen by teachers may not suit different students' preferences. As a matter of fact, students have different interests, learning styles, level of language proficiency, pace of learning, etc. As a result, students should have the opportunity to make their voices heard so that teachers can use the information to make decisions about their classroom.

In the classroom context, it may not always be possible to allow students to make every decision. Providing choices for students to choose from is another practical way of applying the concept of autonomy into the classroom. For example, we prepare three reading passages, and let them choose which one they prefer to read. According to Self-Determination Theory, if students have the opportunity to make choices, their intrinsic motivation increases. This is because their need for autonomy is satisfied. In other words, they feel that they are willing to do the activities by their own volition not by being controlled or forced by others.

3.4.2 Active Roles

A great way to foster learner autonomy is to encourage students to take more active roles in their learning. In traditional approaches and methods such as Grammar-Translation Method and Audio-Lingual Method, the role of students are often passive. On the other hand, a more holistic approach to learning such as task-based and project-based learning allows and encourages students to take more active roles, make decisions, and control their own learning through completing the assigned task. For example, students can make decisions about their task or project. They have to decide what topic they are going to do, how they are going to collect the information, how they are going to present their work. Through these steps, learner autonomy can be fostered.

However, teachers need to change her roles from the only source of knowledge, the decision maker, and the controller of the classroom to the facilitator and the advisor who supports students' learning. On the other hand, students need to change their roles from the passive recipients of knowledge to be more responsible for their own learning. It should be noted that the degree of freedom and the amount of responsibilities can be various

depending on each context and would influence the different roles of teachers and students and the activities in the classroom.

3.4.3 Learning Management

Learning autonomously beyond the classroom is not monitored or controlled by teachers. Students need to manage their own learning. As a result, learner autonomy can be fostered through preparing students with learning management skills such as how to set goals, how to keep tracks on their progress, and how to evaluate whether they achieve the goals set. In addition, they should learn how to find the learning materials that are appropriate for their own level of proficiency and their interests. Fortunately, the advance of technology, notably the Internet, can be used as a learning resource. Finally, they should learn how to manage their psychological aspects, for example, what they should do to motivate themselves.

3.5 Conclusion

The concept of learner autonomy is important in second language learning and teaching since it emphasises on the active role of students. It is believed that students should take charge of or responsibilities for their own learning. The concept is relevant to Self-Determination Theory because autonomy is one of the basic psychological needs. Once the need for autonomy is satisfied, motivation increases. As a result, we should foster the autonomy of our students by allowing them, at an appropriate degree, to choose or make some decisions about their learning. In addition, we should equip them with some essential skills that they may need for their self-directed or self-regulated learning.

We can see that the concept of 'independence' is important in the concept of learner autonomy. However, researchers in the field of learner autonomy and Self-

Determination Theory recognise the role of sociocultural conditions in human behaviours including second language learning. The next chapter discusses Sociocultural Theory and how it impacts the process of second language acquisition.



CHAPTER IV

Sociocultural Theory

Questions for Reflection

- **What are the roles of social interaction in second language learning?**
- **How can teachers, peers, and other people assist students' learning process?**
- **How can technology facilitate interaction and communication?**

The main goal of learning a new language is the ability to communicate with other people. Communication is a social activity in its nature. As a result, social interaction is crucial in learning a new language. In this chapter, Sociocultural Theory is discussed since it emphasises the role of social interaction in human activities. Then the applications of Sociocultural Theory into language education are elaborated. Finally, the roles of technology in social interaction are discussed.

4.1 Introduction

Sociocultural Theory is a constructivist theory originating from the work of Lev Semenovitch Vygotsky, a Russian psychologist, and his colleagues. Vygotsky was born on November 5, 1896 in Orsha, a town near Minsk in Belorussia (Wertsch, 1985). He graduated from Moscow University in 1917 with a specialisation in literature (Lantolf & Appel, 1994). He was interested in philosophy, literature, and culture and turned his attention to fundamental questions of human development and learning (Newman & Holzman, 1993). The main focus of Vygotsky was on the social origins and cultural bases

of individual development (Moll, 1990). Lantolf and Appel pointed out that “Vygotsky’s enterprise was to unify semiotics, neurolinguistics, psychology, and psycholinguistics into a stable theoretical framework that had as its goal the scientific exploration and explanation of the development and function of the human mind” (Lantolf & Appel, 1994, p. 2). Later, Vygotsky’s ideas were refined by his colleagues, including A. R. Luria and A. N. Leont’ev, into a sociocultural theory of human mental processing (Lantolf & Appel, 1994).

However, the political climate at that time resulted in efforts to ban his work in Russia for many years. One of the reasons was that he referenced Western psychologists in his work. After the death of Stalin, Vygotsky’s writings were published again (Swain, Kinnear, & Steinman, 2011). In the 1960s, the theory was introduced in the western world by the translation of two of his important books: *Thought and Language* (Vygotsky, 1986) and *Mind in Society* (Vygotsky, 1978) and has influenced the field of general education for decades.

Sociocultural Theory is a theory of the development of higher mental functions (Lantolf & Thorne, 2006). Basically, Sociocultural Theory provides a theoretical framework to explain the role of social interaction in human cognitive development. According to Vygotsky, cognitive development is “a process of transforming physical and symbolic tools into psychological tools with the result that we gain intentional control over our cognitive functioning and consequently our relation to others and to the world” (Lantolf & Poehner, 2008a, p. 14). The following sections discuss the central concepts of sociocultural theory: mediation and artefacts, social sources of cognitive development, zone of proximal development and activity theory.

4.2 Mediation and Artefacts

Mediation is the central concept of Sociocultural Theory. According to Vygotsky, all forms of higher human mental activity are mediated by culturally constructed physical and/or symbolic artefacts (Vygotsky, 1978). The indirect relationship between human and the world makes us different from other animals. As a result, we need to understand how human social and mental activity is organised through culturally constructed artefacts (Lantolf, 2000a).

Artefacts refer to all human-made objects. The artefacts were created by human over time and were modified to meet the needs of the communities and individuals before passing on to the future generations (Lantolf, 2000a). For example, the first generations of computers are quite different from computers today in terms of their capacities and human interfaces. In addition, the language that we speak today has been remodeled by speakers over time.

According to Vygotsky, there are two types of artefacts: physical (material) and psychological (symbolic). Examples of physical or material artefacts include books, pens, tables, computers, and mobile phones. Examples of psychological artefacts are languages, numbers, and concepts. All artefacts have the potential to be used as mediating means. However, we call it a mediational means only when it is used to mediate our activity. For example, a rock is a mediational mean when you use it as a tool to hunt.

Although both physical (tools) and psychological (signs) artefacts have mediating functions, Vygotsky argued that they were different. In Vygotsky's words:

The tool's function is to serve as the conductor of human influence on the object of activity; it is *externally* oriented; it must lead to changes in

objects. It is a means by which human external activity is aimed at mastering, and triumphing over, nature. The sign, on the other hand, changes nothing in the object of a psychological operation. It is a means of internal activity aimed at mastering oneself; the sign is *internally* oriented. These activities are so different from each other that the nature of the means they use cannot be the same in both cases (Vygotsky, 1978, p. 55).

In other words, physical tools can be used to mediate and bring about change in other objects while psychological tools can be used to mediate the mind and behaviour. For example, a grammar book is a physical artefact (tool) when we use it to lengthen a leg of the bedside table since it mediates change the material object. However, it is a psychological artefact (sign) when we use it to mediate our learning of the language because we learn through the language in the book and to mediate change in our higher mental processes (Swain et al., 2011).

Private speech is a great example of how a psychological artefact, language, is used to mediate the process of cognitive development. A child often talks to herself while she is playing. This self-talk is called “private speech” or “egocentric speech”. According to Piaget, egocentric is a sign of cognitive immaturity. However, Vygotsky viewed that private speech played “an important role in cognitive development by moving children in stages toward self-regulation: the ability to plan, monitor, and guide one’s own thinking and problem solving” (Woolfolk, 2010, p. 46) . In his experiments, Vygotsky (1978) found that children used egocentric speech during activities as a problem-solving tool to find a solution to the problem, to complete “difficult tasks, to overcome impulsive action, to plan a solution to a problem prior to its execution, and to master their own behavior” (Vygotsky, p. 28). Moreover, he argues that “[t]he more complex the action demanded by

the situation and the less direct its solution, the greater the importance played by speech in the operation as a whole” (pp. 25-26).

In conclusion, we learn from Sociocultural Theory that artefacts or tools, both material and symbolic, are important for us because we use them to mediate our higher-order mental activities. The next section discusses the role of social interaction as a source of cognitive development.

4.3 Social Sources of Cognitive Development

Another crucial tenet from Sociocultural Theory is the emphasis on the importance of the role of social interaction in cognitive development. It is believed that, according to Sociocultural Theory, cognition is first co-constructed through the shared activities between the child and others and then internalised by the child as a part of cognitive development (Woolfolk, 2010). This idea is different from that of cognitivists who view that cognition originates and develops “exclusively inside the individual mind by means of biological mechanisms and internal processes” (Gutiérrez, 2006, p. 232). Vygotsky argues that “human development is the product of a broader system than just the system of a person’s individual functions, specifically, systems of social cooperation” (Vygotsky, 1999). From this perspective, cognition is “a mediated process that originates in societal activity” (Gutiérrez, 2006, p. 232). In other words, cognition is not just influenced by the environment but the environment itself is the source of cognitive development. In the words of Lantolf and Johnson, “social activity is the process through which human cognition is formed” (Lantolf & Johnson, 2007, p. 878).

Both Piaget and Vygotsky realise the importance of social interaction in cognitive development. However, Piaget believes that interactions between peers are the most

helpful because they are on equal basis. On the other hand, Vygotsky believes that cognition can develop through interactions with more capable people (Woolfolk, 2010). The way we acquire our first language is a great example that emphasises the importance of social interaction as a source of cognitive development. We learn our first language through interaction with more capable people: our parents. According to Sociocultural Theory, the language development of a child is not just influenced by the interaction with her parents. Rather, the language development has its origins in social sources. In other words, social interaction is the source of language acquisition.

Vygotsky also proposes the process of internalisation consisting of a series of transformations. The first step of transformation, discussed above, is the process when “*an external activity is reconstructed and begins to occur internally*” (Vygotsky, 1978, p. 56). The second step occurs when “*[a]n interpersonal process is transformed into an intrapersonal one*” (Vygotsky, 1978, p. 57). Vygotsky proposes that cognitive development occurs first in the interpsychological plane and is subsequently transformed into an intrapsychological. In Vygotsky’s words,

“Every function in the child’s cultural development appears twice: first, on the social level, and later, on the individual level; first, *between* people (*interpsychological*), and then *inside* the child (*intrapsychological*). This applies equally to voluntary attention, to logical memory, and to the formation of concepts. All the higher functions originate as actual relations between human individuals” (Vygotsky, 1978, p. 57).

Finally, he proposes that the process of internalisation, which is the transformation of an interpersonal process into an intrapersonal one, is the result of a long series of

developmental events (Vygotsky, 1978, p. 57). Private speech, mentioned in Section 4.2, is also a great example of internalisation. See an example below:

For example, in any preschool room you might hear 4- or 5- year-olds saying, “No, it won’t fit. Try it here. Turn. Maybe this one!” while they do puzzles. As these children mature, their self-directed speech goes underground, changing from spoken to whispered speech and then to silent lip movements. Finally, the children just “think” the guiding words (Woolfolk, 2010, p. 46).

These steps from private speech to inner speech is an example of how higher mental functions appear first between people and internalise as cognitive processes.

In conclusion, we learn from Sociocultural Theory that our cognition develops through a series of transformation: we learn first through social interaction specifically with more capable people, and then we gradually internalise the knowledge. This process leads to our cognitive development.

4.4 Zone of proximal development

The Zone of Proximal Development (ZPD) is one of the most important and well-known concept of Sociocultural Theory especially in the field of education including language education and applied linguistics. According to Sociocultural Theory, children develop cognition with the assistance of more capable others and appropriate artefacts. The difference between what a child accomplishes by herself and what she might achieve when she was assisted is called the Zone of Proximal Development (Swain et al., 2011). Vygotsky proposed that the Zone of Proximal Development refers to:

“the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers” (Vygotsky, p. 86).

It should be noted that the Zone of Proximal Development is not a physical place. The concept is created as a metaphor to illustrate the space where a child can master a task if she is given appropriate assistance and support. Vygotsky argues that we cannot measure the full range of individuals' abilities through observation of independent performance. He states that abilities can only be revealed by measuring individuals' responsiveness to various forms of mediating support (Lantolf & Poehner, 2008a). Vygotsky elaborates the differences between supported and unsupported performance as follows:

“Suppose I investigate two children upon entrance into school, both of whom are twelve years old chronologically and eight years old in terms of mental development. Can I say that they are the same age mentally? Of course. What does this mean? It means that they can independently deal with tasks up to the degree of difficulty that has been standardized for the eight-year-old level. If I stop at this point, people would imagine that the subsequent course of development and of school learning of these children will be the same, because it depends of their intellect. [...] Now imagine that I do not terminate my study at this point, but only begin it. These children seem to be capable of handling problems up to an eight-year-old's level, but not beyond that. Suppose I show them various ways of dealing with the problem. Different experimenters might employ different modes of demonstration in different cases: some might run through an entire demonstration and ask the

children to repeat it, others might initiate the solution and ask the child to finish it, or offer leading questions. In short, in some way or another I propose that the children solve the problem with my assistance. Under these circumstances it turns out that the first child can deal with problems up to a twelve-year-old's level, the second up to a nine-year-old's. Now, are these children mentally the same? When it was first shown that the capability of children with equal levels of mental development to learn under a teacher's guidance varied to a high degree, it became apparent that those children were not mentally the same age and that the subsequent course of their learning would obviously be different. This difference between twelve and eight, or between nine and eight, is what we call *the zone of proximal development* (Vygotsky, 1978, pp. 85-86)".

In other words, the concept of the Zone of Proximal Development emphasises the different potential of children if assisted by appropriate assistance.

In the field of education, the assistance is called "scaffolding". It should be noted that the term scaffolding is not coined by Vygotsky. Actually, the term was first used in a paper by Wood, Bruner and Ross (1976). Although they did not reference the work of Vygotsky in that article, but the concept of scaffolding was similar to the concept of the Zone of Proximal Development. They defined scaffolding as "a kind of process that enables a child or novice to solve a problem, carry out a task, or achieve a goal which would be beyond his unassisted efforts" (Wood et al., 1976, p. 90). This kind of support can be gradually reduced and withdrawn at an appropriate time.

4.5 Cultural-Historical Activity Theory (CHAT)

Activity theory is the Soviet-originated cultural-historical research tradition. The concept has long historical roots from classical German philosophy (from Kant to Hegel), the work of Marx and Engels, and the Soviet cultural-psychology, founded by Vygotsky, Leont'ev, and Luria (Engeström, 1999; Kuutti, 1996). Subsequently, a Finnish psychologist, Yrjö Engeström, develops and systematises a model of an activity system and activity system networks that have been applied in many fields of inquiry such as “applied linguistics, psychology, human-computer interaction, cognitive science, anthropology, communications, workplace studies, and education” (Lantolf & Thorne, 2006, p. 209).

Activity Theory refers to “a philosophical and cross-disciplinary framework for studying different kinds of human practices as development processes, with both individual and social levels interlinked at the same time” (Kuutti, 1996, p. 25). In the first generation of Activity Theory, the unit of analysis is object-oriented action mediated by cultural artefacts (see Figure 4.1)

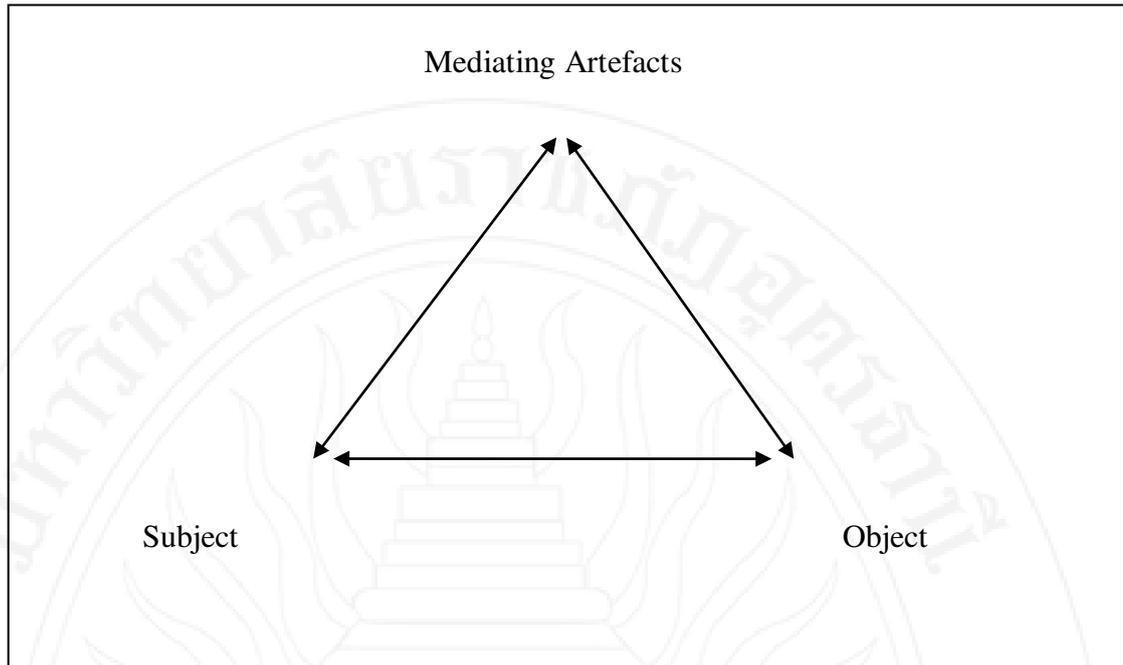


Figure 4.1 First Generation of Activity Theory (Engeström, 2001, p. 134)

Figure 4.1 illustrates the Vygotsky's concept of mediation. As discussed in Section 4.2, human actions are mediated by psychological and physical artefacts. As a result, the subject and the object interact indirectly through mediating artefacts. Engeström (2001) claims that Vygotsky's concept of cultural artefacts as mediation in human actions is revolutionary and the key to understanding human psyche (Engeström, 2001, p. 134)

Although the first generation of Activity Theory is useful to help us understand human action, it has limitation because the unit of analysis is individually focused. In order to understand human activity that is complex and occurs in social contexts, the unit of analysis should not be merely isolated human action (Jonassen & Rohrer-Murphy, 1999; Kuutti, 1996).

In the second generation of activity theory, based on the writings of Leont'ev (1978, 1981b), the main focus is on the "complex interrelations between the individual subject and his or her community" (Engeström, 2001, p. 134). Leont'ev is the person who

differentiates collective activity and individual action and integrates other people and social relations in the Activity Theory (Engeström & Miettinen, 1999). In his famous illustration, Leont'ev (1981b) draws a distinction between an individual action and a collective activity in his famous example of primeval collective hunt:

A beater, for example, taking part in a primeval collective hunt, was stimulated by a need for food or, perhaps, a need for clothing, which the skin of the dead animal would meet for him. At what, however, was his activity directly aimed? It may have been directed, for example, at frightening a herd of animals and sending them toward other hunters, hiding in ambush. That, properly speaking, is what should be the result of the activity of this man. And the activity of this individual member of the hunt ends with that. The rest is completed by the other members. This result, i.e., the frightening of game, etc., understandably does not in itself, and may not, lead to satisfaction of the beater's need for food, or the skin of the animal. What the processes of his activity were directed to did not, consequently, coincide with what stimulated them, i.e., did not coincide with the motive of his activity; the two were divided from one another in this instance. Processes, the object and motive of which do not coincide with one another, we shall call "actions." We can say, for example, that the beater's activity is the hunt, and the frightening of the game his action (p. 210).

From the above famous passage, we learn the differences between activity and actions. The activity is driven by an object-related motive: a need for food or clothing. The action is driven by a goal: to frighten game. It should be noted that one activity can consist of a series of actions. Each action is driven by a goal. For example, in order to scare and drive

the prey towards other members of the community, the hunters may beat the bush, clap their hands, or shout. However, the motive of an activity cannot be determined merely by considering each action separately because the same observable action can be linked to different goals and motives (Lantolf, 2000a).

The graphic model of collective activity system, based on the work of Leont'ev (1981b) is created by Engeström (1987) in order to represent the social and collective elements in the activity system (see Figure 4.2). This representation is currently used in research studies inspired by activity theory.

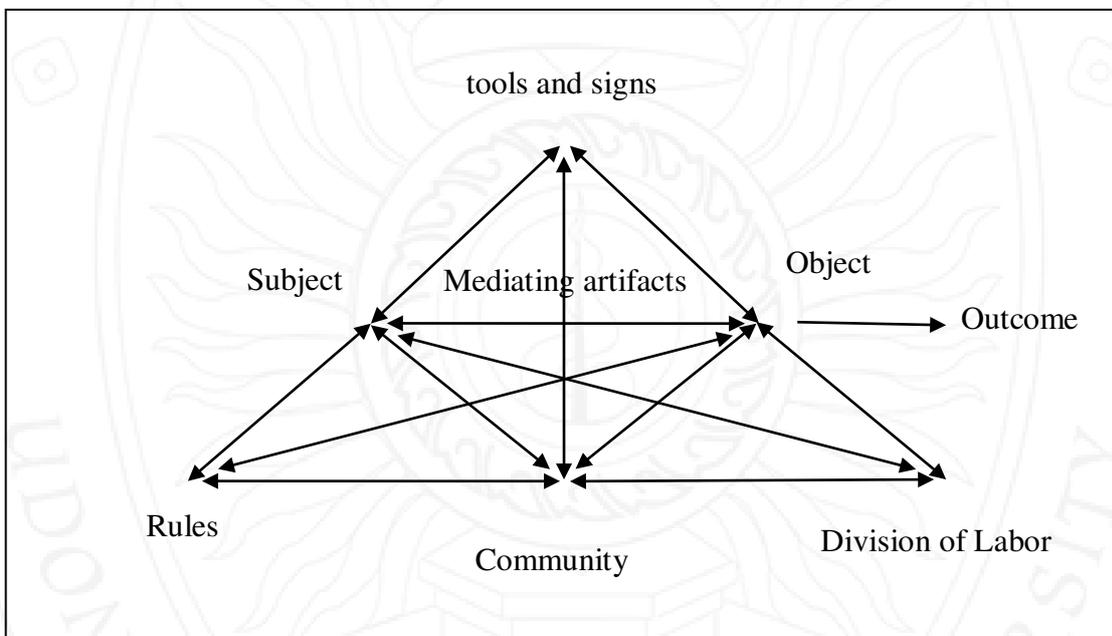


Figure 4.2 The Structure of Human Activity System (based on Engeström, 1987, p. 78)

As represented in Figure 4.2, human activity consists of six elements: object, subjects, artefacts, community, rules and division of labour. Objects are important because activities are object-oriented. As a result, objects distinguish one activity from another (Leont'ev, 1978). The object of the activity can be “the physical or mental product” (Jonassen & Rohrer-Murphy, 1999, p. 63) “as long as it can be shared for manipulation

and transformation by the participants of the activity” (Kuutti, 1996, p. 27). The subject of an activity can be both individuals and groups engaged in the activity (Jonassen & Rohrer-Murphy, 1999). The relationship between the subject and the object of the activity is mediated by any kind of physical and/or psychological artefacts. The relationship between subject and community is mediated by rules. The rules can be “both explicit and implicit norms, conventions, and social relations within a community” (Kuutti, 1996, p. 28). Finally, the relationship between the community and the object of the activity is mediated by division of labour.

4.6 Applications

Actually, Sociocultural Theory is not a theory of teaching and learning. However, Vygotsky’ legacies can be applied to the field of language education and applied linguistics (Hawkins, 2004; Lantolf, 2000b; Lantolf & Poehner, 2008b; Lantolf & Thorne, 2006; Swain et al., 2011) and has gained more attention recently after having been dominated by cognitive domain for decades. This section discusses how we can apply Sociocultural Theory to language teaching and Computer-Assisted Language Learning.

4.6.1 Mediating Artefacts

We learn from Section 4.2 that our higher-order mental activities, including learning and teaching a second language, are mediated by physical and/or psychological artefacts or tools. This tenet from Sociocultural Theory is crucial because it emphasises the importance of learning and teaching materials. The mediating artefacts or learning and teaching materials include traditional ones such as books and blackboard or more sophisticated ones such as the Internet. According to Sociocultural Theory, all kinds of artefacts have the potential to become mediating means. However, it becomes mediating

means only when it is used to mediate our higher-order mental activities. In other words, learning and teaching materials, including technology, are useful for learning and teaching process only when they are used properly. For example, we all are aware of the potential of the Internet as a powerful tool for learning a second language. However, if we do not actually learn from the learning materials available there, the Internet cannot be regarded as a mediating artefact. As a result, teachers should encourage students, through meaningful learning activities, to learn from available resources.

4.6.2 Social Interaction

We learn from Section 4.3 that Vygotsky emphasised the importance of social interaction. He claimed that social interaction is the source of cognitive development. As a result, learning a second language, a kind of cognitive development, requires social interaction to improve language proficiency. The concept is relevant to theories of second language acquisition since language is social in nature. As a result, teachers should encourage social interaction (communication) in the classroom. Collaboration, in terms of pair work or group work, is generally regarded as an effective activity to encourage social interaction and communication.

4.6.3 Zone of Proximal Development

We learn from Section 4.4 that the Zone of Proximal Development is the difference between what a student can do alone and what she can do with appropriate assistances. For example, in a translation course, dictionaries can be an appropriate assistance. The student who has a talent in translating might forget the meaning of some words in the passage. Once she is provided with a dictionary, her translation might be a lot better.

In addition, the concept also emphasises one of the roles of teachers: providing appropriate assistances. According the Sociocultural Theory, teachers should ‘scaffold’ students’ learning process. It is important to note that scaffolding or assistance should be gradually withdrawn once students can deal with their own learning.

The concept of the Zone of Proximal Development can also be used to determine the level of difficulty of the lesson. Berger (2006) argues that the Zone of Proximal Development is somewhere between what students already know and what they are not ready to learn. If the lesson is too easy, students will get bored. If the lesson is too difficult, they will not be able to understand. As a result, the lesson should be in the “magic middle”-- the level that students have the potential to learn with appropriate assistance.

4.6.4 Activity Theory

We learn from Section 4.5 that Activity Theory is a unit of analysis to understand a human activity. We can apply the concept to understand the learning and teaching process because it provides a flexible lens to investigate the relationship among elements in the activity system. For example, the motive of teaching a second language is to develop students’ language proficiency. The subjects involved are students and teachers working together to achieve the object. In order to do that, a lot of actions must be done such as learning activities, doing exercises, and taking tests. Each action has its own immediate goal. For example, the goal of a language game may be to improve students’ communicative competence. The goal of singing English songs may be to improve pronunciation. As a whole, the series of actions is done to achieve the object of learning and teaching activities. Moreover, Activity Theory can be used to explain the relationship among subjects in the activity: the rules in the classroom and the responsibilities of each person.

4.7 Conclusion

The application of Sociocultural Theory to second language learning and teaching has gained more attention because it emphasises the roles of social interaction in the learning process. This leads to the focus on collaborative activities since it is believed, according to Sociocultural Theory, that it can enhance students' learning. Moreover, it also emphasises the roles of learning and teaching tools as mediating artefacts to mediate the learning process. In addition, the concept of 'scaffolding' allows teachers to provide appropriate assistances to facilitate students' learning. Finally, Activity Theory helps us understand the whole contexts of learning and teaching.

So far, we have learned some theories, concepts, and issues in the field of Second Language Acquisition. The knowledge from the field has been applied to pedagogical contexts. The next part discusses technological tools and their potential for language learning and teaching.





PART III
TECHNOLOGY



Part III

Introduction

Technology has influenced almost every aspect in our lives. In the context of language education, the way we teach and the way students learn have also been influenced, in many ways, by the advance of technology. This part discusses the technological tools and their potentials for language learning and teaching.



CHAPTER V

Technological Tools (1)

Questions for Reflection

- **What are the technological tools you use in language learning and teaching?**
- **How can technological tools impact the process of language learning and teaching?**

5.1 Introduction

Technology changes rapidly. It is getting smarter, faster, more sophisticated, and more efficient. More advanced technology may be more technically efficient. For example, if your computer has more capacity, the online communication with learners of English from Japan is more technically smoothly. However, to be more pedagogically efficient, you need well-designed learning and teaching activities. As a result, the ultimate goal of this part is not to review the latest innovation such as the newest computer program or the most sophisticated hardware for two main reasons. First, technology changes rapidly, what is regarded as ‘the latest’ at the time the book is written might be outdated at the time the book is published. Second, as aforementioned, the sophistication of technology cannot guarantee the success of learning and teaching a second language. The success of the integration of technology in language learning and teaching depends on how you use the available technology in your context.

Technological tools can be categorised differently depending on how you perceive them. In this chapter, technology is perceived metaphorically as a resource of authentic materials, a communication tool, and a reference tool.

5.2 Technology as a Resource of Authentic Materials

As discussed in Chapter II, comprehensible input is important for learning a second language. Learners acquire a new language through an exposure to the target language. In the past, in many parts of the world, the opportunity to be exposed used to be rare. In Thailand, for example, English is regarded as a foreign language. This means that English is not an immediate need for the majority of Thai people, that English is not a medium of communication, and that the opportunity to be exposed to the target language is rare.

In many parts of the world, students learn English only from the textbooks used in the classroom. It is criticised that the materials in the textbooks are not authentic. Basically, authentic materials refer to the language, in any kinds and platforms, which is produced for native speakers of that language such as songs, movies, magazines and books. The materials are authentic because they are not simplified, adapted, or specifically created for pedagogical purposes. It is argued that authentic materials are more appropriate for learning a second language since they represent the real level of difficulty of the real world materials that students will face outside the classroom.

Although authentic materials are preferable for learning a second language, such materials may not be affordable for the majority of learners of English in many areas of the world including Thailand. Fortunately, technology, notably the Internet, provides students with the opportunity to be exposed to authentic materials of the target language. For example, a lot of authentic materials such as novels, stories, news, and magazines are

available free of charge on the Internet. A number of listening materials such as songs, movies, TV series, documentaries, and radio programs are also available for free (or paid) view or download. Actually, there are countless of authentic materials in the English language available on the Internet. You can use a search engine such as 'Google' to find the materials you are looking for. This section discusses some important kinds of authentic materials that you can find and use for language learning and teaching.

5.2.1 Text-Based Materials

Text-based materials are the most commonly used materials in language teaching for decades. One of the reasons might be that they are accessible and affordable for teachers. Additionally, they require minimum additional tools comparing with other kinds of materials. Nowadays, text-based materials are still popular, but the Internet makes these materials even more accessible and affordable. In addition, the advance of technology provides more functions and enhances more exciting possibilities in using text-based materials in your classroom.

News may be one of the most popular types of text-based materials used by language teachers of any languages. One of the reasons might be that the information contained in news is up-to-date. Students might have heard the information from other sources such as television and radio programs. This background knowledge can assist students' comprehension when they read the news.

There are a lot of news websites that provide you news from all around the world. Thanks to the advance of technology, the news is updated every few minutes. Moreover, you can get access to this information anytime and anywhere. The followings are some

recommended sources of news that you can find authentic materials for your classroom.

Please note that the list is not inclusive.

News Agent	URL
BBC	www.bbc.com
CNN	www.cnn.com
VOA	www.voanews.com
ABC	www.abc.net.au
Bangkok Post	www.bangkokpost.com

Table 5.1 News Website

From Table 5.1, you can see the list of popular news websites based in various countries: BBC (United Kingdom), CNN and VOA (United States of America), ABC (Australia), and Bangkok Post (Thailand). It should be noted that although each website provides news from all around the world, different websites may have different focus in terms of contents and the regions of the news. That is the reason why local news website should be visited if you are looking for local news.

Apart from news, articles are commonly used in language classrooms. Nowadays, we can get access to articles on almost any topics on the Internet. Online articles have been published in different platforms. For example, more personal and informal articles (or journals and diaries) are usually written in the form of 'blog' (weblog). More formal articles can be found in news or magazine websites.

The most popular and influential source of articles is Wikipedia. Wikipedia is an online encyclopedia where you can find information about almost any important topics. It should be noted that since anybody can write or edit the articles, the accuracy of the articles is often an issue.



Figure 5.1 Wikipedia
(Source: <https://en.wikipedia.org>)

Apart from non-fiction, students can also benefit from fiction such as fairy tales, short stories, and novels. You can find many free versions of non-fiction on the Internet. For example, Gutenberg Project (www.gutenberg.org) gathers a lot of ebooks and audio books. The project offers 57,000 titles including great literature such as 'Pride and Prejudice' by Jane Austen, 'Alice's Adventures in Wonderland' by Lewis Carroll, 'War and Peace' by Leo Tolstoy, 'Grimms' Fairy Tales' by Jacob and Wilhelm Grimm, and a lot more. All the ebooks and audio books in the website are legal because the copyright has expired.



Figure 5.2 Project Gutenberg
(Source: <http://www.gutenberg.org>)

Gutenberg Project provides you a great collection of classic literatures. However, there are no modern literatures available in that website because they are copyright. There are a lot of websites that provide free download of pirated or illegal ebooks. Fortunately, there is another way that you can do to use some parts of modern literatures for your class without violating copyright laws. As a matter of fact, we are allowed to see some excerpts from the books for marketing purposes. Figure 5.3 illustrates the excerpt from Harry Potter.

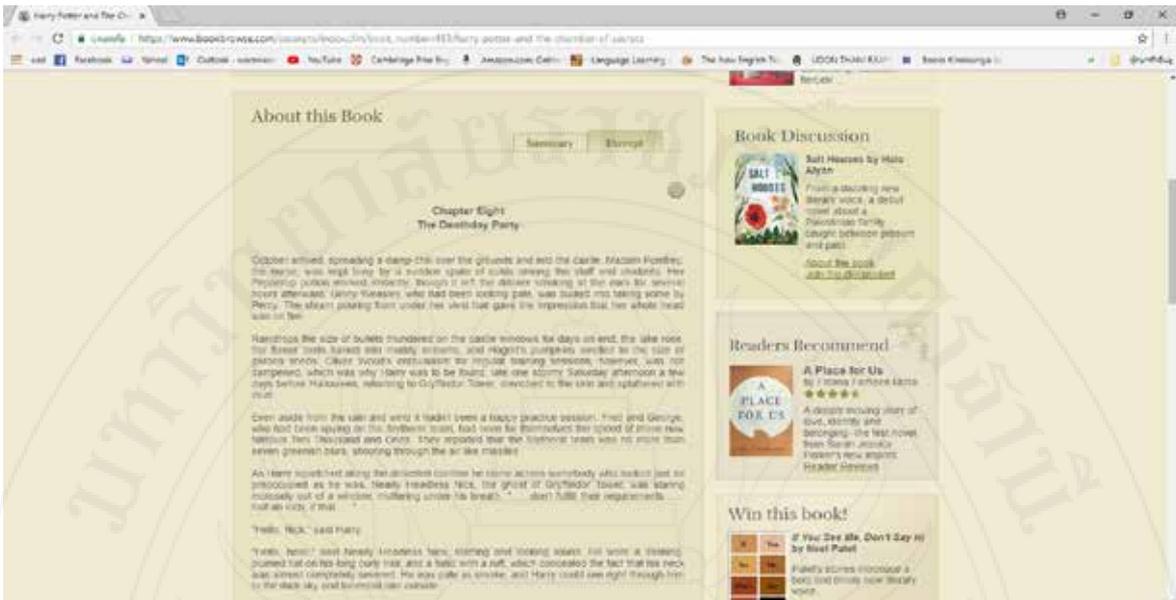


Figure 5.3 Book Excerpt

(Source: https://www.bookbrowse.com/excerpts/index.cfm/book_number/453/harry-potter-and-the-chamber-of-secrets)

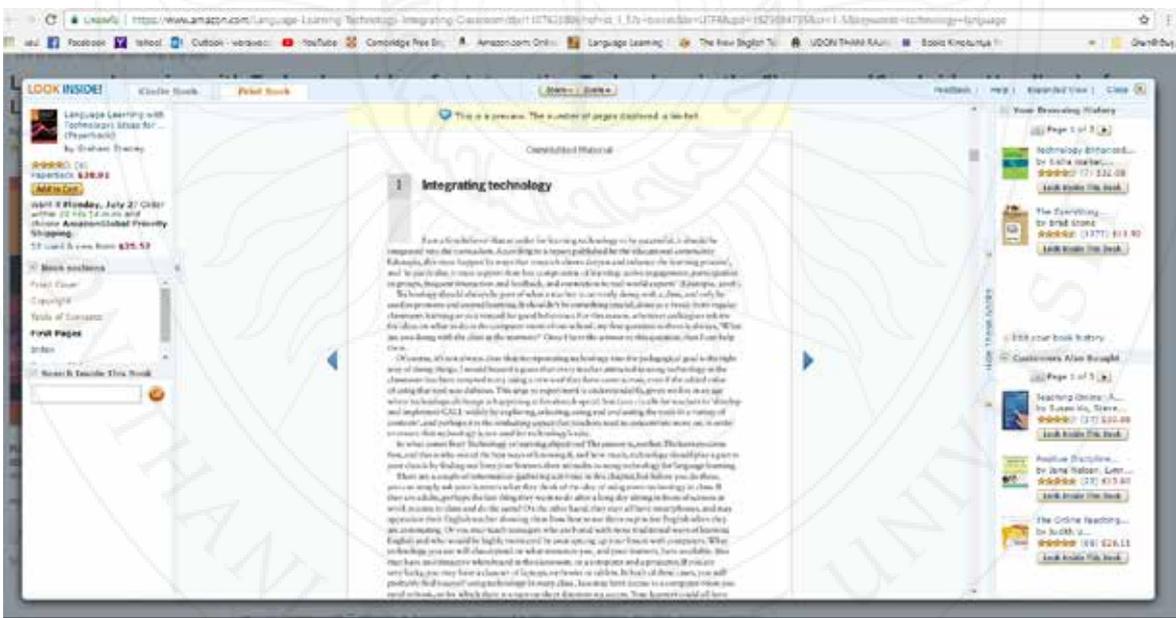


Figure 5.4 Book Excerpt from Amazon

(Source: <https://www.amazon.com>)

Figure 5.4 is a book excerpt from Amazon (www.amazon.com), one of the largest online bookstores in the world. Amazon provides a useful function called “LOOK INSIDE!” that allows us to see some parts of the book. You can use book excerpts for your reading class for free without violating copyright laws.

Application to Language Learning and Teaching

Basically, text-based materials are used in language classroom as a source for reading passages. Although the contents in paper-based materials and electronic versions are not significantly different, the electronic ones provide more potential for language learning and teaching. For example, we can get access to the news reporting the similar event from different sources. Reading the same news from multiple sources may provide students background knowledge and lead to better comprehension of the texts. Moreover, teachers may have students compare the different syntactic structures and semantic items in the different news or even the biases of different journalists. In addition, you can consult reference tools while reading electronic news. For example, if you do not know the meaning of some vocabulary, you can look it up from an electronic dictionary. If you are not sure about a technical term, you can ‘google’ them for the definitions, examples, or further explanations. Moreover, you can integrate reading skills with other skills by using electronic news. For example, many websites provide an audio or video file along with a written script. This function can be used to improve students’ integrated skills.

5.2.2 Audio and Video-Based Materials

Actually, audio and video have been used in language classroom for decades especially in the audio-lingual method. The materials in the earlier age were in the form of tape and video cassettes. Later, the contents were stored in the form of electronic files in

Compact Disc Read-only Memory (CD-ROM). In 1990s, Digital Versatile Discs (DVDs) were developed. DVDs are also used to contain digital files but have much greater storage capacity than CD-ROMs.

At present, thanks to the advance of technology especially the Internet, the audio and video files are stored on the Internet. Teachers and learners of any languages can get access to the materials anywhere and anytime through their devices such as PCs and mobile phones. You can listen to or watch the materials online or download them for offline use.

Since there are countless of various audio and video files on the Internet, teachers and students can choose the contents that suit students' interests. One of the most popular sources of audio and video files is podcast. The name podcast comes from the combination between '*iPod*' (a popular MP3 player from Apple) and 'broadcast'. A podcast is an episodic series of audio or video file that is broadcast or published or available on the Internet.

Nowadays, *Youtube* is the most popular source of free digital videos broadcast by people (called Youtubers) around the world. You can find videos on almost any topics such as songs, movies, reviews, news, TV programs, etc. Learners and teachers of any languages, especially English, can learn from countless of videos.

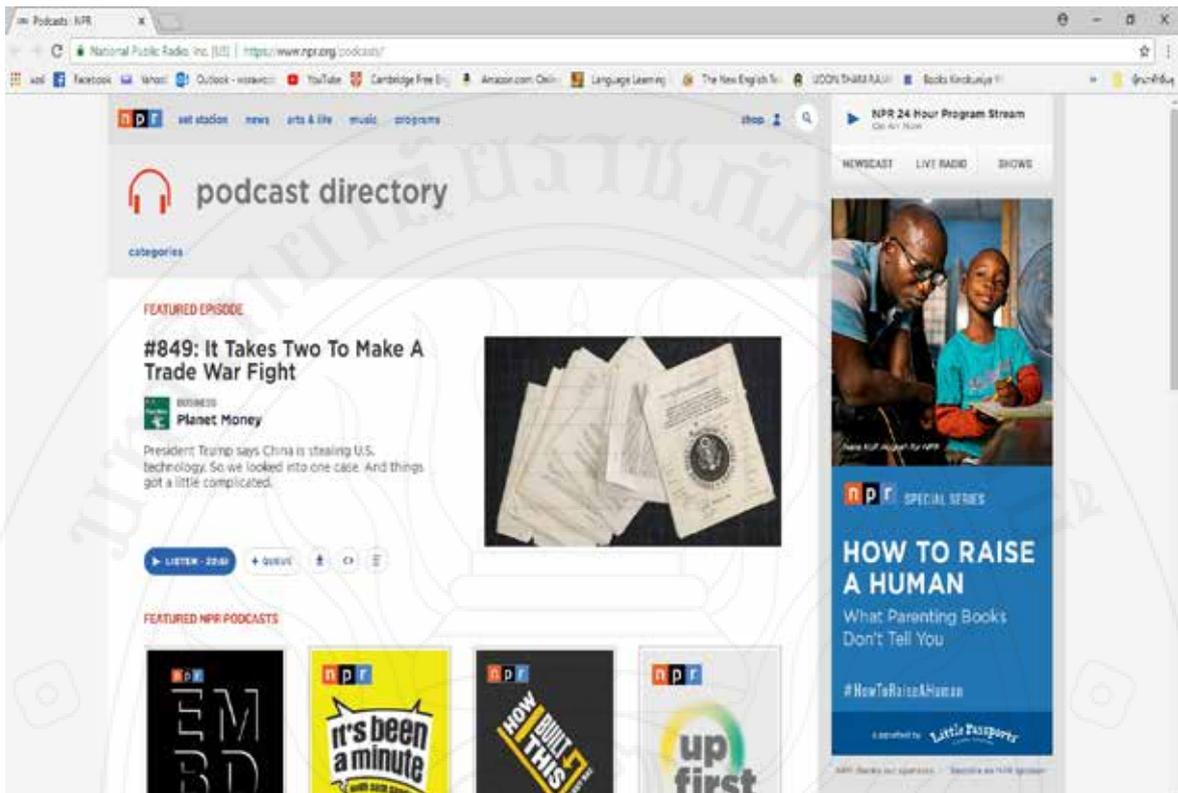


Figure 5.5 Podcast
(Source: <https://www.npr.org/podcasts>)

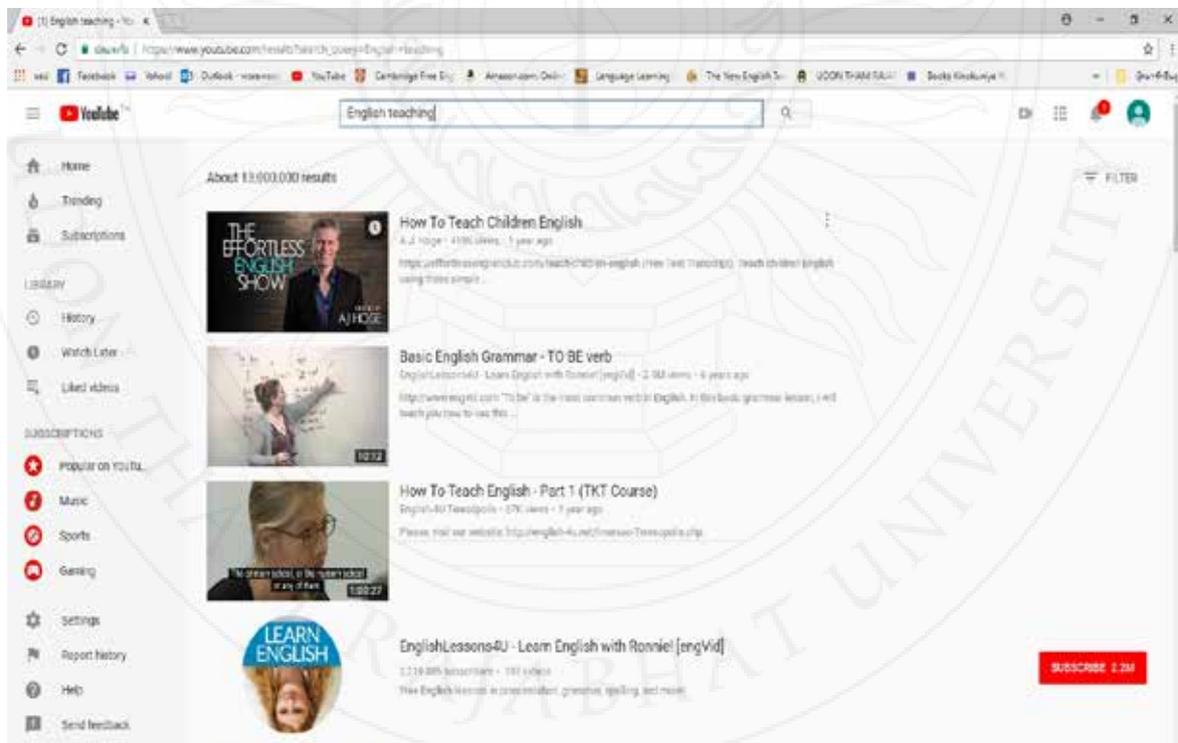


Figure 5.6 Youtube
(Source: www.youtube.com)

Application to Language Learning and Teaching

Audio and video-based materials can be used to improve students' listening skills and pronunciation. As a matter of fact that the majority of teachers of English in Thailand are non-native speakers of English, audio and video-based materials are essential to present the correct use of the target language especially pronunciation. In addition, since the contents of these materials are various and accessible, you can choose the materials to suit the interests of your students. Apart from listening skills, an audio or video clip can also be used to gain students' attention or as a starting point for other learning and teaching activities. For example, you may ask your students to discuss or write an essay about the environmental issues after watching a video clip. In addition, the authentic materials can be used as learning materials for self-learning outside the classroom by autonomous learners. Those who are highly motivated to learn a new language can use a search engine, such as Google, to find the materials that suit their learning style, learning pace, and levels of proficiency.

In conclusion, authentic materials can be used to provide 'input' for students to be exposed to. Technology makes authentic materials more accessible for teachers and learners of almost any languages especially English. Moreover, technology provides more functions and tools that make the learning process easier and more interesting.

5.3 Technology as a Communication Tool

One of the ultimate goals of second language learning is the ability to communicate with other people in the target language. However, in many parts of the world, the opportunity to use the target language for communication is rare. In Thailand, English is not the means of communication on a daily basis for the majority of Thais. In the field of World Englishes, the countries where English play less important role in daily

communication is classified as ‘an expanding circle country’ (Kachru, 1998). In those countries, the opportunity to be exposed to and to use the target language is limited. Fortunately, the advance of technology can facilitate interaction with people from all over the world through a new mode of communication called computer-mediated communication (CMC). This enhances the importance of new *electronic literacies* including computer literacy, information literacy, multimedia literacy, and CMC literacy (Warschauer, 2002) in many aspects of our lives including business, social interaction, and education. Although CMC may take place with or without involving learning, this mode of communication is one of the most popular activities associated with the integration of technology in a second language learning and teaching (Beatty, 2010, p. 9). Consequently, CMC is, arguably, required to be included into the English language teaching curricula so that the use of these computer technologies can enhance the opportunity to communicate with speakers of the target language and potentially improve the language skills.

There have been a number of research of which the results reveal the benefits of CMC in a second language learning and teaching by promoting, for example, participation (Zha, Kelly, Park, & Fitzgerald, 2006), the quantity of language production (Abrams, 2003), the use of wider lexical range (Fitze, 2006), noticing of errors (Lai & Zhao, 2006), scaffolding (Lee, 2004), confidence in English (Greenfield, 2003), positive attitudes towards English (Shang, 2007), motivation (Sandra Fotos, 2004) and learner autonomy (Aitsiselmi, 1999; Fisher, Evans, & Esch, 2004; O'Rourke & Schwienhorst, 2003; Schwienhorst, 2008).

CMC can be divided into two modes: Synchronous Computer-Mediated Communication (SCMC) and Asynchronous Computer-Mediated Communication (ACMC). The two modes have different benefits and limitations in learning and teaching a

second language. Synchronous Computer-Mediated Communication (SCMC) is real-time communication through live chat software on computers and mobile phones. It can be text-based chat such as Messenger program in *Facebook* and *Line* application or voice chat such as *Skype*. Previous studies reveal that SCMC benefits language learners by providing immediate responses (Hodgkinson-Williams & Mostert, 2005). Moreover, communicating with native speakers provides students with the opportunity to discover informal, authentic and natural social interaction (Tudini, 2007).

Asynchronous Computer-Mediated Communication (ACMC) refers to a mode of communication through technology that the responses are not immediate such as emails. The limitation of this mode is that the delay of the discussion can reduce motivation (Abrams, 2003) because of a lack of “instant and tailored feedback” (Kitade, 2008, p. 80). However, the delay also allows students to revise their messages (Yamada & Akahori, 2007) by consulting resources and may reduce anxiety that often accompanies face-to-face communication.

Application to Language Learning and Teaching

Computer-Mediated Communication tools are not designed especially for language learning and teaching. As suggested by its name, it is created for communication. However, a Computer-Mediated Communication tool is one of the most important tools in language education since it provides the opportunity to use the target language through real communication with native speakers, speakers or learners of the target language. The advance of technology facilitates communication within the classroom and beyond.

A Computer-Mediated Communication tool can be used as medium of communication. You can assign your students to exchange emails with peers to practice writing skills. You can also assign your students to chat, using the target language, with

peers to practice text-based communication. For more holistic approach, Computer-Mediated Communication tools can be used in collaboration or telecollaboration when your students are assigned to complete tasks or a project. One of the advantages of Computer-Mediated Communication is that students are encouraged to use the target language in discussion because teachers can monitor the language use. Moreover, teachers can download the chat transcripts for language analysis for research purposes.

5.4 Technology as a Reference Tool

Apart from authentic materials and communication tools, technology can be used as a linguistics reference tool. Students can get benefits from this kind of tools by checking the accuracy of linguistic features such as pronunciation, spelling, meaning, collocations, and grammar. In the following sections, some reference tools are discussed.

5.4.1 Corpus-Based Tools

Corpus-based tools are the product from the study in a field of linguistics called corpus linguistics. A corpus is a collection of texts collected from the language used by speakers of the language from various media such as novels, documentaries, speech, conversation, TV programs, radio programs, news, articles, etc. The data is managed by means of computer programs for linguistic analysis.

Corpus linguistics is descriptive linguistics because the researchers investigate and analyse how the language is used. The analysed information is also useful for learners of the language. For example, the data tell us how frequent the word occurs in the language use. This information is useful for learners to make decisions which words they should study first. It is argued that the more frequent those words appear, the more likely they

should be mastered first. As a result, a corpus-based tool is regarded as one of the most important reference tools for learners and teachers of any second language.

A dictionary has been one of the most popular corpus-based reference tools. A good dictionary provides essential information about a specific language. A traditional paper-based dictionary may feature the correct spelling, the meaning, the samples of using the word in sentences, and grammatical knowledge. Even pronunciation is described in the International Phonetic Alphabet (IPA).

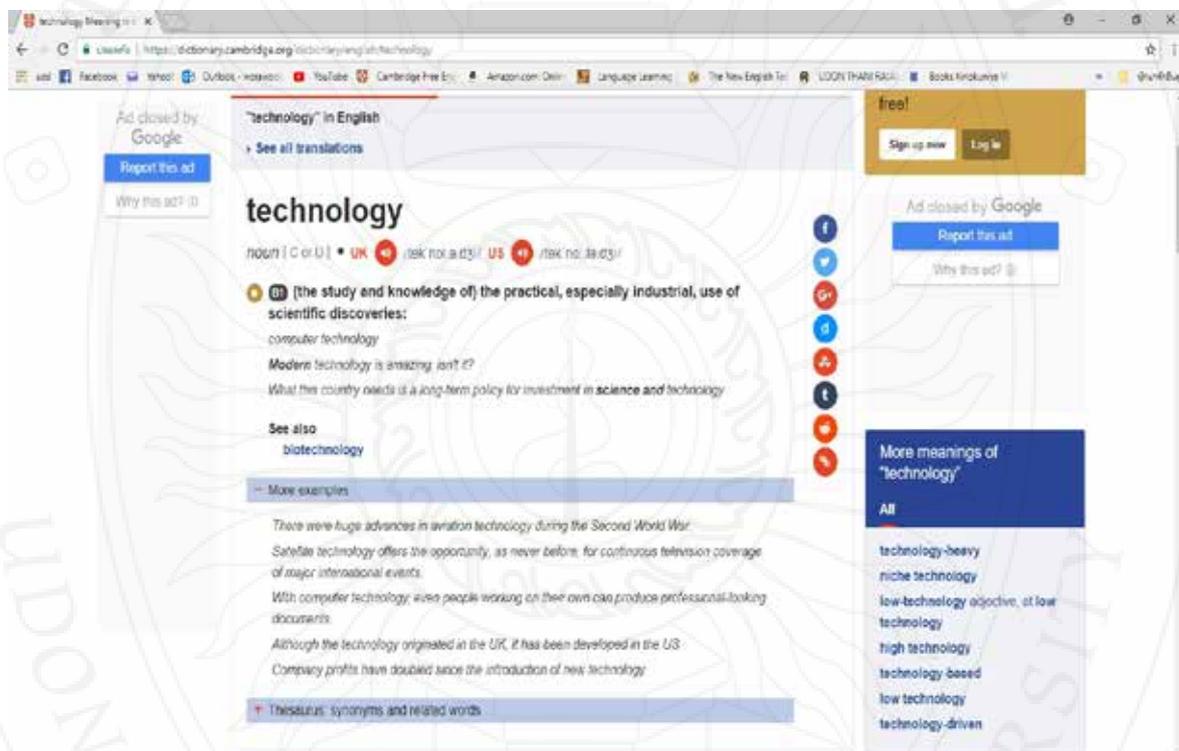


Figure 5.7 Online Dictionary
(Source: <https://dictionary.cambridge.org>)

Later, dictionaries are available in electronic platforms (see Figure 5.7). You can install an electronic dictionary program from the CD-ROM or DVD into your computer or use online dictionary from the publishers' website. Electronic dictionaries have more functions than that of traditional dictionaries that students can use for learning the

language. For example, students can learn how to pronounce the target words correctly by clicking the ‘speaker’ button to listen to the audio files.

Another important corpus-based tool is collocations (see Figure 5.8). Collocations can tell us which words normally occur together. For example, if you are not sure how to use ‘afraid’ in a sentence, you can use collocations to check how the word usually appears in the language production of native speakers gathered by corpus linguists. From Figure 5.8, students learn that ‘afraid’ is usually used with several verbs such as ‘be’, ‘feel’, ‘look’, and ‘seem’ and followed by prepositions including ‘of’ and ‘for’.

The screenshot shows the website ozdic.com with the search bar containing 'afraid'. The page displays the following information:

afraid - adj

VERBS
be, feel, look, seem | become, grow | make sb
 - What has made you so deeply afraid of your boss?

ADV.
deeply, desperately, extremely, horribly, mortally, really, terribly, very | almost
 - She was *terse*, almost afraid to open the *elder*.
| a bit, half, a little, rather, slightly
 - He was half afraid to look at her.
| just, simply
 - You do know, don't you? You are just afraid to tell me.
| genuinely | suddenly
 - He stopped abruptly, suddenly afraid to say the words out loud.
| physically
 -

PREP.
for
 - Roger was very afraid for her.
| of
 - Charlie is afraid of marriage.

PHRASES
nothing to be afraid of
 - Don't worry. There's nothing to be afraid of.

Relevant words:
 requirements
 cripple
 mistaken
 mistake
 attention
 fundamental
 fundamental
 characteristic
 diverse
 idea
 van
 thinking
 accountant
 award
 movie
 attempt
 reputation
 live
 demonstration
 deposit
 recognize
 priority

Figure 5.8 Collocations
 (Source: <http://www.ozdic.com>)

Application to Language Learning and Teaching

As mentioned earlier, a Corpus-based tool is a language reference tool. Basically, students use this kind of tools when they need to assistance such as to check the definitions and the pronunciation of the word they are studying. It is important to prepare students with the ability to use the tools effectively. For example, you can also assign your students to study several aspects such as the pronunciation, the definition, and the grammatical features of a word in details and present the knowledge they have found to the class. In addition, you can teach your students how to choose the appropriate definition of a word to suit the context.

5.4.2 Grammar and Spell Checker

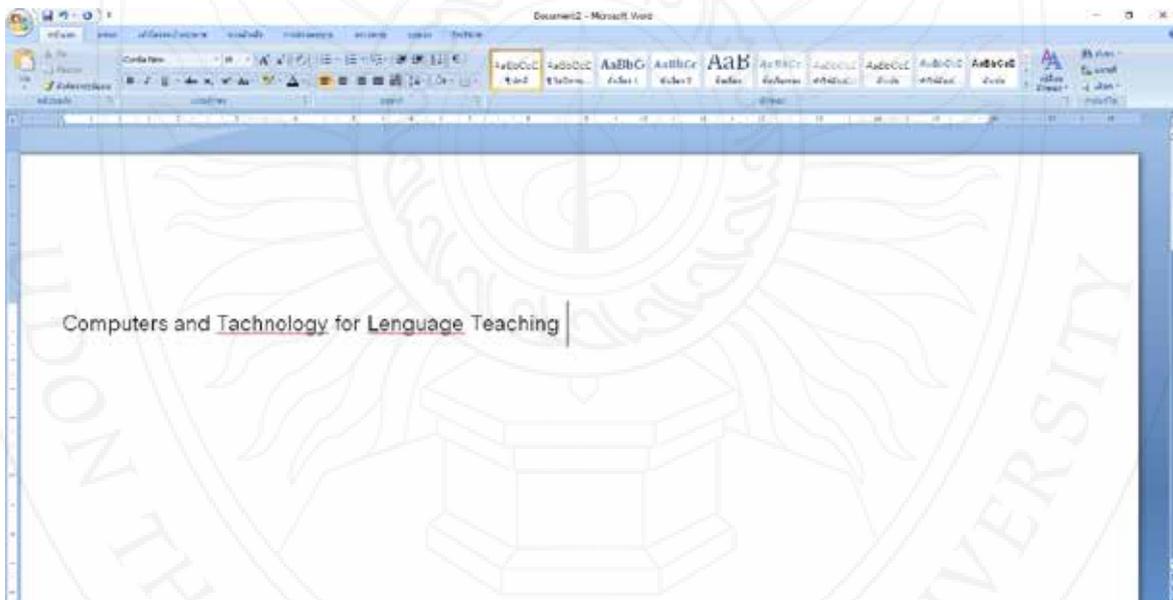


Figure 5.9 Spell Checker

Grammar and spell checker is a computer program that can be used to help us verify whether or not the sentence we write is grammatically correct or if the word is spelt correctly. There are a number of grammar checker programs available on the Internet. You

simply copy and paste your written texts in the program, and you will receive the feedback immediately.

Actually, word processing program such as Microsoft Word also provides a grammar and spell checker (see Figure 5.9). If the sentence you write is underlined with a green line, it might be grammatically wrong. If word is underlined by a red line, it might be spelt incorrectly. You can click the right bottom of the mouse to see the suggestions and can decide whether or not to accept them.

Application to Language Learning and Teaching

The results from a grammar and spell checker and also applied for language learning and teaching. You can assign your students to discuss, without seeing the suggestions, how they can edit the incorrect words or/and sentences. This can also be used as a starting point to teach grammatical features.

5.4.3 Search Engine

A search engine is an important tool in the era of Information and Communications Technology. As a matter of fact, there are countless of webpages on almost any topics available on the Internet. A good search engine, such as Google, gathers and classifies the online information from all over the world so that we, users, can search for any information by typing an appropriate keyword.

A search engine can be used to find tools discussed in this chapter. For example, you can find authentic materials by using keywords such as ‘news’, ‘poems’, and ‘articles’. You can also search for learning and teaching materials created and shared by teachers of the target language around the world available in online professional communities such as ESL (English as a Second Language) and ELT (English Language

Teaching). As a result, the information can be found by using keywords such as ‘ESL printable materials’ and ‘ELT lesson plans’. In addition, you can find research databases for your classroom research. Some of the databases allow you to see just only the abstract of the article such as ERIC (<https://eric.ed.gov>) while some are open access allowing you to download the whole article for free. For example, Language Learning & Technology (www.lltjournal.org) is an open access journal focusing on the use of technology in language learning.

However, this section does not teach you how to use a search engine. Instead, the main purpose of this section is to discuss the possibilities of using a search engine, notably Google, as a language reference tool. For example, if you are not sure if it is correct to write ‘I must to go home now*’, you can simply search for the explanation of the use of ‘must’. A number of websites and forums provide good explanation of the grammatical features.

Another possibility to use Google as a reference tool is to see if the sentence or the phrase is used by other people or not. For example, you can try googling the sentence ‘I must to go home now*’. You will find the results showing that the majority of people write ‘I must go home now’ rather than ‘I must to go home now*’ (see Figure 5.10). As a result, it can be assumed that the former sentence has more chance to be grammatically correct. However, it must be emphasised that Google is not a language reference tool. What the search results tell us is not whether the sentence is correct or not. Instead, the results tell us how the majority of people write that sentence on the Internet. As a result, students should be bear in mind that this technique has some limitations and should be used carefully and critically.

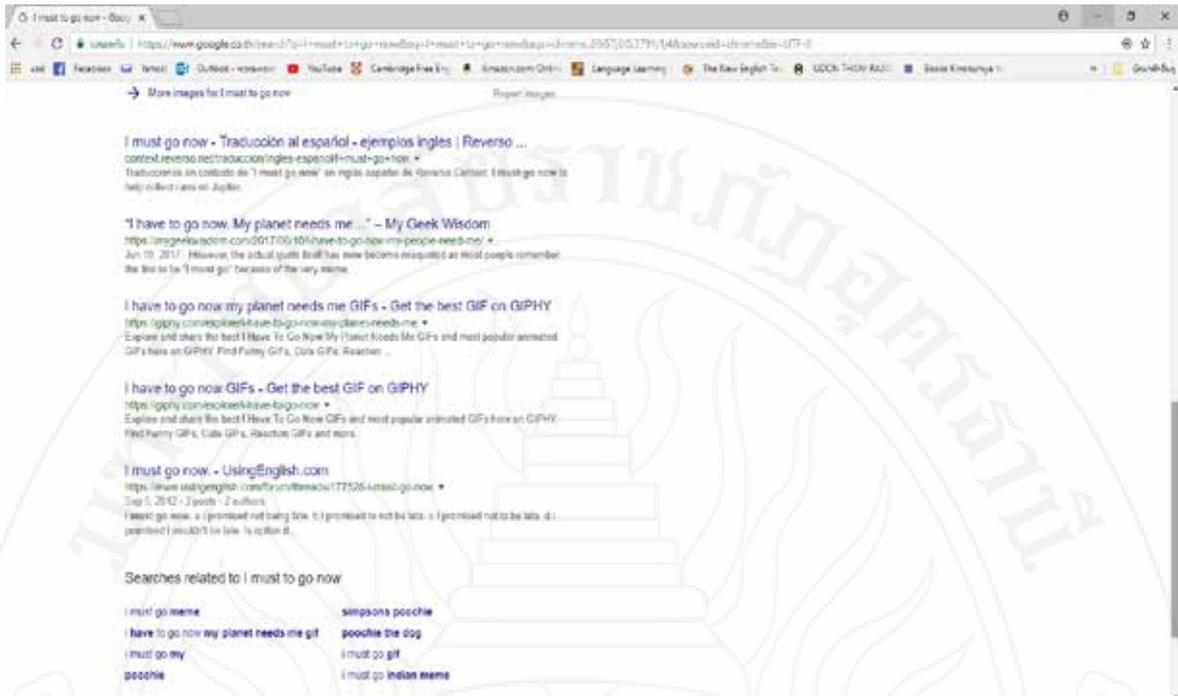


Figure 5.10 Search Results for “I must to go now”

5.4.4 Machine Translation

Machine translation is a program that helps you translate from one language into another language automatically. One of the most well-known translation programs is Google Translate (<https://translate.google.com>). Actually, Google Translate is not a language reference tool. It is created to help Internet users to understand the webpages written in foreign languages. For example, if you are about to buy a product from a website written in the language you do not speak, you can ask Google Translate to translate some words, phrases, sentences or even the whole pages into the language that you speak. As a result, the quality of the translation is good enough for you to understand the price, the specification of the product, and the shipping and payment method.

However, Google Translate has been sometimes misused by many learners of a second language. In Thailand, for example, some Thai learners of English taking a Translation Course simply use Google Translate to translate their assignments. As

mentioned, the quality of automatic translation is just good enough for general use not for professional translation. From Figure 5.11, you can see the example of mistranslation derived from Google Translate.

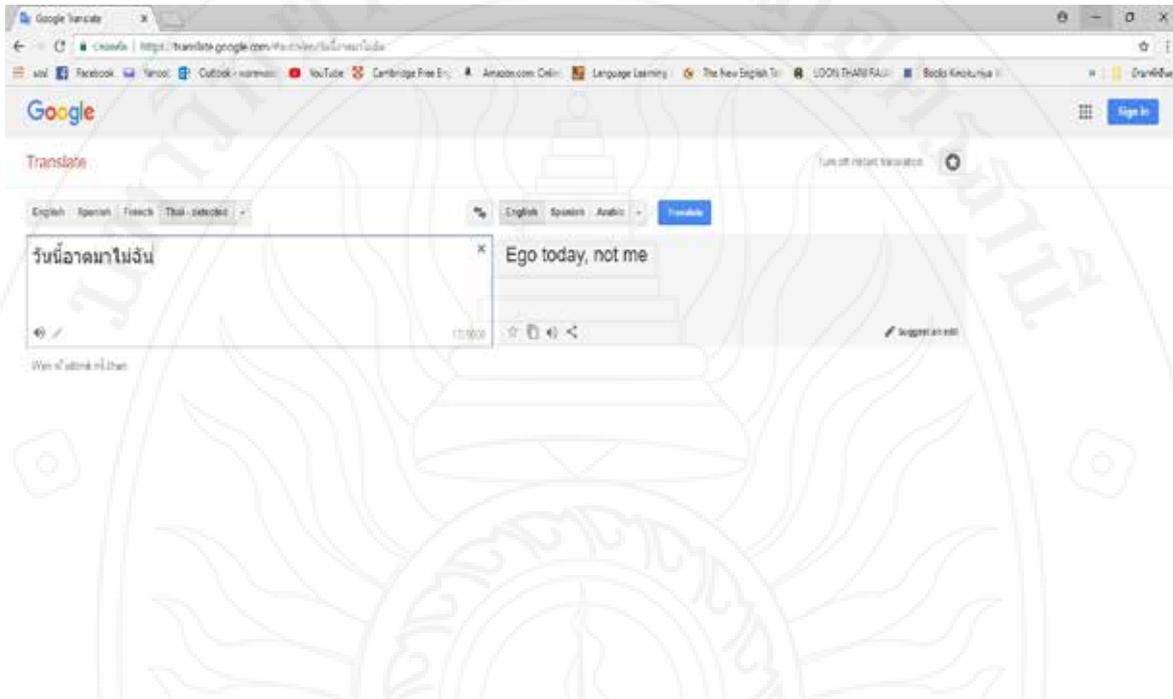


Figure 5.11 Mistranslation from Google Translate

Application to Language Learning and Teaching

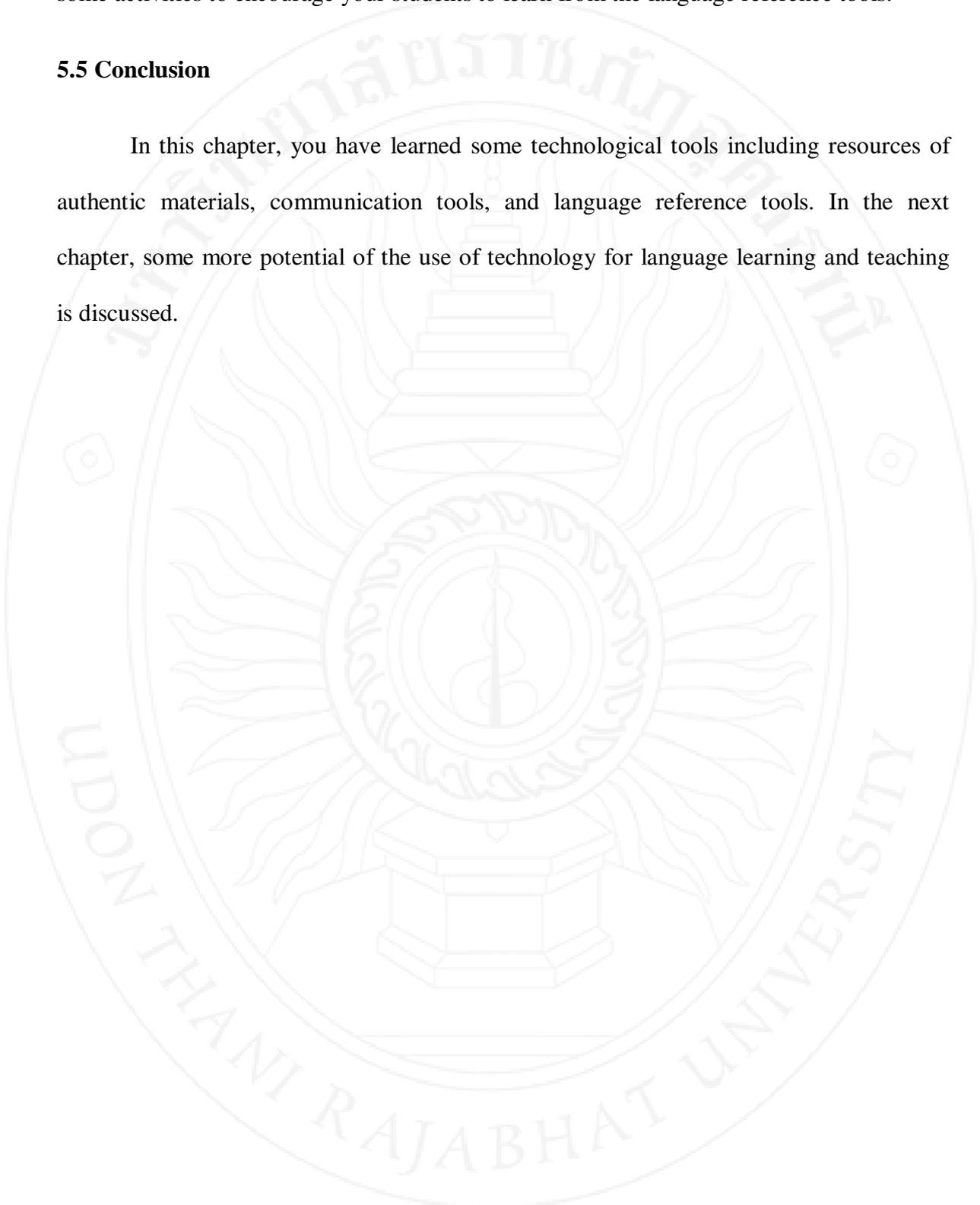
Although Google Translation has some limitations in terms of the quality of the translation, machine translation can be applied for second language learning and teaching. For example, you can ask your students to analyse the errors occurring in the translation and discuss how they can correct the mistakes and improve the language production.

In conclusion, language reference tools are very useful for language learners. Nowadays, technology provides both language reference tools and general tools that can be applied to use indirectly. In addition, the tools can be used when students need to find

some information about the use of the target language. On the other hand, you can assign some activities to encourage your students to learn from the language reference tools.

5.5 Conclusion

In this chapter, you have learned some technological tools including resources of authentic materials, communication tools, and language reference tools. In the next chapter, some more potential of the use of technology for language learning and teaching is discussed.



CHAPTER VI

Technological Tools (2)

Questions for Reflection

- **How can you use technology for class preparation?**
- **How can technology help you create an online course?**

6.1 Introduction

Apart from the resources of authentic materials, communication tools, and reference tools, technology has the potential for class preparation and classroom management. This chapter discusses technology as an educational tool, technology as a virtual community, and technology as a virtual classroom.

6.2 Technology as a Virtual Community

As teachers of a second language, we have various responsibilities along the process of teaching. Class preparation is one of them. It is essential that we have to prepare our lessons before class. In the past, teachers had to develop their own materials or find them from available resources such as the library. The materials they developed were rarely shared with other teachers outside their school.

At present, in the era of Information and Communications Technology, virtual communities for professional development have been founded to be a virtual space for sharing ideas, experience, and materials among teachers around the world. For example, there are a number of websites created for teachers of English as a Second Language

(ESL) or English as a Foreign Language (EFL) or English Language Teaching (ELT). You can find these websites by using keywords such as ‘ESL’, ‘EFL’, or ELT. The followings are some examples of the websites for teachers of English.

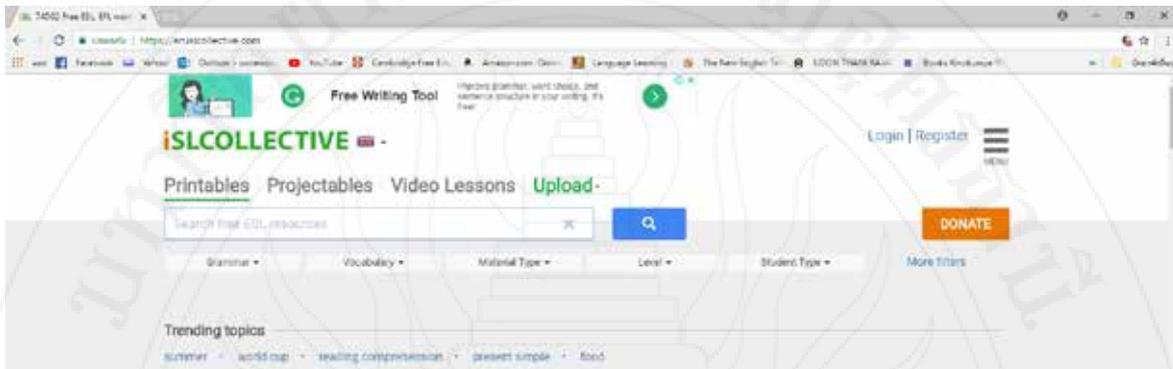


Figure 6.1 iSLCOLLECTIVE
(Source: <https://en.islcollective.com>)



Figure 6.2 English Club
(Source: <https://www.englishclub.com>)

ESL websites are regarded as virtual communities where teachers of English from all over the world can participate in. Although each website is unique, they share some common features. It is common that the websites provide a section for sharing learning and

teaching materials. As a result, you can download printable materials such as worksheets on any important topics such as grammatical features, speaking, listening, reading and writing. In addition, you can download lesson plans that you can promptly use or adapt for your own class. Some websites provide some space where you can upload the materials that you create in order to share with other teachers from all around the world.

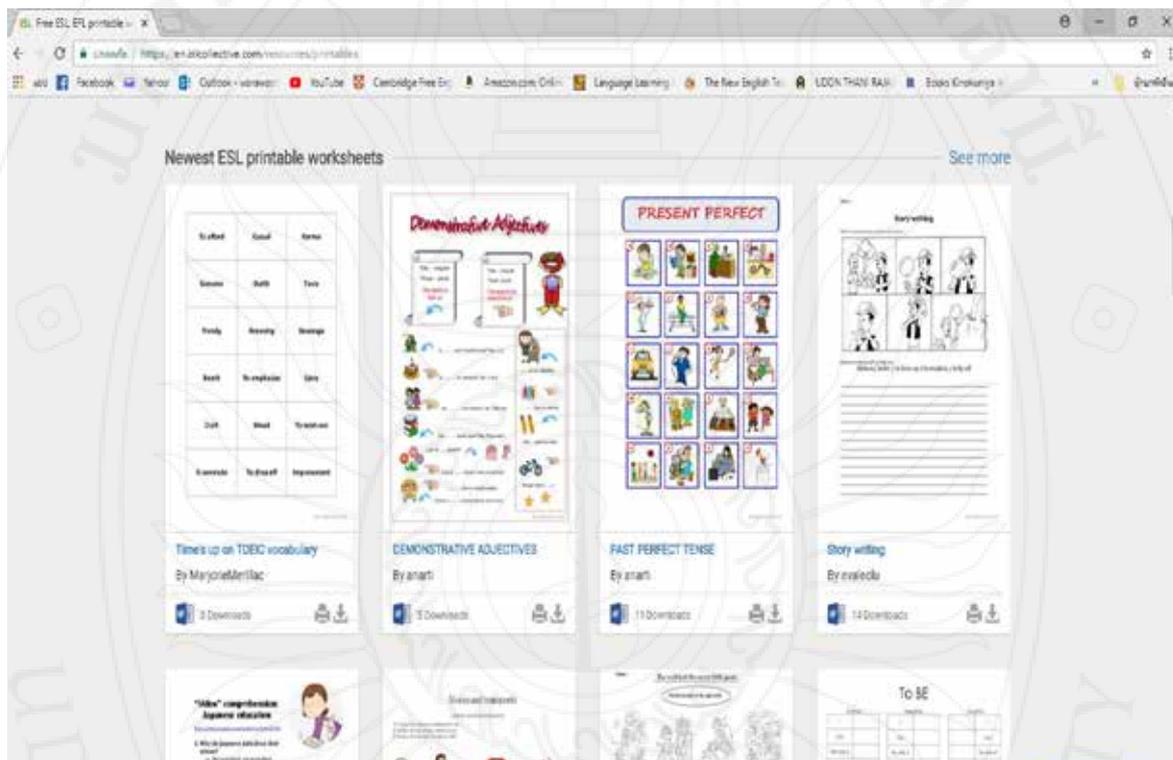


Figure 6.3 Printable Materials
(Source: <https://en.islcollective.com/resources/printables>)

Apart from printable materials, an ESL website normally provides a forum that teachers of English can ask and respond to questions, and share experience. Although teachers who participate in ESL websites are from different parts of the world, we can benefit from reading experience from and discussing with teachers from different contexts.

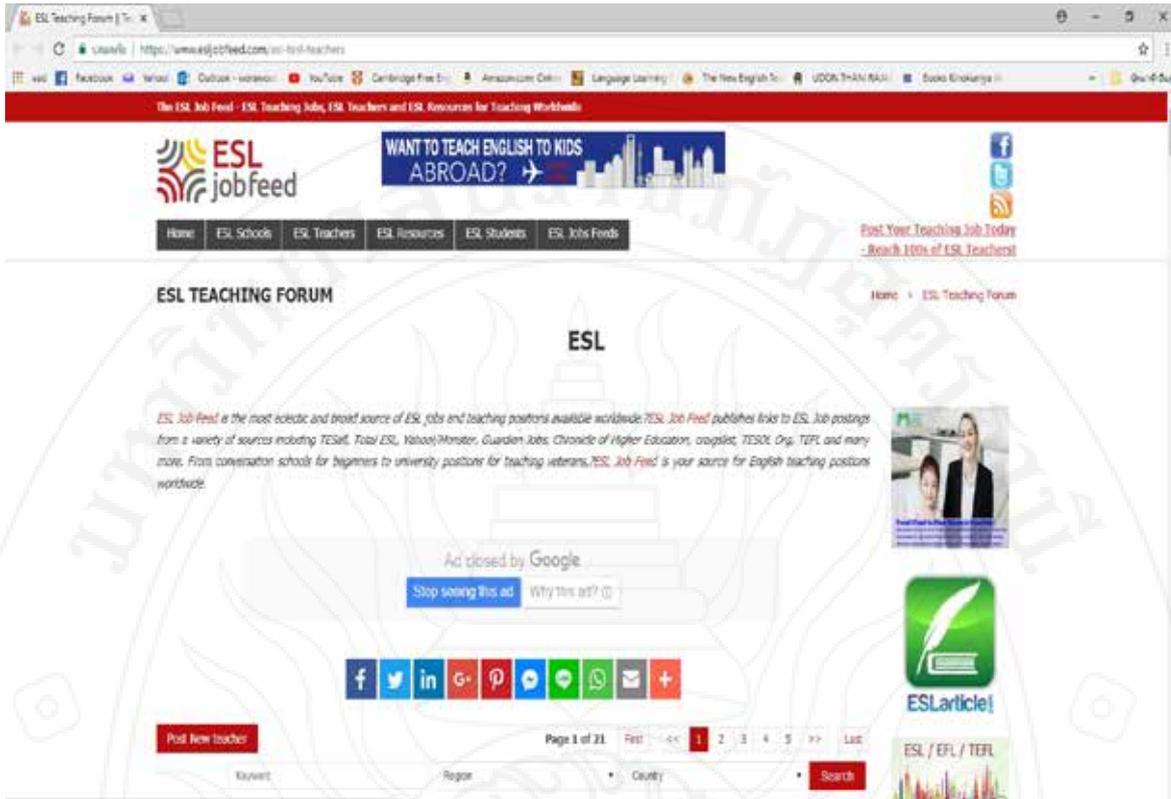


Figure 6.4 ESL Forum
(Source: <https://www.esljobfeed.com>)

In conclusion, ESL websites are virtual communities in which teachers of English can participate in order to exchange and share information, materials, experience and opinions about teaching English as a second language. The next section discusses how you can use technological tools to create learning and teaching materials and assessments.

6.3 Technology as an Educational Tool

Apart from ready-made materials that you can download from ESL websites, you can also create your own materials using some technological tools. The followings are some of the tools that you can use to prepare your teaching materials.

6.3.1 Youtube downloader and Clip Slowdown

Youtube is the most well-known and the largest source of video clips in the world. You can get access to countless of video clips if your device is connected to the Internet. However, in many contexts, the Internet connection is not available or the speed of the Internet is not good enough for playing online clips smoothly. As a result, you may need to download the video clips into your device and play them offline in your classroom. However, Youtube does not have the download function. You need to download another program that can assist you to download video clips from Youtube. Actually, there are a number of computer programs that you can use. Figure 6.5 is an example of a program called YTD. You simply enter the URL of the video you want to download in the field and choose the type and the quality of the video clip.

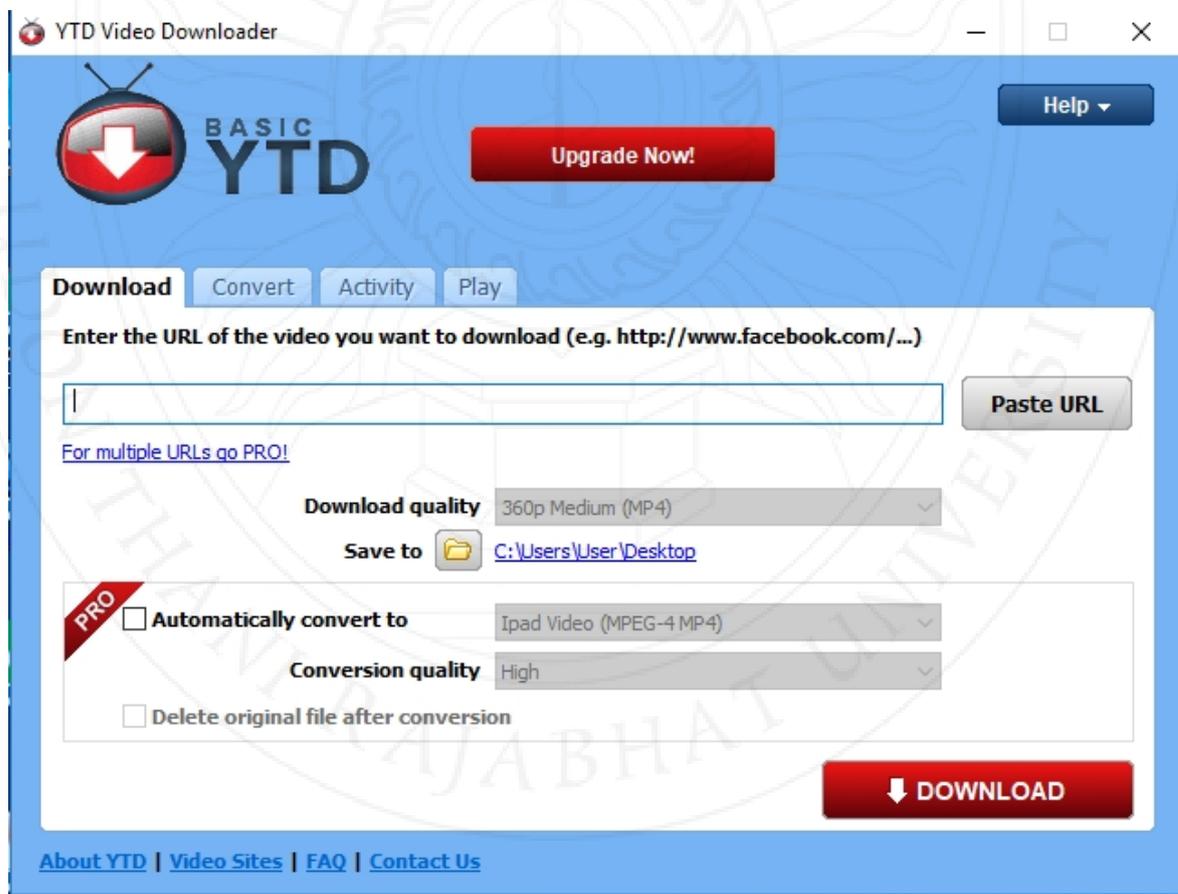


Figure 6.5 Youtube Downloader Program

Actually, there is another way you can download video clips from Youtube without installing any further computer program. You simply adjust the URL of the video clip you want to download by adding 'ss' before the word 'youtube' in the URL bar. For example, the original URL of the video clip is <https://www.youtube.com/watch?v=IXTdPKScsSg>, the edited URL is <https://www.ssyoutube.com/watch?v=IXTdPKScsSg> (see Figure 6.6). This will bring you to a new website. In addition, you can choose the type and the quality of the video clip that you want to download.

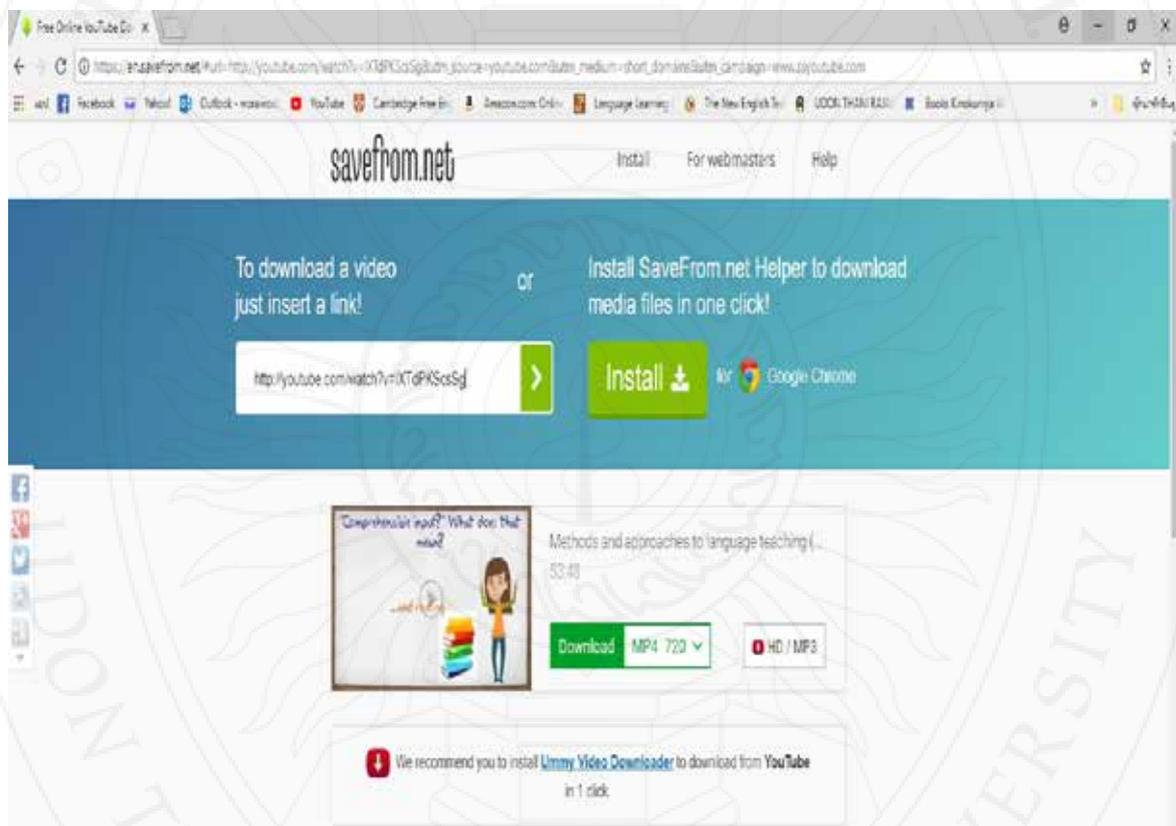


Figure 6.6 How to Download Video Clips
(Source: <https://en.savefrom.net/>)

At present, it is not unusual that teachers play a video clip for students to practice listening and speaking skills. However, it is sometimes found that the normal speed of authentic materials is a little bit too fast for some students with low proficiency of the target language. Nowadays, there are many computer programs that you can use to reduce

the speed of video clips. This kind of programs is often called video editor program (see an example of video editor program in Figure 6.7).

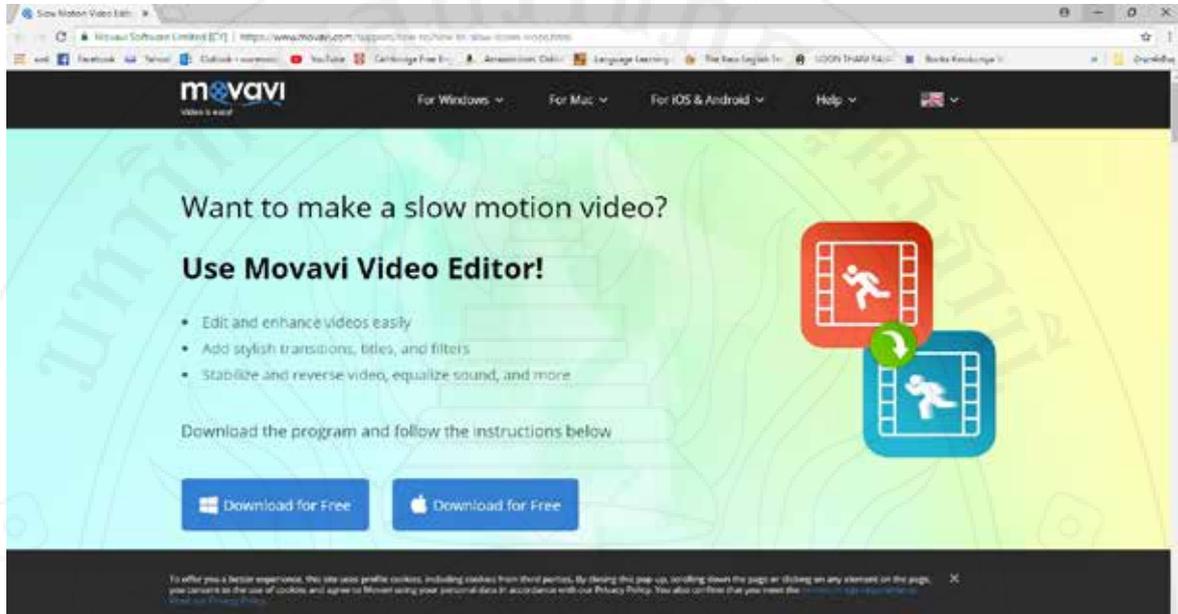


Figure 6.7 Video Editor Program
(Source: <https://www.movavi.com/support/how-to/how-to-slow-down-video.html>)

6.3.2 Text to Speech

As mentioned earlier, the majority of teachers of English in Thailand are not native speakers. Moreover, not all Thai teachers of English can be a role model of the target language. As a result, they may need to use technology to deal with this challenge. Text to Speech is a software program that allows you to transcribe texts into speech (see Figure 6.8). You can choose the gender and the accent of the speaker. You can also adjust the speed of the speech to suit your students' level of proficiency. In addition, you can download the speech in the form of audio files for later use. Although, the speech produced by the program is not 100 per cent natural, the program is useful for teachers who want to develop teaching materials or listening tests.

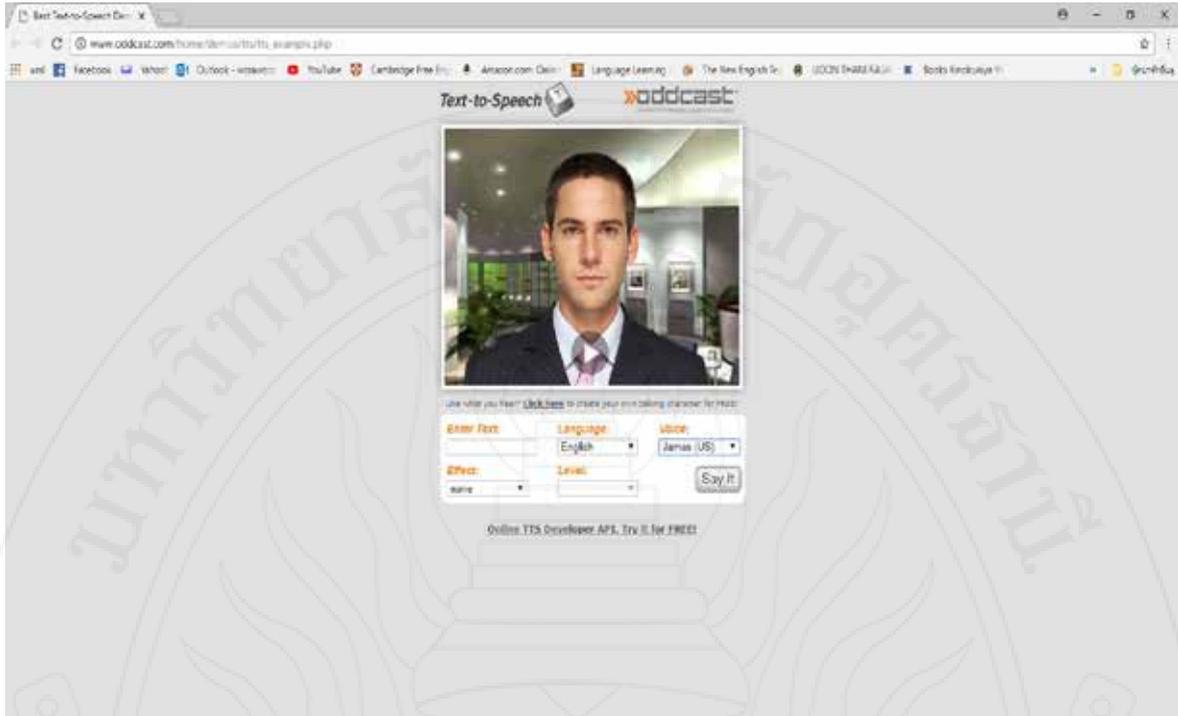


Figure 6.8 Text-to-Speech Program
(Source: http://www.oddcast.com/home/demos/tts/tts_example.php)

6.3.3 Quiz

Online quizzes have become more popular recently. One of the advantages of an online quiz is that it can provide immediate feedback (true or false) and further explanation on why the answer is right or wrong. An online quiz is appropriate for autonomous learning because students can repeat and learn from the quiz as many times as they are pleased.

There are many software programs that allow teachers to create an online quiz. One of the most well-known programs is Hot Potatoes (see Figure 6.9). This program allows teachers to create a variety of exercises including multiple choice, short answer, jumbled sentence, crossword, matching, ordering, and gap-fill.

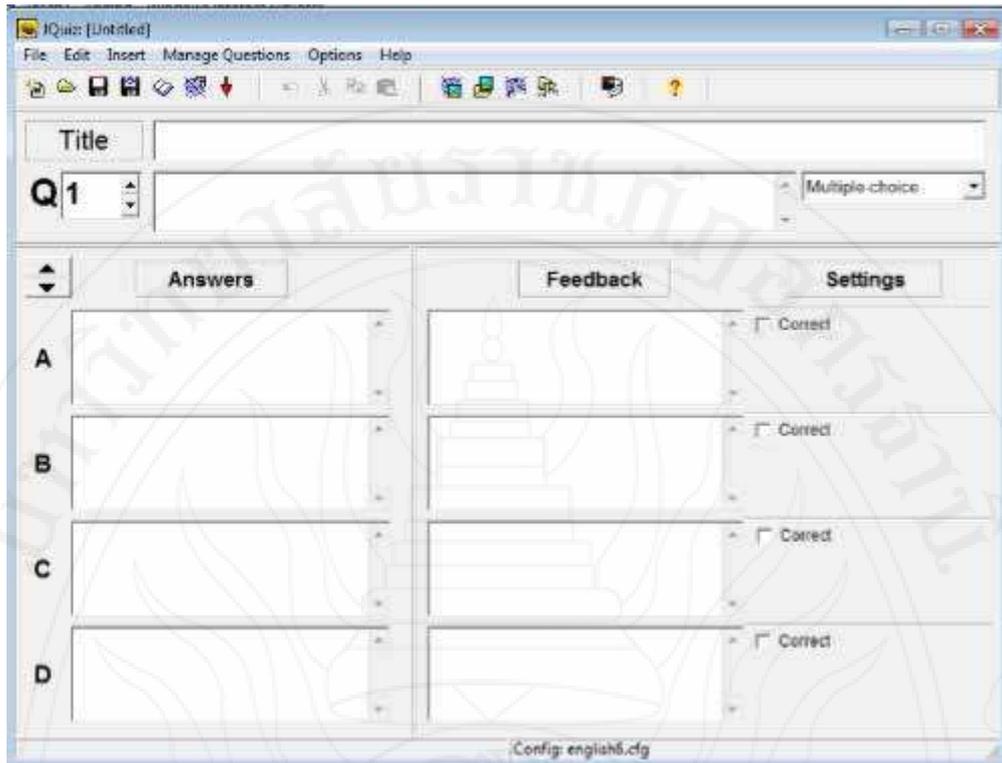


Figure 6.9 Hot Potatoes Program

Recently, a new kind of an online quiz called ‘real time quiz’ has been introduced and has become more popular in the pedagogical contexts and beyond. What is more exciting than a traditional quiz is that a real time quiz shows the real time scores of each student or each team on the screen. This feature excites and motivates students to participate in the learning activity because they want to compete with other teams.

One of the most popular real time quiz programs is Kahoot (see Figure 6.10). Kahoot allows teachers to create or simply use ready-made quizzes. After creating or choosing a quiz, you will have a pin code. Then you ask your students to join the game by entering the pin code. The students work as a group or individually trying to answer the questions presented on the screen.

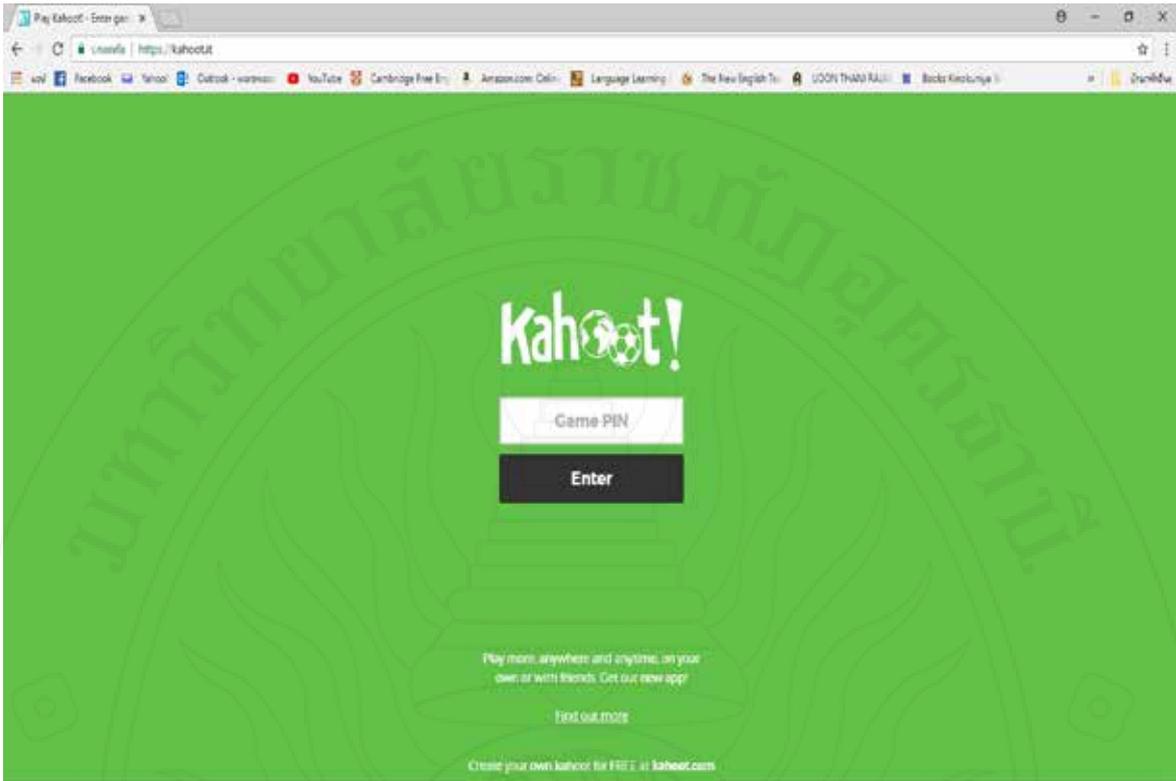


Figure 6.10 Kahoot

In conclusion, technology provides useful educational tools for teachers to create learning and teaching materials. These tools are also called authoring tools. You can produce traditional paper-based materials by using this kind of tools. In addition, you can create online materials that can excite, interest, and motivate students to participate in learning activities.

6.4 Technology as a Virtual Classroom

Traditionally, a classroom refers to a physical room, located in an educational institution, where teachers and students are present and where learning and teaching takes place. One of the limitations of a traditional classroom is that teachers and students have to be there in order to do learning and teaching activities. In addition, every student has to learn the same content, at the same level of difficulty, and at the same time.

At present, the advance of technology provides an alternative kind of classroom called 'a virtual classroom'. A virtual classroom refers to an online platform where learning and teaching takes place. Teachers and students can participate in the activities anytime and anywhere as long as they are connected to the Internet. In this section, two types of virtual classroom are discussed.

6.4.1 Online Lessons

There are many online English lessons available on the Internet. Basically, an online lesson is created for self-learning. As a result, it usually comes with all necessary learning materials such as video clips, audio files, reading passages, important information and exercises. In addition, the process of learning is clearly stated, and learners are supposed to follow those steps. For example, learners may be encouraged to watch a video clip and then to do a comprehension exercise.

Although an online lesson is a good place for learning a second language, it has some limitations. For example, learners only get automatic feedback from the computer program. In other words, learners will not get feedback or further explanation from real people. In addition, in speaking exercises, learners are asked to listen to an audio file and to repeat and record their own sound to see if they pronounce the words correctly or not. It can be noticed that this kind of task focuses on pronunciation rather than on speaking. Although the advance of technology called Artificial Intelligence (AI) allows us to communicate with computer program, it is not a real communication with real people. The next section discusses another kind of virtual classroom that provides you an alternative way to cope with this challenge.

The screenshot shows the VOA Learning English website. The main content area is titled "About Let's Learn English - Level 1" and contains a paragraph describing the course. Below this, there is a section titled "Let's Learn English - Level 1 Lessons" which displays four video thumbnails. The first three thumbnails are labeled "Lesson 1: Welcome!", "Lesson 2: Hello, I'm Anna!", and "Introducing Let's Learn English". The fourth thumbnail is partially visible and labeled "Lesson 3".

Figure 6.11 VOA Online Lessons
(Source: <https://learningenglish.voanews.com/p/5644.html>)

6.4.2 Learning Management System

Learning Management System is different from online lessons. An online lesson is created for self-learning. Learners can be anybody who can get access to the lesson. In addition, real communication with other learners or teachers is not available or very limited. On the other hand, learning management system allows teachers to create their own virtual classroom (see Figure 6.12).

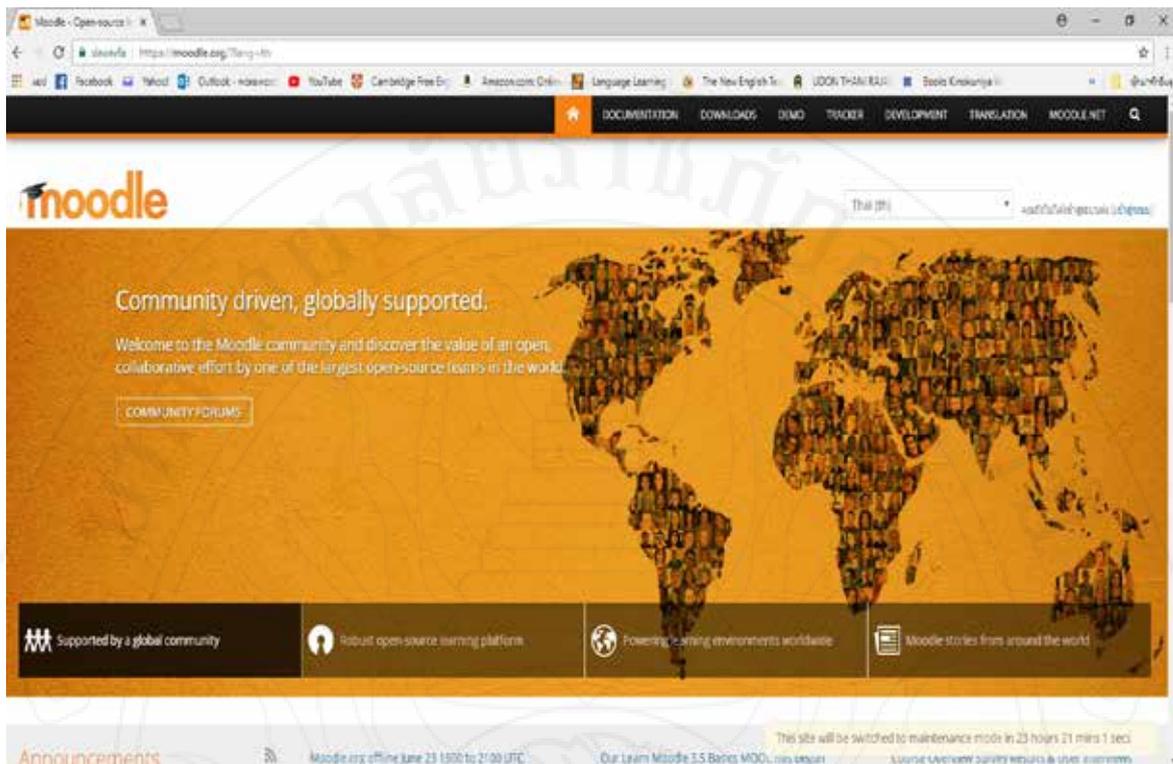


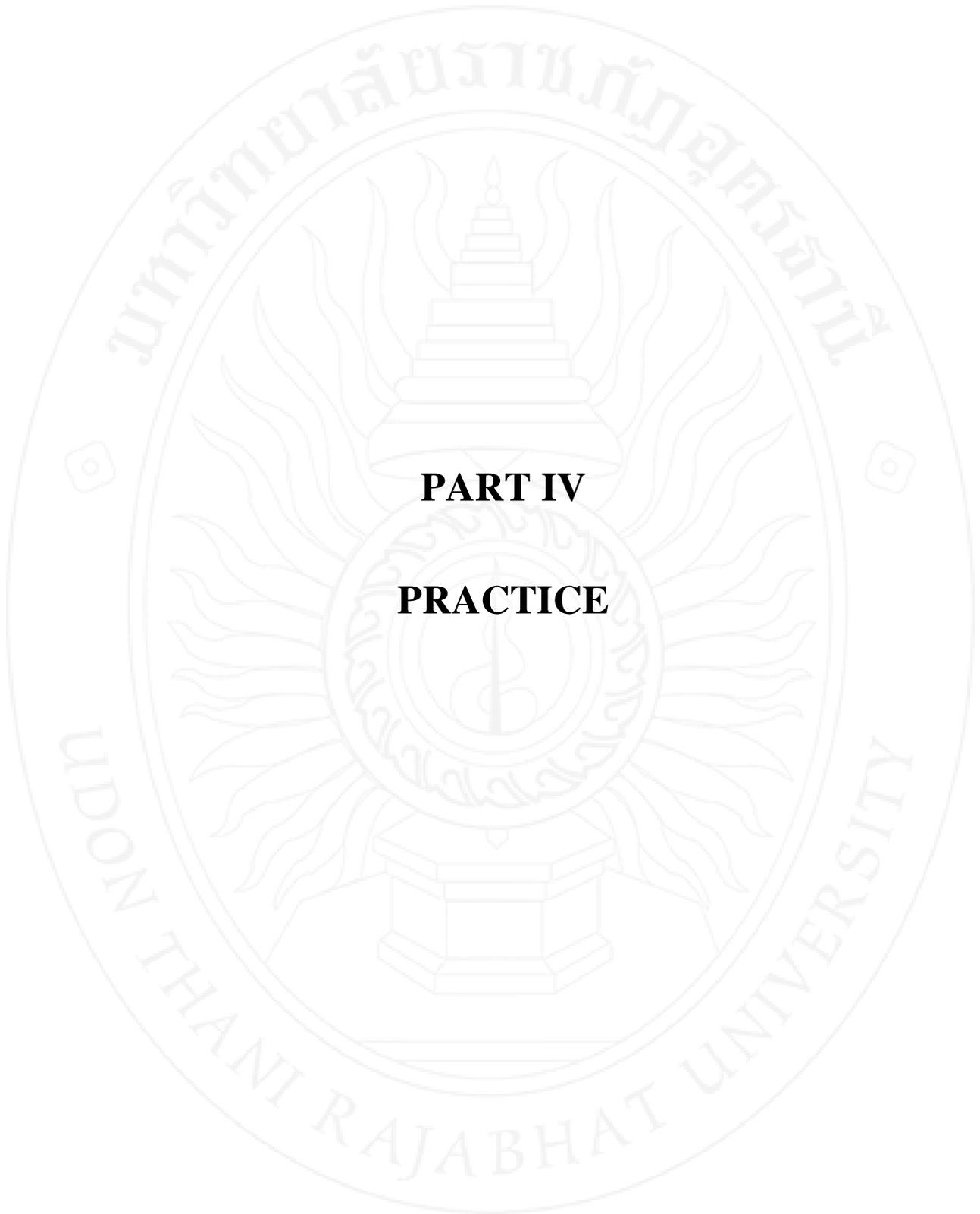
Figure 6.12 Learning Management System
(Source: <https://moodle.org/?lang=th>)

It can be noticed that a virtual classroom created through learning management system is quite similar to traditional classroom. Those who can participate in your virtual classroom are your students. One of the advantages of learning management system is that your students can communicate with you and other students. However, you need to create and provide your own learning and teaching materials. In other words, learning management system provides you a space where you can create and manage a virtual classroom. For example, homework can be assigned and submitted through learning management system.

In conclusion, this kind of classroom allows you and your students to participate in learning and teaching activities anytime and anywhere.

6.5 Conclusion

In conclusion, technology is important for second language learning and teaching, for it provides powerful tools to facilitate the process of learning and teaching a second language including the opportunity to gain access to incalculable information and to communicate with people around the world. However, we should be aware that technology-rich environment per se may not bring about language improvement. The challenge for English language teachers is how to encourage students to engage in activities that require the exposure to the target language and at the same time takes advantage of what the new technologies have to offer. In order to do so, the next chapter discusses how to integrate technology into classroom practice.



PART IV

PRACTICE



Part IV**Introduction**

As mentioned earlier, the main objective of this book is not to provide an inclusive list of sophisticated technological tools. A successful class depends mainly on how well the lessons are designed. In other words, the tools must be used in well-designed learning and teaching activities in order that students would benefit from them. Part IV discusses the integration of technology into language skills teaching and into some important teaching methods and approaches.



CHAPTER VII

Second Language Teaching and Technology

Questions for Reflection

- **What are the advantages of technology in language learning and teaching?**
- **How can we integrate technology in language skills teaching?**

7.1 Introduction

The English language has played an important role as one of the most important international languages for decades. The advance of technology has influenced the wide spread of English resulting in the increasing numbers of learners of English around the world. In addition, technology has influenced how English is learned and taught.

Language teaching has a long history. Language teaching is a field that has gone many fluctuations and shifts over the years because many language teachers are not aware of the linguistic, psychological, and sociocultural underpinnings of the many methodological options they have (Celce-Murcia, 2014). In the past, one of the goals of teachers, educators, and researchers in the field of language education was to find the best way to teach. A variety of teaching methods and approaches have been proposed. Some of them are getting less popular while others are still in the main stream.

A language consists of at least two main skills: receptive skills and productive skills. Listening and reading are receptive skills because we receive the messages and try

to extract the meaning from the discourse. On the other hand, Speaking and writing are regarded as productive skills because we have to produce the language.

In real communication, we rarely use only one skill at a time. The activation of one skill can be reinforced by the use of other skills (Brown & Lee, 2015). For example, we respond (speaking) to what we have heard (listening) from our friend in a conversation. In other words, we normally use both listening and speaking skills in real communication. However, in this chapter, the receptive and productive skills are present separately for clear demonstration of how to integrate technology into each skill teaching.

7.2 Teaching Receptive Skills

Receptive skills in language learning and teaching refer to listening and reading skills. We use receptive skills to acquire the first and second language. When we were young we listened to the language produced by our parents and the people around us, and we gradually acquired the first language. It can be concluded that input, along with the interaction with people around us, is essential for language development.

In the context of second language acquisition, as discussed in Chapter II, comprehensible input is crucial in the process of second language acquisition. As a matter of fact, we receive comprehensible input through receptive skills. If we are in the context where we can be exposed to the target language, we have more opportunity to improve receptive skills and may lead to the acquisition of the second language. This section discusses the activities that can be done to improve students' receptive skills in and beyond the classroom. Please note that some activities are appropriate for both listening and reading skills while some activities can be specifically done for either skill.

7.2.1 Intensive Listening/ Reading

Intensive listening/ reading refers to learning and teaching activities that aim to improve students' listening/ reading skills. Intensive listening/ reading normally takes place in the classroom. The activities can be divided into three phases: pre-listening/ reading, while-listening/ reading, and post-listening/ reading.

7.2.1.1 Pre-Listening/ Reading Activities

The purpose of pre-listening/ reading activities is to prepare students for the main activities. The followings are some ideas that you can use during pre-listening/ reading phase.

Activating Students' Background Knowledge

According to Top-Down Model of listening/ reading, students bring their background knowledge to comprehend or interpret the texts they are listening to or reading. Background knowledge can be “knowledge of the world and common situations and events, general knowledge or knowledge of how different kinds of texts are organized” (Richards, 2015, p. 381). The teacher may begin the lesson by writing the topic on the board, showing a picture, playing a video clip or an audio file and ask some questions to activate students' background knowledge. For example, if students are about to read about ‘Songkran Festival’, the teacher may ask what they know about the festival, what people normally do, why they do such activities. Students can answer the questions one by one or by brainstorming to share ideas with their peers.

Predicting

Prediction activity is also based on Top-Down Model of listening/ reading. Before listening to or reading the texts, students are asked to predict some of the things they may hear or read based on the topic or/and the picture they see. Students can work individually or discuss with peers. Students may write down their predictions and check if their predictions are correct or not while they are listening or reading. For example, if the topic is “I hate Songkran Festival”, students may predict why the author hates the festival. When they listen to or read the text, they can check whether or not their predictions are correct. The interaction between the reader and the text is called interactive model of reading. It is believed that listening or reading is not as passive process. In order to comprehend the texts, we need to interact with the texts by asking questions and predicting the information.

Presenting Important Vocabulary and Structures

Before listening or reading, teachers may present some important vocabulary and grammatical structures that students will need to comprehend the texts. In listening activity, you may need to focus more on the pronunciation because it might help students to recognise the words when they have to listen to the text.

Skimming and Scanning

Skimming and scanning activities are appropriate for the pre-reading phase. Students may be asked to skim the texts for a general idea and the potential themes of the text, and the directions the author may take (Richards, 2015). On the other hand, students may be asked to scan the texts for specific details such as names, places, and other facts in the texts. These two activities may help students get a general idea of the texts and may lead to better comprehension of the text in the while-reading phase.

In conclusion, the activities in the pre-listening/ reading phase should aim to activate students' background knowledge, encourage them to interact with the texts, prepare them with essential knowledge and skills for the while-listening/ reading phase.

7.2.1.2 While-Listening / Reading Activities

There are various types of while-listening/ reading activities teachers can do to improve students' receptive skills depending on the purposes of the lesson. This section discusses some ideas of while-listening/ reading activities.

Listen and Restore

The main purpose of this activity is to improve listening skills by focusing on some specific words. Students are asked to listen very carefully to an audio file and try to find the mistakes of the written script, purposefully amended by the teacher. This activity can be used to check if students can recognise some confusing pairs of phonemes such as “read” and “lead”, “thank” and “tank”, and “watch” and “wash”. In addition, the words that the teacher amended can be the synonyms or antonyms of the original words. For example, the original word “possible” can be replaced with “impossible” to provide some hints. Other hints such as the number of the mistakes can also be provided. Figure 7.1 is the original text and 7.2 is the example of the amended text.

Original Texts

Ant colonies have their own personalities, which are shaped by the environment, a US study suggests. Colonies of several hundred ants show differences in the way they behave, just like individual people do. The study is published in the journal 'Proceedings of the Royal Society B'. The BBC's Jonathan Webb reports.

According to ecologists, having a personality means showing a consistent pattern of behaviour over time. Researchers from the University of Arizona studied colonies of rock ants across the western US, both by following them in the wild and by taking whole colonies back to the lab.

They found that certain risky behaviours, like foraging widely for food and responding aggressively to a threat, went together, and colonies further north tended to take more of these risks. The study suggests those more adventurous personalities could be an adaptation to the limited window of activity left by the long, snowy northern winter.

Figure 7.1 Original Text

(Source: http://www.bbc.co.uk/worldservice/learningenglish/081222_download.shtml)

Directions: Listen and find the wrong words. Then correct the words.

Ant colonies have their own personalities, which are shaped by the environment, a US study suggests. Colonies of several hundred ants show different in the way they behave, just like individual people do. The study is public in the journal 'Proceedings of the Royal Society B'. The BBC's Jonathan Webb reports.

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They found that certain risky behaviours, like foraging widely for food and responding aggressively to a threat, went together, and colonies further north tended to take more of these risks. The research suggests those more adventurous personalities could be an adaptation to the limited window of activity left by the long, snowy northern winter.

Figure 7.2 A Worksheet for Listen and Restore

It can be noticed that Listen and Restore activities can encourage students to listen to specific details. However, listening comprehension is not the main purpose of this activity.

Listen/ Reading and Sort

This activity can be done with both listening and reading skills. The main purpose of Listen/ Reading and Sort is to encourage students to listen or read and rearrange the sequence of the texts. The story or dialogue script can be cut into strips. Students are asked to put the scrambled story or dialogue into the correct order. It is believed that in order to rearrange the story or the dialogue, students need to listen carefully to the texts or comprehend the whole story they are reading. The following is an example of the worksheet used in this activity.

Todd: OK, Sophie, we're going to talk about high school. What was high school like?
Sophie: It was great. Lots of fun. Lots of friends. Learned quite a bit at school.
Todd: So, what did you study in high school?
Sophie: I studied mainly sciences actually.
Todd: Oh, really!
Sophie: Biology.
Todd: Did you study science in college?
Sophie: Yes! Oh, No! I didn't. I went on to do a bachelor of technology.
Todd: Oh, really. Well, that's kind of similar.
Sophie: Kind of similar. Related.
Todd: OK, what did you do in high school? Any clubs or anything?
Sophie: Yeah, I did rowing for the school. I played basketball, played tennis, was on the swimming team.
Todd: Wow, you're quite athletic. What sport did you like the most?
Sophie: Rowing.
Todd: Rowing. Do you still row?
Sophie: No, unfortunately not.
Todd: Really!
Sophie: Would like to.

Figure 7.3 Original Text for Listen/ Reading and Sort
 (Source: <http://www.manythings.org/elllo/33.html>)

So, what did you study in high school?
OK, Sophie, we're going to talk about high school. What was high school like?
I studied mainly sciences actually.
Did you study science in college?
Biology.
Oh, really!
It was great. Lots of fun. Lots of friends. Learned quite a bit at school.
Oh, really. Well, that's kind of similar.
Rowing. Do you still row?
Rowing.
Kind of similar. Related.
Wow, you're quite athletic. What sport did you like the most?
OK, what did you do in high school? Any clubs or anything?
Yeah, I did rowing for the school. I played basketball, played tennis, was on the swimming team.
No, unfortunately not.
Yes! Oh, No! I didn't. I went on to do a bachelor of technology.

Figure 7.4 Example of Scrambled Dialogue

Listen/Reading and Compare

This activity can be used for the development of both listening and reading. Students are asked to listen to or read several sources on the same topic. After that, they are asked to compare the similarities and/or the differences among the sources. It is

believed that in order to compare the listening/ reading texts, students need to comprehend the texts and be able to grab the important messages from the texts. Students can write down the main ideas of each text they are listening to or reading in a table. Please have a look at an example below.

Directions: Listen and write the key ideas of each story in the table below.		
Story 1	Story 2	Story 3

Figure 7.5 Worksheet for Listen/ Reading and Compare

For beginners, hints or choices can be provided. Figure 7.6 and 7.7 are two examples of worksheets for students with lower level of proficiency.

In conclusion, while-listening/ reading activities are the main focus of a listening/reading lesson. The activities are various depending on the objectives set such as listening/ reading for specific details and for main ideas.

Directions: Listen and choose the key ideas that are mentioned in each story in the table below.

watching movies	having foreign friends
studying abroad	reading novels

Story 1	Story 2	Story 3

Figure 7.6 Worksheet for Listen/ Reading and Compare for Beginners (1)

Directions: Listen and circle the number of the story in which the key ideas are mentioned.

- watching movies	1	2	3
- having foreign friends	1	2	3
- studying abroad	1	2	3
- reading novels	1	2	3

Figure 7.7 Worksheet for Listen/ Reading and Compare for Beginners (2)

7.2.1.3 Post-Listening/ Reading Activities

The main focus of the post listening/ reading phase is to check whether or not students understand the texts that they have listened to or read. It is also an opportunity to

respond the texts in different ways and to make links to other skills (Richards, 2015). The followings are some examples of post-listening/ reading activities.

Checking Comprehension

In real life, the main purpose of listening or reading activities is comprehension. When we talk to our friend, we listen and try to understand the meaning of her messages. When we read news on the Internet, we are trying to understand what happens in the news, what are the messages that the author tries to convey. In the classroom context, to check whether or not the listening or reading activity is successful, we may check students' comprehension. One of the most popular ways to measure students' comprehension is testing. There are several types of tests teachers can use such as a multiple-choice test, a true or false test, and a short answer test. The test may measure if or how well students find the main ideas of the texts, find the specific details, specify the inferences, and interpret and evaluate the texts.

Summarising

Summarising is an alternative way to measure students' comprehension. In order to summarise the texts that they have listened to or read, students need to understand the key messages in the texts. Students can summarise the texts in the form of a short passage or a graphic organiser. Figure 7.8 illustrates an example of a graphic organiser. The main idea of the text is written in the middle. The branches represent the supporting details.

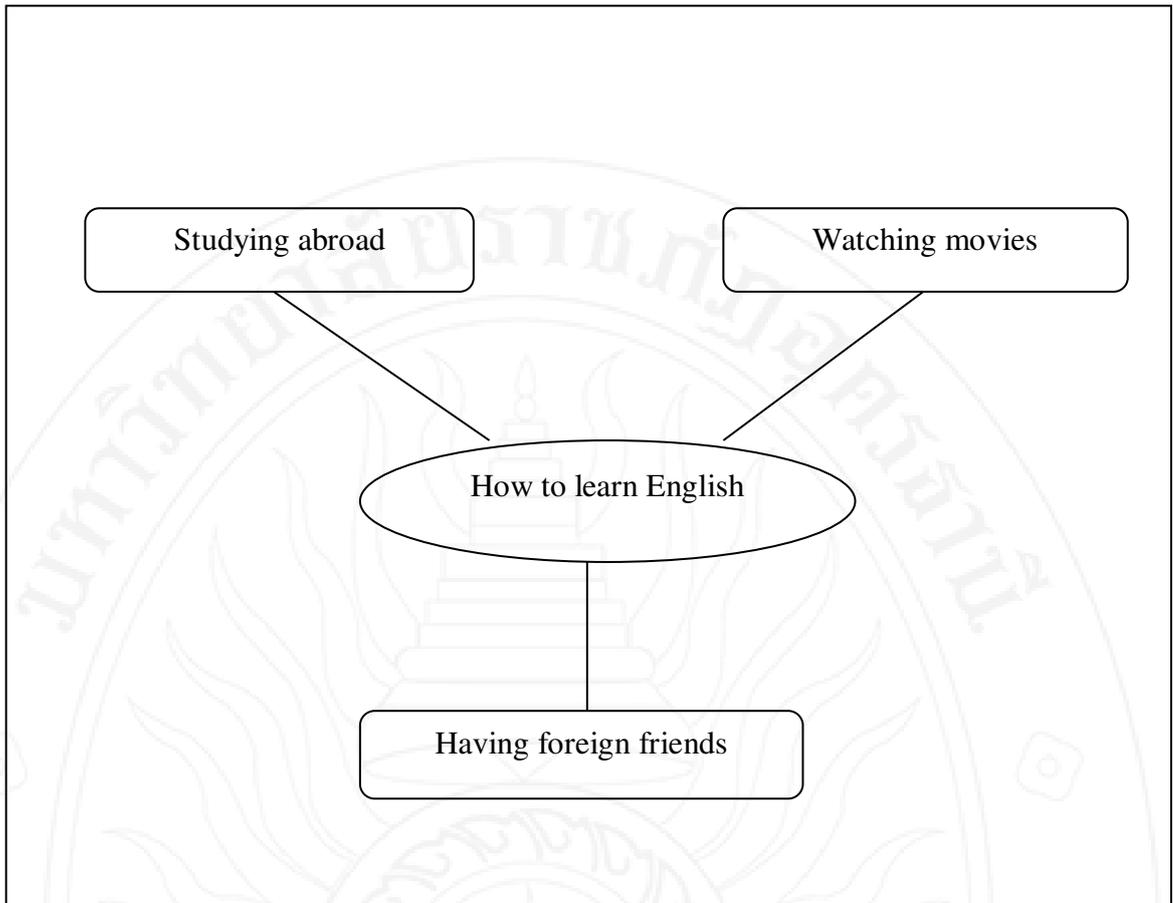


Figure 7.8 A Graphic Organiser for Summary

Words and Language Study

While students are listening to or reading the text, they may find some difficult words and grammatical structures. In the post-listening/ reading phase, students have the opportunity to focus more on lexical and syntactic aspects of the text. The analysis of the language can be done through exercises or worksheets focusing on some words or structures that students and the teacher want to focus.

Extension Activities

It is also a good idea to encourage your students to do some activities beyond listening or reading. This can help your students transfer the knowledge and skills they have acquired from listening or reading tasks into other skills. For example, after listening

to or reading the texts about how to learn English, students may be asked to write comments on whether or not they agree with the author or write an essay on the similar topic.

7.2.2 Extensive Listening/ Reading

Extensive listening/ reading, as opposed to intensive listening/ reading, refers to listening to or reading the texts in the target language extensively. The main purpose of extensive listening/ reading is for pleasure. The concept is derived from extensive reading. It is believed that if students enjoy reading, they will read more. The more they read, the better they understand. The better they understand, the faster they read. If they read faster, they will enjoy reading more. This is called “the virtuous circle of the good reader”. As a result, the texts students read should not be too difficult for students to understand because they may not enjoy the texts and may give up. In addition, the focus of extensive reading activities is on the fluency rather than the accuracy. According to extensive reading, reading a lot of easy texts is more preferable than reading a few difficult ones.

In addition, each student should be allowed to choose the texts that they are interested in. The obvious reason is that we tend to enjoy listening or reading what we find interesting. Additionally, apart from the issue of individual differences, the opportunity to make choices may lead to the increase of motivation (see Chapter III).

It is also suggested that there should be neither exercises nor tests after listening or reading. Instead of using tests to measure the development of listening or reading skills, we use listening or reading logs to keep tracks on students’ progress (see Figure 7.9).

Date	Books	Author	Comments

Figure 7.9 Reading Log

7.2.3 Technology and Receptive Skills

As discussed in Chapter V and VI, various types of technology can be used to facilitate the process of learning and teaching in various ways. According to the field of Second Language Acquisition (see Chapter II), in order to develop receptive skills, students need to be exposed to comprehensible input in the target language. Technology, especially the Internet, provide countless of materials that can be used to improve receptive skills. The materials can be used as learning and teaching materials in the classroom. For example, you can find different sources of listening or reading materials on the same topic for Listen/ Reading and Compare activities.

In addition, the Internet provides resources of materials that can be used in extensive listening and reading activities. A wide range of listening and reading materials on almost any topics can be found easily. Students can find the materials that they are interested in. Moreover, they can choose the materials that suit their level of proficiency.

In the field of extensive reading, students are encouraged to read graded readers because the materials are simplified and graded according to different level of proficiency.

Technology is not regarded as only a source for learning and teaching materials. Technology can facilitate listening and reading process in many ways. First, multimedia may help students understand the texts better because it allows students to see the pictures, hear the sound, and read the script at the same time. For example, students may be able to guess the meaning of the video clip by combining the sound they are hearing and the picture they are seeing. Moreover, multimedia is more interesting than traditional listening and reading materials. Second, technology provides language reference tools that students can consult while they are listening or reading. For example, they can check the meaning of some difficult words from an online dictionary.

Technology can also be used as an authoring tool. If the materials are much above the current level of your students, technology can help you can adapt them to suit the appropriate level. For example, if the conversation in the clip video is too fast, you can use a simple computer program to slow it down. In addition, you can create audio files for your listening class by using Text-to-Speech program (see Chapter V).

In conclusion, receptive skills are important for second language acquisition. In order to improve receptive skills, students need to have a lot of comprehensible input. In case the teacher is not a native or a near-native speaker of the target language, technology can help provide materials that can be used in the classroom. What the teacher needs is to design meaningful tasks that encourage students to be exposed to the materials in the target language both in intensive and extensive approach.

7.3 Teaching Productive Skills

Receptive skills are important because they are the skills that students use to receive comprehensible inputs in the target language. However, currently, applied linguists have found that only comprehensible input is not enough for second language acquisition. It is now believed that students also need the opportunities to produce the target language (see Chapter II) by speaking and writing. These two skills are called productive skills. The following sections discuss how we can teach speaking and writing skills and how technology can facilitate the learning and teaching process.

7.3.1 Teaching Speaking Skills

In the field of second language teaching, there have been many methods and approaches proposed to improve students' speaking ability. One of the most important approaches is Communicative Language Teaching (CLT) or communicative approach. According to Communicative Language Teaching, the ultimate goal of second language learning is the competence to communicate in the target language (Celce-Murcia, 2014, p. 8). It is believed that the process of learning a second language should be done through the use of the target language in "real communication and the exchange of information" (Richards & Rodgers, 2001, p. 204). This section discusses some important types of activities that can be used to improve students' speaking ability.

7.3.1.1 Information Gap Activities

The main purpose of an information gap activity is to encourage students to communicate in the target language by exchanging information that they have. Each student is given a different set of information. The rules are that each student must have a

different set of information and must not see the information of her partner. In addition, the information must be exchanged through spoken form in the target language only.

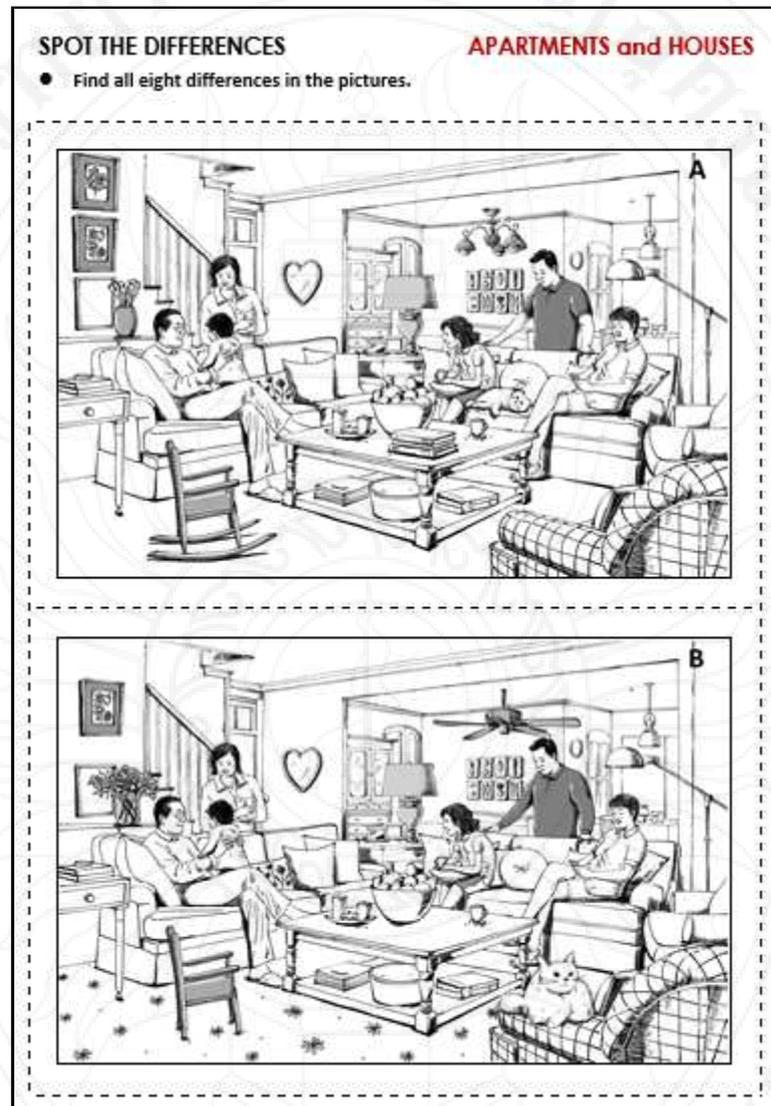


Figure 7.10 Information Gap Activity
(Source: <https://www.allthingstopics.com/apartments-and-houses.html>)

Figure 7.10 is an example of an information gap activity. Student A and Student B receive different pictures containing different information. They have to find the differences between the two pictures by asking and answering questions, and describing

the picture. It is believed that through the process of exchanging information, students have the opportunity to communicate in the target language and that this kind of activities may lead to the development of speaking skills.

7.3.1.2 Role-Playing

Role-playing is another important activity focusing on speaking skills. A situation is set, and each student is assigned a role. For example, the situation is at the market. One student takes a role of a merchant, another takes a role of a customer. The teacher may assign the customer to buy things in the shopping list. The merchant has to tell and calculate the price of the products.

It should be noted that students should be taught the language they need to use in role-playing. For beginners, you may provide a set of sentence patterns or phrases from which students can choose to use in the conversation. For advanced students, they may be encouraged to make a conversation freely as long as they can achieve the goal of the task.

7.3.1.3 Language Games

There are a number of language games that you can use to encourage your students to communicate in the target language. For example, “Find someone who....” is a well-known activity. Students are asked to find someone in the class who matches a description. In order to do that, students have to move around the classroom and interview their friends. At the end of the activity, you may ask your students to present their results in front of the class for practice presentation skills.

Find someone who....		
likes dogs	had breakfast this morning	is the only child
watched TV yesterday	likes football	drinks coffee
likes English	take a shower every day	speak more than one language

Figure 7.11 Find someone who...

Another popular language game is “20 questions”. This activity let students practice asking and answering questions. One of the students is assigned to be someone such as David Beckham, and Michael Jackson or something such as a dog and a pen. The rest of the students have to guess who or what the student is by asking only 20 questions.

Bingo is also a famous language game. Each student gets a card with 9 squares containing words in a different order. Each time the teacher calls out a word, students mark the word that they have in the card. The first student to have 3 words in a row wins. Actually, bingo is a general game that can be applied into language classroom. If the main objective of the lesson is pronunciation, the teacher may assign one of the students at a time to come up and read the word. The student who reads the word practices pronunciation, the rest of the students practice listening skills. The words containing in the squares can be various depending on the purpose of the lesson.

watch	wash	live
tank	rice	watched
leave	thank	lice

Figure 7.12 Bingo

7.3.1.4 Technology and Speaking Skills

Speaking may be one of the most difficult skills to improve through technology. What current technology can do best in the development of speaking skills is the practice of pronunciation. As discussed in Chapter V, there are many software programs that can be used for practicing pronunciation. For example, students listen to an audio file, and then record their own voice repeating what they have heard. The program will analyse and compare to what extent the two sounds are similar.

Speech recognition technology can also be used for practicing pronunciation. For example, you can use ‘voice search’, instead of typing keywords, to search for information from Google. This technology can transcribe what we say into texts. This activity can help students improve English pronunciation because they can check whether or not they pronounce the words correctly. If the pronunciation is wrong, the program will not show the right search results. Then, they need to adjust and improve their pronunciation until the target words appear on the screen.

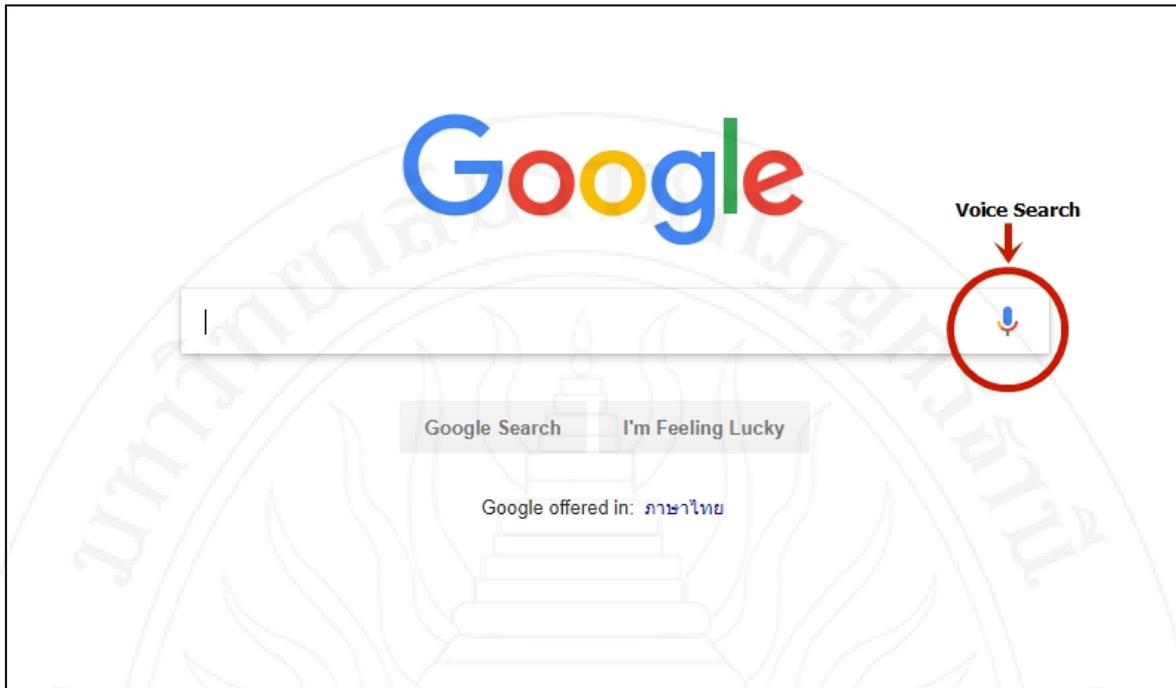


Figure 7.13 Voice Search

Pronunciation is an important aspect in speaking skills. However, real communication needs interaction and the exchange of information from interlocutors. Artificial Intelligence (AI) technology creates robot-like characters known as “chatbots” with which we can have conversation. The limitation of this kind of conversation is that the communication is not ‘real’ because the responses are derived automatically from the database not from other human beings. However, one of the advantages of chatting with chatbots is that some students may feel more comfortable chatting with a computer program because they have the opportunity to use the target language without be afraid of making mistakes.

Technology can also be used to improve speaking skills through real communication with other human beings. Communication tools (see Chapter V) such as mobile phones make communication with native speakers, speakers, and learners of the target language from all around the world possible. You can assign your students to do a

task or a project that requires them to discuss in the target language through Computer-Mediated Communication (CMC) such as group chat and video conference.

7.3.2 Teaching Writing Skills

Writing is regarded as one of the most difficult skills to learn because there are several components in a piece of good writing such as grammatical structures, choice of words, organisation, cohesion, and ideas. This means that if you want to improve your students' writing skills, you need to improve at least all aspects mentioned above.

Actually there are several levels of teaching writing ranging from writing alphabets, words, phrases, sentences, a paragraph, to an essay. In this section, only paragraph and essay writing are discussed.

Before writing, students need to think about the topic. Students should decide what the message they want to convey to their readers is. In other words, they should decide what the main idea of the paragraph or the essay is. A good main idea should not be too narrow or too broad and should allow the author to explain or to give some reasons to support the idea. For example, "My friend is Somchai." is not a very good main idea comparing with "Somchai is my best friend for several reasons".

Once students can decide what the main idea is, they are encouraged to collect necessary information. A good way of gathering information is to write down everything that comes to their mind in a piece of paper. At this stage, they may not need to worry much about the spelling or the grammatical structures of what they write. They can cross out the ideas that they will not use. After that, students are asked to group their ideas into three to four categories (see Figure 7.14 and Figure 7.15).

Appearance	Personality	Hobbies
adorable	brave	reading
beautiful	calm	playing games
handsome	gentle	watching movies
pretty	happy	
	kind	
	nice	

Figure 7.14 Grouping Ideas for Writing

The next step before writing is to organise the story. The subtopics derived from the gathering information stage can be used as the supporting details or reasons to support their main idea. For example, if the main idea is “Somchai is my best friend for several reasons”, students can write about Somchai’s appearances, personalities, and hobbies. You can ask your students to write the organisation of a paragraph or essay in an organisation form (see Figure 7.16).

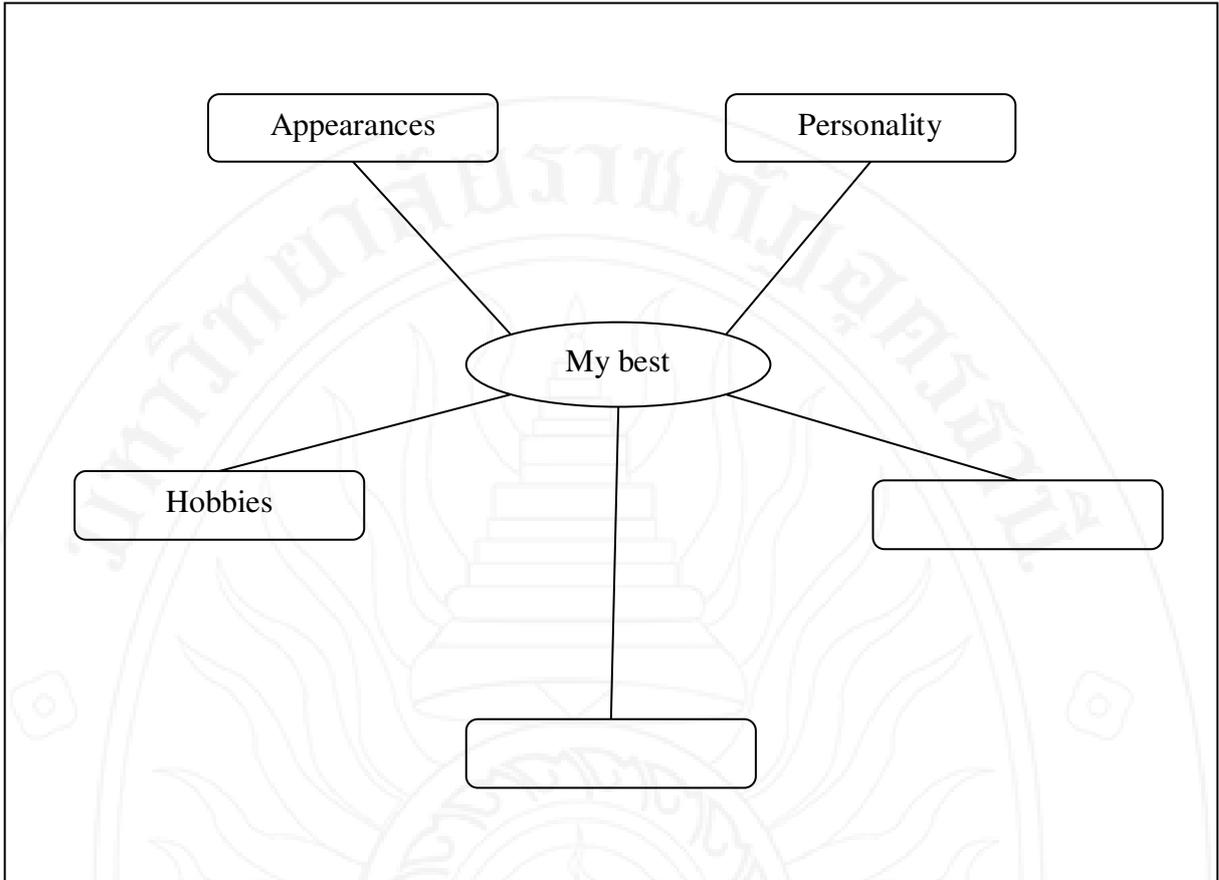


Figure 7.15 Graphic Organiser for Writing

Topic
Main idea
Support 1
Support 2
Support 3
Conclusion

Figure 7.16 Organisation Form

After having the plan, students are asked to write a paragraph or an essay by expanding their ideas they have in the plan. The teacher can teach them how to make grammatically correct sentences and how to use discourse markers to connect the ideas.

After finishing the first draft, students may submit it to the teacher or exchange it with their peers for comments. The teacher may use correction code for writing in order to tell students how they can improve their writing (see Figure 7.17). After correcting the mistakes, students may write the final draft.

GR: grammar
TN: tense
SP: spelling
P: punctuation/capitalization
PREP: preposition
WW: wrong word
WO: wrong order
WF: word form
^ : missing word
SYN: provide a synonym for this word.
RW: try re-writing
REG: wrong register (formal/informal)
??? : Ideas are not clear.

Figure 7.17 Correction Code for Writing

(Source: <http://cperkins.cumbresblogs.com/2017/03/03/writing-correction-code/>)

Technology and Writing Skills

Technology can facilitate the process of writing in many ways. First, it provides a source of information. In case students need to write about something they are not familiar with, they need to search for information such as facts or other people's opinions for references.

Second, technology also provides useful language reference tools that students can use if they are not sure about the grammatical structures, word use, or spelling of some words (see Chapter V). Examples of language reference tools are dictionaries, concordancers, collocations and spell checkers. Teachers may design activities to have students practice using the language reference tools (see Figure 7.18). Moreover, as discussed in Chapter V, a search engine can also be used as a language reference tool. Teachers may ask students to check whether or not the sentences are grammatically correct.

Directions: Write sentences using the following words. You are encouraged to consult collocations to see how the words can be used in a sentence.

Words	Collocations	Your Sentences
afraid	be afraid of	Somchai is afraid of spiders.
prefer	prefer ... to ...	Somchai prefers coffee to tea.
sorry	be extremely sorry	Somchai was extremely sorry for what he had done.

Figure 7.18 Worksheet for Collocations

Technology also provides editing tools for teachers. For example, teachers can use 'track change' to give students comments about their mistakes. This tool is useful because students can learn from their mistakes and improve their paragraph or essay.

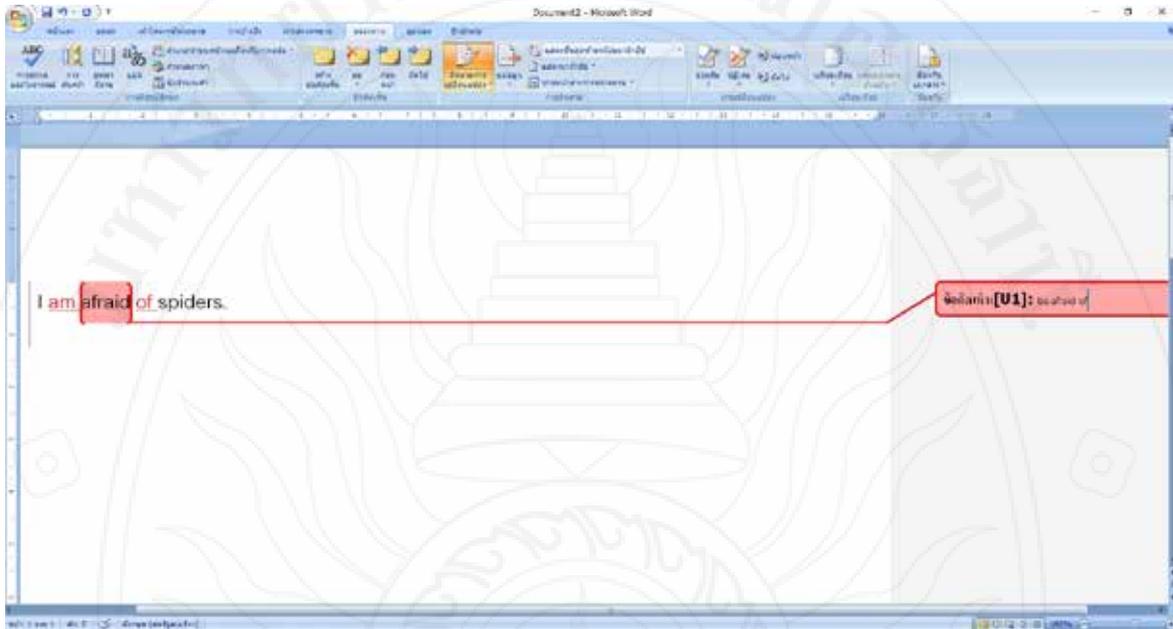


Figure 7.19 Track Change

In conclusion, the development of productive skills is important for the acquisition of a second language. There are many activities that students can do to improve those skills. Technology can also be used to facilitate the learning and teaching process.

7.4 Task-Based Language Teaching

In the field of English as a second language teaching, there are several more approaches that teachers around the world use to improve students' overall language proficiency. According to holistic approach, language skills are not taught or developed separately.

Task-based language teaching (TBLT) is a holistic approach to teaching a second language. It is believed that students' language proficiency can improve through the

process of completing tasks. Tasks involve students in “comprehending, manipulating, producing, or interacting in the target language to achieve a non-linguistic outcome” (Nunan, 2014, p. 459). The followings are the principles of task-based language teaching.

- Meaning is primary.
- Learners are not given other people’s meanings to simply repeat.
- There is some sort of relationship to comparable real-world activities.
- Task completion has some priority.
- The assessment of the task is in terms of outcome (Nunan, 2014, p. 459).

There are several model of task-based language teaching. One of the most well-known framework was created by Jane Willis (Willis, 1996). She proposed that task-based learning framework consists of three stages: The pre-task stage, the task cycle stage, and the language focus stage. In the pre-task stage, the teacher explores the topic, highlight useful words and phrases, and helps students understand task instructions. The task cycle stage consists of three activities: task, planning, and report. After students complete the task, they prepare to report how they did the task, what they decided or discovered. In the language focus stage, students examine and discuss specific language features and practice new words, phrases and patterns occurring either during or after the analysis.

Willis (1996) suggested six tasks types that teachers can use in the classroom. The tasks are listing, ordering and sorting, comparing, problem solving, sharing personal experiences, and creative tasks. It can be noticed that the tasks can be used in skills teaching discussed earlier.

Task-based language teaching share similar characteristics with other teaching approach such as project-based learning. Nunan (2014, p. 463) defines projects as “super-tasks that incorporate a number of self-contained but interrelated subsidiary tasks”. It is also believed that students acquire a second language through the process of completing a project.

Technology and Task-based Language Teaching

Technology can facilitate the process of task-based language teaching in several ways. First, technology, especially the Internet, provides countless of materials and information used in task-based language teaching. For example, if students are assigned to plan a trip to Japan, they need to search for real information on the Internet such as the airfare ticket, the tourist attractions, and the accommodation. In addition, teachers can ask students to discuss through Computer-Mediated Communication (CMC). This mode of communication is used to encourage students to use the target language in the discussion. Moreover, teachers can keep the chat log for language analysis. Thanks to the advance of technology, collaborative work is not restricted to students in one classroom. A project or a task can be done collaboratively by students from different classes, from different school, and from different countries. This is called telecollaboration.

7.5 Conclusion

This chapter discusses the principles of teaching language skills including receptive skills and productive skills. Receptive skills consist of listening and reading. On the other hand, productive skills comprise speaking and writing. The holistic approach such as task-based language teaching is also discussed. The learning and teaching activities are based on the theories and research findings from the field of Second Language Acquisition and

language education discussed in the second part of this book. Moreover, the potential of the integration of technology into language teaching skills has been proposed. Technology can be used as a resource for learning and teaching materials, a language reference tool, a communication tool.



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