# THE EFFECTIVENESS OF MULTIMEDIA-BASED INSTRUCTION
# IN DEVELOPING THE SIXTH GRADE STUDENTS' ENGLISH ABILITY

A THESIS

BY

PUDSADEE  KAEWCHAWEE

Presented in Partial Fulfillment of the Requirements for the

Master of Arts Degree in Teaching English as a Foreign Language

at Srinakharinwirot University

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AN ABSTRACT

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The study aimed to investigate the effectiveness of Multimedia-Based Instruction to develop the sixth grade English ability. It also examined the students' attitudes in learning English after taught through Multimedia-Based Instruction. The research design was one single group pre-test and post-test design. The participants of the study were fifty sixth grade students at Tessaban 1 Buriratdarunwittaya School, Buriram province. Data were collected through English ability pretest and posttest in four skills; listening, speaking, vocabulary and grammar, and learning English through Multimedia-Based Instruction attitude questionnaire. In the experiment, the students learned English through various Multimedia-Based Instruction activities for eight weeks. The Multimedia-Based Instruction included twenty-six lesson plans; each lesson plan was taught for three sessions and each session lasted 50 minutes. The results revealed the significant difference at the .01 level in the overall mean scores of the pre-test and post-test in the experimental group. In addition, the mean scores of the English ability pretest of the experiment goup was higher then that of the pretest. Furthermore, when comparing the mean scores between each skill, the results revealed that the mean scores of all skills of the pretest were higher than those of the posttest. Additionally, the results from the questionnaires revealed that students had highly positive attitudes toward learning English through Multimedia-Based Instruction. Also, the results from the open-ended questionnaires revealed that students enjoyed learning English through Multimedia-Based Instruction.  This might be because the PowerPoint presentation, video clips from the websites helped them to enjoy learning English. Besides, students

reported that learning English through PowerPoint presentation and video clips made them understand the lesson more clearly.

ประสิทธิผลของการสอนแบบสื่อประสมในการพัฒนาความสามารถทางภาษาอังกฤษ
ของนักเรียนชั้นประถมศึกษาปีที่ 6

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จุดประสงค์ของงานวิจัยในครั้งนี้เพื่อต้องการศึกษาประสิทธิผลของการสอนแบบสื่อประสม
ในการพัฒนาความสามารถทางภาษาอังกฤษของนักเรียนชั้นประถมศึกษาปีที่ 6 นอกจากนี้ผู้วิจัย
ต้องการศึกษาทัศนคติของนักเรียนที่มีต่อการเรียนภาษาอังกฤษด้วยสื่อประสม หรือสื่อมัลติมีเดีย
แบบแผนการวิจัยเป็นแบบกลุ่มทดลองกลุ่มเดียววัดผลก่อนและหลังการทดลอง กลุ่มตัวอย่างคือ
นักเรียนชั้นประถมศึกษาปีที่ 6 จำนวน 50 คน โดยนักเรียนในกลุ่มตัวอย่างเป็นนักเรียนโรงเรียน
เทศบาล 1  บุรีราษฎร์ดรุณวิทยา จังหวัดบุรีรัมย์ ระยะเวลาในการทดลอง 8 สัปดาห์ รวม 26 คาบเรียน
ไม่รวมเวลาจากการทดสอบก่อนและหลังเรียน เครื่องมือที่ใช้ในการเก็บข้อมูลประกอบด้วย ข้อสอบ
วัดความรู้ภาษาอังกฤษก่อนเรียนและหลังเรียน โดยเป็นข้อสอบเป็นข้อสอบใช้ทดสอบ 4 ทักษะคือฟัง
พูด คำศัพท์ ไวยากรณ์ และแบบสอบถามทัศนคติของนักเรียนที่มีการเรียนภาษาอังกฤษโดยใช้สื่อ
ประสม ผลจากการศึกษาพบว่า ในภาพรวมการใช้สื่อประสมหรือสื่อมัลติมีเดียในการพัฒนา
ความสามารถทางภาษาอังกฤษของนักเรียน คะแนนหลังจากการทดลองสูงกว่าก่อนการทดลองอย่าง
มีนัยสำคัญทางสถิติที่ระดับ .01 อย่างไรก็ตาม เมื่อนำผลคะแนนจากการก่อนการทดลองและหลังการ
ทดลองมาวิเคราะห์แยกเป็นรายทักษะ 4 ทักษะแล้วนำมาเปรียบเทียบกัน พบว่าคะแนนของนักเรียน
หลังการทดลองในแต่ละทักษะเพิ่มสูงขึ้นอย่างมีนัยสำคัญทางสถิติในทุกทักษะ นอกจากนี้ผลจาก
แบบสอบถาม พบว่านักเรียนสนุกกับการเรียนภาษาอังกฤษผ่านสื่อประสมหรือสื่อมัลติมีเดีย โดย
นักเรียนได้ให้ความเห็นว่าสนุกกับการเรียน อาจเป็นเพราะว่างานนำเสนอโดยคอมพิวเตอร์ และคลิป
แถบภาพวีดีทัศน์ช่วยให้นักเรียนเข้าใจบทเรียนชัดเจนยิ่งขึ้น

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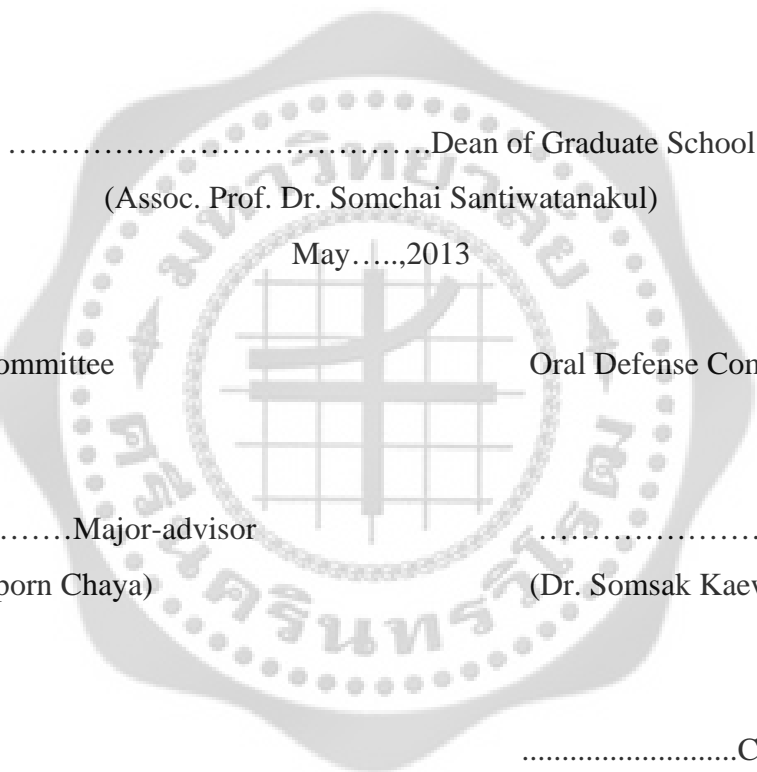

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Thesis Committee                                    Oral Defense Committee


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(Dr. Walaiporn Chaya)

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# CHAPTER I

# INTRODUCTION

**Background of the Study**

English has played a very important role in many developing countries which where it has been used both as a second language (ESL) and a foreign language (EFL). In Thailand, like in many other countries, English has been taught as a foreign language for many decades. Thai students are required to learn English as a compulsory subject from primary school to university levels. However, Thai people use only one official language, Thai, so most Thai students cannot communicate in English fluently and successfully (Wiriyachitra, 2001) like students in ESL contexts. Thai students lack opportunities to communicate in English in their real life situations and in daily activities outside the classroom (Techa-Intrawong, 2003). It is apparent that Thai students cannot fulfill the communicative goals of learning English. Therefore it is teachers' responsibility to think critically about how to improve their teaching techniques and skills to help Thai students become successful in English language learning and be able to communicate in English effectively. Wiriyachitra (2001) points out that Thailand will be left behind in the competitive world of business, education, science and technology if English language teaching is not improved to develop Thai students' English ability.

With the advancement of technology and the digital revolution such as the Internet and computer software, the demand for language learning and teaching English through computer and new media has increased (Wiriyachitra, 2001). Multimedia is increasingly accepted as a means of English language teaching (Fang,

2010).  Fang also states that more English teachers who have attempted multimedia instruction agree that teaching English with multimedia makes English classes more active than the teacher-centered model.  In addition, "compared to the traditional methods in which students are usually passively spoon fed with large amounts of grammar rules and vocabulary, multimedia has shown its superiority" (Fang, 2010, p. 1).  In traditional English classroom, teachers have to spend time writing important language points and information on the board. Conversely, in multimedia classrooms, teachers can press a key on a computer to show significant content in a few seconds as long as he or she can operate the multimedia (Gilakjani, 2012).  Learning through multimedia has also proven that students can be easily exposed to sound, video, visual image and animation of authentic target language.  Students are able to get involved with authentic language, so their use of authentic language can be improved through integration of text, sound, graphics, animations and images presented in the multimedia (Fang, 2010).

Noytim (2006) proposes that effective teachers are able to appropriately implement teaching strategies to create an effective and powerful learning environment.  In this way, multimedia has become an important classroom teaching tool because it can integrate all the sensory learning methods and it can address an individual student's needs by requiring total interaction and response (Moore, 2012). Furthermore, Moore points out that multimedia language programs interest student with visual effects, audio effects and interesting real life situations.  Consequently, students become enthusiastic and wish to participate more in the language learning process.  Many researchers have come to the consensus that learning English through multimedia can be one attempt to solve the problem of unsuccessful English classes

and help develop a new teaching approach to encourage students' interest in English language learning.

In Thailand, the government's educational reform (1996-2007) sought ways to shift from traditional teacher-centered to learner-centered classes (Ministry of Education, 2007). Later, the Board of Education of Thailand, in an attempt to fulfill the educational reform proposed the Basic Education Core Curriculum, B.E. 2008. The main objective of learning foreign languages is to promote Thai learners to be able to communicate with foreigners. In addition to developing the ability to communicate in English effectively, the essentials of the English curriculum concern 4 basic skills: listening, speaking, reading, and writing. To achieve this communicative goal in accordance with the new English curriculum, teachers are required to change their roles and become less dominant in the classroom. Students are expected to be more actively involved in the learning process. To support communication skills, students take active roles rather than merely being passive recipients of information transmitted by a teacher, textbook, or broadcast. In addition, the Ministry of Education has sought to solve some major concerns of teaching English in Thailand, specifically in government schools (Noytim, 2006). Many studies have investigated English language teaching (ELT) practices at Thai government schools resulting in a curriculum initiative which aims to engage students in learning through the use of multimedia.

Multimedia refers to computer-mediated information that is presented concurrently in more than one medium; it consists of text, graphic images, motion graphics, animations, hypermedia, photographs and sounds (i.e., songs, music). Multimedia has the potential to create high quality learning environments, with the

capacity of creating a more realistic learning context (Nusir, Alsmadi, Al-Kabi, and Sharadgag, 2012, p.18). Nusir et. al. further explain that multimedia allows a learner to take control of their own learning process. Interactive multimedia can provide an effective learning environment for different kinds of learners (Margie and Liu, 1996, cited in Nusir et. al., 1996). It also helps teacher take better control of a classroom especially in large class. According to Mayer (2011) "the principle of education is to help people learn. Whether it is for education or training, the goal of a teacher is to plan for "effective, efficient and appealing instruction" (Moore, 2009, p.12). Hence, one of the most influential learning theories in effective instruction is the use of multimedia as a teaching tool that helps make instruction effective and efficient (Plass, Moreno and Bruken,2010).

**Statement of the Problem**

As mentioned earlier, multimedia instruction offers numerous opportunities for students to interact with authentic language in real situations. Teachers can also present information through video or Internet together with sounds, images, and animations according the learning objectives. Multimedia can increase students' interest in English leaning as well as help them improve more quickly than traditional approaches. In researcher's experience as a government English teacher, most classrooms time is dominated by teacher-talk. This results in students having few opportunities to actively engage in learning tasks where the target language is used for communication. As teachers recognize the benefits of using multimedia in English language classrooms, multimedia instruction has become very popular in schools in EFL contexts. As a Thai EFL teacher with many years of experience teaching English at primary school, the researcher was interested in contributing to the improvement of

English teaching practices through multimedia instruction in Tessaban 1 Buriratdarrunwittaya School, where students are systematically allocated into large size classes. Very little research concerning multimedia instruction at the primary level has been found in the literature. To fill this gap, this study has been conducted with sixth grade students at Tessaban 1 Buriratdarrunwittaya School employing multimedia as an instructional teaching tool. Multimedia can enhance English language learning in accordance with the communicative language teaching principles of meaningful interaction (Warschauer, 2001).

It is the researcher's belief that the sixth graders in Tessaban 1 Buriratdarunwittaya School in Buriram province can make more progress and can be more effective in English learning through the use of multimedia as a teaching tool. Thailand is currently preparing for ASEAN. Every government school is required to should give weight to teaching English; therefore, Multimedia-Based Instruction (MBI) could be a great help for students to learn English effectively since they as will be able to learn English with a variety of media. Multimedia Based-Instruction method clearly helps students and improves their skills. As a result, multimedia is a great tool to support and provides more opportunities for students to use English in the classroom. Furthermore, multimedia helps students' built positive attitude towards the use of multimedia as a teaching tool.

In consideration of research studies described above, the main objective of the present research was to investigate the effect of MBI on students' English ability. The researcher also proposed two sub-problems for the main research objective: to examine the effect of MBI on learning four basic skills of English: listening, speaking, vocabulary and grammar and to determine whether there is a significant difference in

overall mean scores as well as four different skills in the effect of MBI between high and low proficient stduents. The study also examined the students' attitudes toward English language learning through Multimedia. The research results can be utilized for teachers looking for techniques to improve their teaching methods and increase their students' English ability.

**Objectives of the Study**

The main objectives of this study are as follows:

1. To examine the effectiveness of Multimedia-based instruction on sixth grade students' English ability.

2. To examine students' attitudes towards learning English through Multimedia –based Instruction.

**Research Questions**

This study addresses two main research questions as follows.

1. Is Multimedia-based instruction effective in enhancing the sixth grade students' English ability?

2. What are the sixth grade students' attitudes toward learning English through MBI?

**Significance of the Study**

This study provides information concerning the development of sixth grade students' English ability based on the communicative approach of teaching through the use of Multimedia-based instruction (MBI). The findings of this study will be beneficial to English teachers at the primary level in particular and also to researchers who are looking for alternative ways to enhance Thai EFL students' English ability.

For teachers, the results will provide a clear understanding of teaching young children to learn English in authentic learning environments using Multimedia including graphics, animations, sounds, movies and PowerPoint presentations. Results of this study will also help English teachers determine if the MBI can develop students' English ability in four important skills: listening, speaking, vocabulary and grammar.

The goal of learning English is to develop students' ability to communicate well. The findings will provide an alternative way to teach primary students skills by engaging them in realistic situations through Multimedia so that they have more opportunity to communicate in real life situations. The findings will help students gain greater English ability achievement. Further, the findings of the study will be useful for further research on English ability skills.

Finally, the research results can serve as guidelines for EFL teachers, particularly primary school teachers, to prepare appropriate lesson plans integrating different types of media to develop students' learning achievement and to enhance their attitudes toward learning English.

**Scope of the Study**

The present study confined itself to the following:

1. This study emphasized the effectiveness of MBI including PowerPoint presentation, WebQuest, short stories, clips, images, and animations in which different types of media were combined to teach sixth grade students based on the communicative approach.

2. The participants of the study were 50 sixth grade students. They were purposively selected from one classroom out of four classes (200 students altogether).

The students were randomly assigned to the experimental group.  The experiment involved one single group, using a pretest/posttest design.

3.  The research was implemented during the second semester of the academic year 2012 for 8 weeks.  Students and teachers met three periods per week; each period lasted 50 minutes. This yielded a total of thirty periods, including the pre-test and pos-test.

**Definition of Terms**

The following terms were specifically defined because they occur frequently and  repeatedly in the research study.

**Multimedia**.

Multimedia was originally defined by Mayer (2001, 2003) as presentation of content that relies on both text and graphics.  Neo and Neo (2001) following Mayer's definition,  define multimedia as "the combination of various digital media types, such as text, images, sound, and video, into an integrated multi-sensory interactive application or presentation to convey a message or information to an audience.  In this study multimedia refers to multimedia materials used for developing students' English ability.  The materials were constructed by the researcher, including content from websites, audio, multiple choices quizzes, short stories, clips, PowerPoint Presentations, graphic images, animations and Multimedia Instruction Software (MIS).

**Multimedia-Based Instruction (MBI).**

Multimedia-Based Instruction refers to English teaching and learning based on the multimedia materials created by the researcher.  In this study,  the teaching approach was based on the traditional 3Ps approach consisting of presentation,

practice and production.  The multimedia included video clips with content selected from websites, PowerPoint presentations, graphic images with audio, and images without audio.

### English ability.

English ability refers to student's ability to communicate in English using MBI divided into listening, speaking, vocabulary and grammar learning, during and after the language development activities deployed in the classroom.

### Attitude.

Attitude refers to a settled way of thinking or feeling, typically reflected in a person's behavior (Shurtleff, 2009). In this study,  attitude refers to students' opinion toward learning English through MBI.

## Summary of the Chapter

This chapter presented the rationale, context and directions of the study.  It has discussed the background of study including student's problems concerning their English ability.   It has also discussed current trends in teaching English.  It concludes with the objectives, research questions, significance and scope of the study plus definitions of key terms.

## Organization of the Research

The rest of this research is organized as follows:

Chapter 2 presents related literature as the foundation of the study. It includes definitions and research on MBI. This chapter also explains the theoretical concept of attitudes toward language learning.

Chapter 3 presents the research methodology including research design, participants and context of the study. It also discusses the research instruments, data collection and analysis.

Chapter 4 first presents the results of the study showing the differences between pre-test and post-test scores of students learning English through MBI after the experiment. Then, the results of student's attitudes towards learning English are presented.

Chapter 5 summarizes the findings of the study, discuses the effectiveness of the MBI, the improvement in students' English ability after the experiment and their attitudes towards the use of MBI. Recommendations and implications for further studies are also presented.
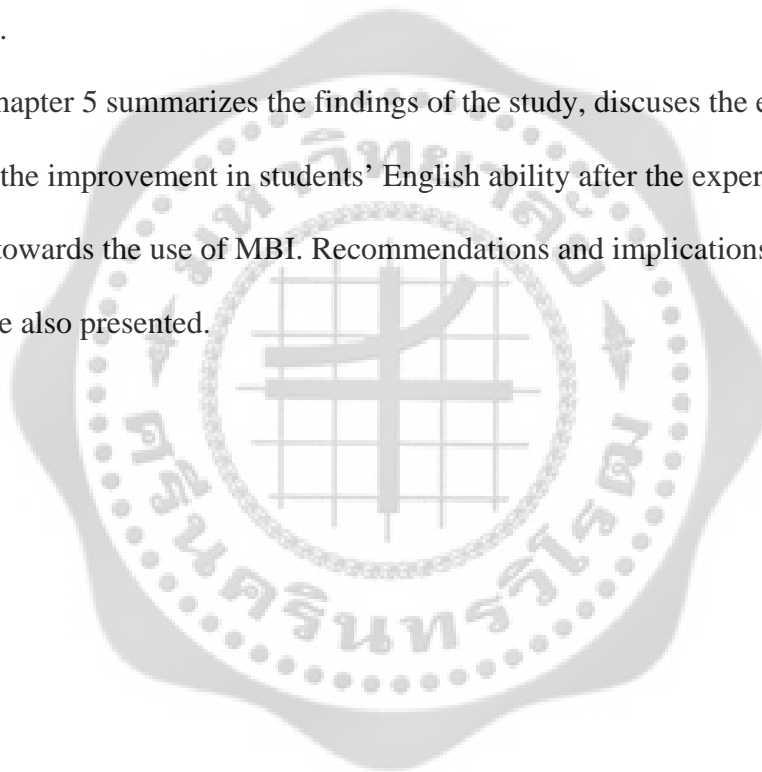
**CHAPTER II**

**REVIEW OF RELATED LITERATURE**

This study aimed to investigate the effectiveness of MBI (MBI) to enhance the sixth grade students' English ability. It also examined students' attitude toward learning English after being taught through MBI. The following related literature has been reviewed as the foundation of the study: 1) MBI; 2) theoretical basis of English MBI; 3) instructional design for MBI; 4) teaching ESL/EFL students English skills through the use of multimedia; 5) related research on MBI; 6) Communicative Language Teaching; 7) attitudes toward language learning; and 8) the traditional PPP approach to communicative language teaching.

**Multimedia-Based Instruction**

**Definition of Multimedia.**

The term "media" originates from a Latin word, and is used to convey messages and information through newspapers, magazines, radio, TV, audio-video programs, computer and so on. Literally, the prefix "multi" is used with "media" as "multimedia" referring to different methods of applying media, particularly computers and things relating to computers that combine programs, a mixture of sounds, pictures, video and written text (Longman Advanced American Dictionary, 2001, p.957).

In fact, multimedia has been a popular term in recent decades in the field of computer technology and it has been defined in multiple ways. The most frequently cited definition comes from Richard Mayer, professor of psychology at the University of California, Santa Barbara. Mayer (2001) defines multimedia as presentation of

content that relies on both text and graphics. Neo, and Neo, 2001 cited in Shank, 2005) extend Mayer's definition and point out that multimedia is "the combination of various digital media types, such as text, images, sound, and video, into an integrated multi-sensory interactive application or presentation to convey a message or information to an audience" (p. 2).  Shank further explains that this concept of multimedia implies that the combination adds up to more than the elements by themselves; this is the key quality of multimedia when it comes to learning.

Generally speaking, multimedia is the integration of text, sound, pictures, and video.  Multimedia applications require other equipment including CD-ROM players, sound equipment, special hardware, and software such as PowerPoint Presentation which can portray sophisticated graphics (Fang, 2010).   According to Tannenbaum (1998, cited in Al-Bureikan, 2008), multimedia is defined as "an interactive computer-mediated presentation that includes at least two of the following elements: text, sound, graphic images, motion graphics and animation" (p.8).  Smith and Woody (2000) define multimedia as "the use of both visual aids and verbal descriptions to illustrate concepts" (p.220).  In addition, Gilakjani (2012) provides a definitions based on previous studies in two ways: 1) multimedia is information in the form of graphics, audio, video or movies and 2) multimedia comprises a computer program that includes text along with at least one of the following audio or sophisticated sound, music, video, photographs, 3-D graphics, animation, or high resolution graphics (pp. 1208-1209).  Fang (2010) discusses multimedia in the context of teaching using the term "integrated media."  According to Fang, multimedia consists of various forms such as text, graphic and animation to browse, query, select, link and use information to meet students' requirement (p. 5).

To conclude, multimedia is an interactive tool used with a variety of media such as text, film, video, animation and graphics to present information through advanced equipment, especially computers and computer programs. This study focuses on multimedia applications in the context of learning and teaching English in EFL classrooms.

### Multimedia-Based Instruction and English Learning.

With increasing demand and development of English around the world, English is used as a second language (ESL) and a foreign language (EFL) in many countries. In addition, the advancement of technology in the globalization age has brought new challenges and duties for English teachers; the traditional approach of teaching English has been dramatically changed (Shyyamlee and Phil, 2012). Different methods of teaching have been implemented to facilitate the teaching process and improve English learners' ability. Multimedia in English language teaching (ELT) has been also created in the English classroom context.

According to Mayer (2003), combining pictures with words contributes to deeper learning. Warcheauer (1996) asserts that multimedia that involve a variety of media such as text, film, video, audio, animations and graphics will be more powerful because of connectivity to hypermedia and the capacity to link the multimedia resources all together including video, graphics and text (Lamper and Ball, 1990, p. 5, cited in Maqbel and Rao, 2013). Maqbel and Rao further state that the use of multimedia in the classroom can play a positive role in improving the quality of teaching and make students pay more attention to the class and increase their motivation, leading to improvement and development of English language skills.

Additionally, integrating multimedia in the English classroom can increase creativity and communication among students. This provides more opportunities for students in accordance with their proficiency level, educational levels and learning style (Hollenbeck and Hollenbeck, 2004, pp.2-3). Brinton (2001) points out that using multimedia can introduce "authenticity" to language classrooms and establish a connection between in-class learning materials and out-of class experience resulting in a more meaningful learning process. For teachers, using multimedia in the instruction of English language creates learner-centeredness and helps students become active learners. This allows them to learn language according to their abilities, needs and preferences (Lu andLiu, 2011, p. 31-78). Gilakjani (2012) also highlights the significant role of using multimedia in EFL classes, particularly in motivating learners' interest in English.

Multimedia provides a large amount of information to students and accelerates the process of information searching. Jochi (2012) suggests that to meet students' needs for developing English language skills, one effective technique is using multimedia in the classroom. This provides opportunity for interacting with various texts that give students a solid background in the tasks and content of the course (p.33). According to Gilakjani, using multimedia in teaching and learning leads to higher learning. It provides a complex -sensory experience while exploring the world (p.57).

In brief, many researchers have agreed that multimedia has played a positively crucial role in improving students' English language learning. A proper combination of multimedia in the classroom such as films, music, text, animations and graphics will help students develop greater confidence in their ability of English as well as

increase their motivation to learn. Using multimedia also provides students chances to learn meaningfully; it also encourages their imaginations and stimulates their interests.

Therefore, it is important for modern language teachers to become aware of multimedia and its application to teaching methods to make the classroom environment as challenging and interactive as possible. However, EFL teachers should profoundly understand the theories and principles underlying multimedia and its relevance to language learning and instruction. They should consider how to effectively integrate multimedia in their teaching. That is, multimedia instructional design should engage students' motivation and interest in learning and create a suitable classroom environment.

The next section disseminates the theoretical basis of multimedia English learning and teaching, the relevance between multimedia and learning, roles of teacher and students in multimedia-based classrooms, the advantages of MBI for developing English learners' ability in EFL context and research related to multimedia.

Instruction that contributes to the present study.

**Theoretical Basis of Multimedia English Instruction**

Cognitive theory and con structivisim theory are two theoretical frameworks of multimedia English teaching and learning.

**Constructivism theory.**

According to constructivism, which was originated by Jean Piaget (1980, cited in Fang, 2010), learning is conceptualized into two aspects: cognitive constructivism and social constructivism. According to cognitive constructivism knowledge refers to

reconstructing and reorganizing experience.  A student is an active learner who constructs knowledge through personal experience or action.  Therefore, while studying, with the help of a teacher and other students, the learner obtains knowledge by construction of meaning.

Fang (2010), following on the concepts of Fosnot (1996) explains that in social constructivism, learning is the process of interacting and collaborating among students and teachers.  The learning process based on constructivism focuses on learner-centeredness whereby the teacher acts as a facilitator.

Thus, the teacher's role is to offer access through which students can experience different ways of life (Fang, 2010, p.8).  This notion is consistent with Nunan's view (2001) that a teacher's job is to create a learning environment in which students can reconstruct their knowledge by relating their existing input with new knowledge.  To elaborate, the role of the teacher is therefore to help and guide students to construct knowledge actively while other students support and collaborate with the learning process.

Liuzhi (2012) states that help establish a true student-centeredness and put English teaching and learning into a more enjoyable environment under the guide of constructivism theory (p.2). Similarly, Fang (2010) asserts that constructivism encourages students to learn through personal experiences rather than being fed by teachers. Zhou (2004, cited in Fang, 2010, p. 9) points out that knowledge is not obtained only by teaching but through help from other and suitable learning materials from teachers should effective methods into multimedia teaching practice.

**Cognitive theory.**

Cognitive psychology focuses on learners' learning process and characteristics. According to cognitive psychology, cognition or mental activity, concerns the acquisition, storage, and use of knowledge learning is not just acquiring knowledge in a passive way but requires initiative depending on a learner's attitudes, demands, interests, habits, and prior knowledge (Fang, 2010). Learners receive information through a variety of senses, such as, vision, hearing, touch, smell and taste, among which visual and auditory inputs are the most important (Liuzhi, 2012). An individual learner is regarded as being active and constructive, so therefore multimedia language teaching and learning are effective.

Previous research ha shown that the five senses play a significant role in getting information through experience; approximately 83 % of human learning occurs visually, and the remaining 17% comes through the other senses-11% through hearing; 3.5% through smel; 1% through taste, and 1.5 % through touch. Studies suggest that three days after an events; people retain 10% of what they heard from an oral presentation, 35% from a visual presentation, and 65% from a visual and oral presentation (Department of Labor, OSHA Office of Training and Education, May, 1996 in Liuzhi, 2012, p.2). The data clearly show that if a teacher uses audio and visual materials simultaneously to teach students in language class, the teaching will be more effective. Integrating multimedia in language teaching offer multiple ways to convey information and knowledge to students.

**The cognitive theory of multimedia learning**.

The rationale for using multimedia has been proposed by several studies, but the most distinctive one is by Mayer (2001, 2003) and Mayer and Moreno, (2002). Mayer's multimedia principle, states that "people learn more deeply from words and picture than from words alone" (p.47). Mayer further points out that multimedia learning promotes student understanding by mixing words. The technique depends on designing instructional message in ways that are consistent with how human learns. Mayer's cognitive theory of multimedia learning (2001, 2003, and 2009) is based on three assumptions: there are two separate channels (auditory and visual) for processing information sometimes called dual coding theory); there is limited channel capacity; and learning is an active process of filtering, selecting, organizing, and integrating information based on the prior knowledge. The following section details three principle of multimedia learning conceptualized by Mayer (2001, 2003).

The dual channel assumption proposes that the human information processing system contains two working memory channels. One channel is for processing auditory/verbal information and the second channel is for visual/pictorial information. For example, when information is presented to the eyes (such as illustrations, animations, video, or on the screen text), humans begin by processing that information in the visual/pictorial channel and spoken words (i.e. narrations). In the verbal channel (sounds), humans begin by processing that information in the auditory channel.

The limited capacity assumption is that the capacity of a processing channel is extremely limited. For instance, learners may be able to mentally activate only one sentence of narration and about 10 seconds of animation at a time. The active learning assumption is that learning occurs when learners engage in cognitive

processing including paying attention to relevant incoming words and pictures;

mentally organizing them into coherent verbal and pictorial representations; and

mentally integrating verbal and pictorial representations with each other and with

prior knowledge.  This process of active learning leads to a meaningful learning

outcome that can support problem-solving.  The framework for a cognitive theory of

multimedia learning is illustrated in Figure 1.
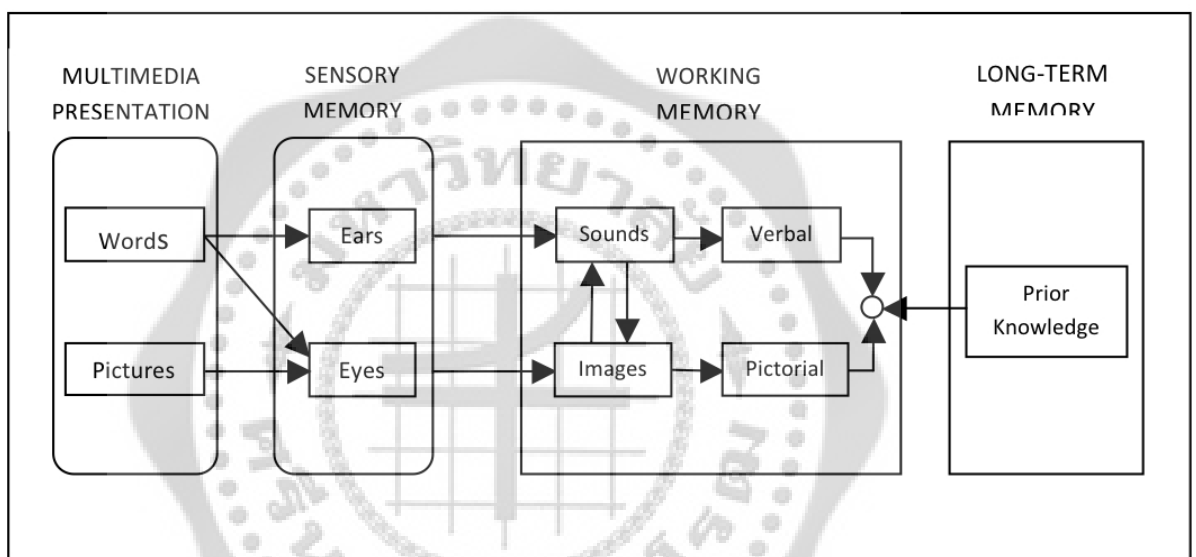


*Figure 1.* : Cognitive Theory of Multimedia Learning

*Source:*  Mayer (2003, p.129*)*

     As illustrated in Figure 1, the arrows represent the steps of processing

involved in the cognitive theory of multimedia learning: (a) selecting relevant words,

(b) selecting relevant images, (c) organizing selected words, (d) organizing selected

images, and (e) integrating verbal and visual representation as well as prior

knowledge.

**Processes in the cognitive theory of multimedia learning**.

According to Mayer, for meaningful learning to occur in a multimedia environment, the learner must engage in three main cognitive processes: selecting, organizing and integrating. However, for Mayer (2001) the three processes are classified based on three cognitive processes into five cognitive processes: (1) selecting relevant words and processing in verbal working memory, (2) selecting relevant images for processing in visual working memory, (3) organizing selected words into a verbal model, (4) organizing selected images into a pictorial model, and (5) integrating the verbal and pictorial representations with each other and with prior knowledge. First of all, the selecting process is described as selecting relevant words and relevant images. The organizing process concerns organizing words and selected images; the integrating process involves integrating word-based and image-based representations.

In the selecting process, in a compute-based environment, the external representations may include spoken words. The learner must select relevant aspects of the sounds and images for further processing. In addition, the learner may convert some of the spoken words into verbal representations for further processing in the verbal channel while some of the animation can be converted into visual representations for further processing in the visual channel. In a book-based environment, external representations may include printed words and illustrations, both of which initially enter through the eyes. The learner must select relevant aspects of the incoming images for further processing.

The organizing process involves organizing words and selected images. The first step of organizing is referred to as, the verbal model; in this step the learner may

convert some of the printed words into verbal representations to be processed in the verbal channel and may even convert some of the illustrations into verbal representations to be processes in the verbal channel. The second step of the process, organizing selected images is to build a coherent representation of the verbal material (i.e. form a verbal model) and a coherent mental representation of the visual material (i.e. form a pictorial model).

A third process which is the most important step in multimedia learning is called integrating. This process involves making connections between word-based and image-based representations. This step concerns a change from having two separate representations (a picture model and a verbal model) to having an integrated representation in which corresponding elements and relations from one model are mapped onto the other. The input for this step is the pictorial model and the verbal model that the learner has thus far constructed. The output is an integrated model, which is based on connecting two representations. Additionally, the integrated model consists of connections with prior knowledge. Table 1 summarizes the five cognitive processes in multimedia learning.

Table1

*Five Cognitive Processes in the Cognitive Theory of Multimedia Learning*

| Process | Description |
| --- | --- |
| Selecting words | Learners pay attention to relevant words in a multimedia message to create sounds in working memory. |
| Selecting images | Learners pay attention to relevant pictures in a multimedia message to create images in working memory. |
| Organizing words | Learners build connections among selected words to create a coherent verbal model in working memory. |
| Organizing images | Learners build connections among selected images to |

Table 1 Continued

| | create a coherent pictorial model in working memory. |
| --- | --- |
| Integrating | Learners build connections between verbal and pictorial models and with prior knowledge. |

Source: Mayer (2001, p. 41)

Table 1 shows that the five processes in multimedia learning are likely to occur many times throughout the multimedia presentation. The selecting, organizing, and integrating processes generally do not occur in a rigid linear order, but rather in an iterative fashion. Once a learning outcome has been constructed, it is stored in long-term for future use. When active learning occurs, the outcome is indexed in long-term memory in a way that allows the learner to use it to solve problems.

In summary, based on the cognitive theory of multimedia learning, meaningful learning depends on three of these processes occurring for visual and verbal representations. Instructional methods that enable and promote these processes are more likely to result in meaningful learning. According to this view, learners can engage in active learning (such as the processes of selecting, organizing and integrating) even when the presentation media do not allow hands-on activity (such as a printed text and illustrations, or animation and narration). The challenge of multimedia learning instructional design is to prime and guide active cognitive processing in learners so that learners construct meaning through internal representation. (p. 129-130).

**The cognitive design of multimedia instruction.**

Since the 1990s, Mayer and his colleagues have conducted research investigating the nature and effects of multimedia presentations on human learning. Mayer's (, 1999, 2001; 2009) theory on multimedia learning involves seven principles

that can be applied for the design of multimedia messages contributing to student

learning.  Figure 2 shows an adaptation of Mayer's principles for the design of

multimedia messages (1999, 2001, 2005)

1. *Multimedia Principle*: Students learn better from words and pictures than from words alone.
2. *Spatial Contiguity Principle*: Students learn better when corresponding words and pictures are presented near rather than far from each other on the page or screen.
3. *Temporal Contiguity Principle*: Students learn better when corresponding words and pictures are presented simultaneously rather than successively.
4. *Coherence Principle:* Students learn better when extraneous words, pictures, and sounds are excluded rather than included.
5. *Modality Principle*: Students learn better from animation and narration than from animation and on-screen text.
6. *Redundancy Principle*: Students learn better from animation and narration than from animation, narration and on-screen text.
7. *Individual Differences Principle*: Design effects are stronger for low-knowledge learners than for high-knowledge learners and for high-spatial learners rather than for low-spatial learners.

*Figure 2.*  Seven Research-based Principles for the Design of Multimedia Messages

*(Adapted from Mayer 2001)*

**Advantages of multimedia in English learning and teaching.**

Many studies have discussed the benefits of multimedia for learning a foreign

language.  Among these are studies by Mayer (2001, 2003); Fang (2006); Fang and

Yang (2008). These studies have demonstrated the positive results of the use of

multimedia in English learning.

Shank explains that well-designed multimedia helps learners build more

accurate and effective mental models than reading text alone. Shephard synthesized

several studies showing the potential benefits of well-designed multimedia, including:

1) Alternative perspectives; 2) Active participation; 3) Accelerated learning; 4)

Retention and application of knowledge; 5) Problem-solving and decision-making

skills; 6) System understanding; 7) Higher-order thinking; 8) Autonomy and focus; 9)

Control over pacing and sequencing of information; and

10) Access to support information. Mayer (2001, 2003) also points out the potential

benefits of multimedia. Given that humans possess visual and auditory information -

processing capabilities, multimedia, he explains, takes advantage of both capabilities

at once. These two channels process information quite differently, so the combination

of multiple media is useful in drawing on the capabilities of both systems. Meaningful

connections between text and graphics potentially allow for deeper understanding and

better mental models than from either source alone.

Fang (2006) describes the advantages of multimedia and network-based

language teaching in four aspects: providing authentic language environment,

promoting students autonomous learning, providing flexibility, and realizing

individual teaching. Fang further disseminates the advantages of multimedia in

learning English as follows:

Firstly, multimedia provides an authentic language environment. Fang

explains that through multimedia and network technology, teachers can offer students

not only rich sources of authentic learning materials, but also an attractive and

friendly interface, vivid pictures and pleasant sounds. To a large extent, these features

overcome the lack of an authentic language environment and arouses students'

interest in learning English.

Secondly, multimedia provides students autonomous learning. Sometimes

teachers feel powerless and frustrated when facing students who do not want to learn.

It seems that the more they try to teach in class, the less the students are interested in

English.  Some students have no initiative for leaning English.  They might learn English for passing exams and getting certificates, so the best way to teach is perhaps to make them responsible for their own learning.  Multimedia makes it possible for students to play the roles of designers of their own learning, organize their own group work, become independent thinkers in completing assignments and become self-assessors of their own performance.  They are no longer dependent on their teacher and become controllers of their own learning while the teacher only "undertakes the role of tutor, supervisor and co-learner (Smith, 1999 as cited in Fang, 2006). Therefore, students' autonomous learning is increasing being promoted.

Thirdly, multimedia provides learning flexibility.  Students benefit from multimedia because they come from different backgrounds and their English level varies.  Therefore, it is difficult for traditional classroom teaching to meet the needs of individual students.  Multimedia language teaching provides students with learning flexibility as far as learning materials, learning time, learning place and learning progress are concerned.  As teaching materials are available whenever and wherever they want, students can start or repeat a lesson at their own language level.

Fourthly, multimedia helps students realize individual teaching.  Students partake in one-to-one learning situation.  Students' individualized teaching has come true.  Students, particularly whose with low English levels can have all the time they need to think out their ideas, ask questions and give answers in private without the fear of ridicule from other students; further, immediate feedback from teachers is also available (pp. 111-112).

The advantages concerning the use of multimedia in English language teaching are also mentioned by Yang and Fang (2008). That multimedia teaching

emphasizes the role of students, and enhances the importance of "interaction" between teachers and students.  The major characteristic of multimedia instruction is to help students to enhance their English ability, plus develop their communicative ability also.  During this process, the teacher plays a role as a facilitator.  Using multimedia in context creation creates a good principle between teachers and students, while at the same time proving a language environment.

In addition, multimedia teaching creates a context for language teaching.  This method makes a class lively and more interesting.  Multimedia has its own features, during the study teaching used sounds and pictures together, which stimulate the students to learn.  When using multimedia software, teachers can use pictures and images to enrich the content of classes.  Students in the class can use multimedia to understand the class in a clear way.  Through the entire interactive process, it appears that using multimedia in English language teaching is effective in nurturing students' interest in learning English, as well as enhancing teacher's interest in English. (Yang and Fang, 2008).

To conclude, using MBI in English helps students to learn by expereince, offers students more motivation, improves their English ability, increases authentic materials for study, encourages greater interaction between teachers and students and students and peers, and focuses on individual needs.  Students can learn cooperatively and collaboratively and they can become autonomous learners who can make progress in learning at their own pace.

**Instructional Design for Multimedia-Based Instruction**.

Integration of different media multiplies the impact of a message. The focus is on instruction and learning. According to research by Mayer and McCarthy (1995) and Walton (1993). Multimedia has gained acceptance with many benefits derived from its use. Learning gains are 56% greater, consistency of learning is 50-60% better and content retention is 25-50% higher. Instructional multimedia focuses on what the learner is expected to do upon the complexion of the instruction. On the one hand, research on multimedia has established learning gains of significant order over the conventional instructional strategies, and on the other, has shown how instructional design is a tested, well-researched mechanism of enhancing human learning. By logical extrapolation, we can say that instructional multimedia can be more effective, if it is backed up by scientific instructional design.

Najjar, (1998) studied many previous studies on the design and applications of multimemdia in the classroom and suggested that the practices could be effective if the instructor or designer of multimedia considers the following principles: 1) selects media with the best characteristics for communicating the particular type of information; 2) use multimedia specifically to support, relate to, or extend learning, not just as embellishment; 3) present media elements together so that they support each other; 4) Use multimedia that effectively employs verbal and visual processing channels to help learners integrate content with prior knowledge (this is called elaborative processing); 5) allow learners to control, manipulate, and explore positively impacts learning and elaborative processing; 6) use familiar metaphors and analogies, feedback, and personalization to augment motivation; 7) encourage learners

to actively process and integrate rather than receive passively; and 8) match assessments media to presentation of information media.

The characteristics of the authentic materials in the multimedia instruction can significantly affect learning. Learning material characteristics include the medium, physical structure, psychological structure, conceptual difficulty, and sequence (Bransford, 1978 as cited in Najjar 1998). Najjar (1998) proposed that mmultimedia designed for children should also feature color, textured, patterned, or gradient backgrounds. Such backgrounds can easily decrease the legibility of letterforms—particularly when there is not enough contrast between text and its background. Thus, it is important to test the usability of an application with children of different ages within the target age range and reading levels. If they experience any difficulties or spend more time doing the tasks or understanding the text, or images, the teacher needs to change the font style or color or simplify the sentences.



*Figure 3.* The example of the Sesame Street Web Site

Yampinij, Kongkachuay and Mejaleurn (2012) created the multimedia game-based instruction aiming at developing students' vocabulary and English idioms. The results revealed that the multimedia game-based was effective in improving students' achievement. They had higher scores on the posttest learning achievement with the statistical significance at the .05 level. The students' showed their satisfaction toward the computer multimedia game-based instruction ion English idioms. The students showed the highest satisfaction towards the game presentation. The study suggested that computer multimedia game-based instruction provides fun and learning atmosphere to encourage students to learn. The study also indicated that the students satisfaction towards computer game was at high level because still images and animation contributes to the lesson and increased the satisfaction and the curiosity in the lesson (Yamipinij et. al., 2012, p. 257). Some content of Computer Multimedia Game-Based Instruction is illustrated in Figure 4, 5, 6, and 7 below ((Yamipinij et. al., 2012, pp.256-257).



*Figure 4*. Animation shows the instructions of how to use the lesson

*Figure 5*. The menu to access the contents of the lesson



*Figure 6*. The illustration of the game called "Fill in the Blank" to practice English

idioms



*Figure 7*. The illustration showing the game called "Fill in the Blank" to practice

English idioms.

**Teaching ESL/EFL Students English Skills through the Use of Multimedia**

With the advance in the development of Information and Communication (ICT) and with the availability of computer and Internet, the learning materials have been distributed in many formats including audio, video, and animations, graphic images or ebooks. Compared to the traditional methods of presenting information, the classroom environment has greatly changed for many years. Multimedia learning has played an important role in English learning and teaching both in ESL and EFL contexts. ESL/EFL students learning English, a new language for them need as much language support as possible. Researchers and teachers who taught those ESL/EFL students know that any language support is helpful for language acquisition since English language learners need a variety of language experiences (Ybarra and Green, 2003). They need to hear language, write language, speak language and read language. That is to say, English language learners need to learn English skills including listening, speaking, reading and writing. In addition, to convey meaning of the target language, they need to know vocabulary and the grammatical structure of the language (Cera, Castro, and Oviedo, 2010).

For teachers of English, teaching a foreign language for a communicative purpose is not only presenting grammatical structures, but they also need to provide students with vocabulary knowledge and integrate four basic skills: listening, speaking, reading and writing. Therefore, one of the important aspects when teaching English is to broaden students' vocabulary and grammar knowledge and help them develop important skills through valuable experience. One of the effective teaching methods is to support their language experience through multimedia learning. This study investigated the effectiveness of using multimedia on EFL students' English

ability.  The following section discusses the concepts relevant to the use of

multimedia in teaching listening, speaking, vocabulary and grammar.

**Teaching vocabulary**.

Vocabulary is an inseparable part of any language learning process.  Students

learning English as a foreign language cannot learn a language without vocabulary

(Akbari, 2008). Therefore, the importance of vocabulary language learning is also

emphasized by many researchers.  According to Thornbury, (2000) "language first

merges as words, both historically, and in terms of the way each of us learned our first

language, and any subsequent language" (p.1).  Cera et. al. (2010) assert that the more

words the learners know, the more fluent they become when using a foreign language.

The researchers, followed Folse's concept (2008, p.21) further explain that basic level

of vocabulary will allow learners to communicate some ideas to certain degree, better

communication can be accomplished when learners have acquired more vocabulary

(p.61). According to Nation (1994), a rich vocabulary makes the skills of listening,

speaking, reading and writing easier to perform.  In such a case, both teachers and

learners know that the lack of vocabulary knowledge is a limitation in language use

and development.

Rivers (1981) states that "vocabulary cannot be taught; it can be presented,

explored, included in all kinds of activities, but it must be learned by individual"

(p.110). She further describes, "As language teachers, we must arouse interest in

words and a certain excitement in personal development in this area" (p.110).

Moreover, according to Raimes (1983), picture can help the teachers and students in

teaching and learning vocabulary and other components of language.  In fact, pictures

can help students to imagine the real objects.  Akbari (2008) confirms that the concept

of using pictures in the shared experience of many people because of their matching ability which enables them to match the words with pictures. It should be mentioned that pictures as mental representation of mind can better affect learning. In addition, pictures are used in the classrooms as teaching tools and can be found to give practice in most skills and components and most stages of teaching. Pictures can motivate students and currently motivation is considered an important factor of learning (p.55).

In EFL learning, the role of vocabulary knowledge has been increasingly detectable (Iheanachu, 1999 cited in Tamjid and Moghadam, 2012). Tamjid and Moghadam (2012) also state that numerous materials for foreign language learning in addition to the traditional grammar books and dictionaries such as workbooks, charts, posters, mewspaper, pictures cards and so on are used. However, computers, multimedia and the Internet can be also used as a supplementary tool and they are becoming very popular in the EFL classrooms. The experimental study conducted by Tamjid and Moghadam revealed that vocabulary taught was mastered by students who learned vocabulary through software. The research result was in line with Nezhad, Atarodi, and Khalili's study (2013) which investigated the effect of multimedia learning on EFL deaf students who were the first grade of junior high school. The result of the study showed that the use of multimedia increased the ability to learn and understand vocabulary learning. Teaching vocabulary through multimedia can substantially impact students learning.

In a study conducted with young Japanese learners by Chujo and Nishigaki (2004), e-learning software was used to develop students' vocabulary knowledge and to fill the gap in missing daily vocabulary in textbooks. In the study a list of 600 everyday words most relevant to students' daily lives was created as e-learning

software.  The steps of teaching consisted of three stages: presentation, practice and performance.  Stage 1 aims to present the target words; Stage 2 intends to construct and consolidate sound chain between pronunciation and its meaning; Stage 3 aims to confirm if students comprehend the target words and can use them.

In summary, teaching English vocabulary is an important area worthy of effort and investigation. Vocabulary is needed for expressing meaning and in using the receptive and the productive skills.

**Teaching Listening and Speaking.**

Teaching listening and speaking can be defined in a various ways.  For the aim of this study defined that young children's listening as a form of communication that involves hearing, interpreting, and constructing meanings; an active process that is not limited to the spoken word; and an essential way of participating in daily routines as well as wider decision-making processes. Even though auditory abilities continue to develop until about fifteen years of age Chermak and Musiek, (1997) Aslin, Pisoni and Jusczyk, 1983; De l'Etoile (2006 sited in Jalongo, 2010) stated that the ability to differentiate one sound from another and focus on those that have meaning for them even  before words and used. Jones (2007) added that listening is the language skill children use the most; it is connecting between the real world and the classroom. Furthermore, Nunan (2003) points out that the principles for teaching speaking as follows: 1) understand the differences between second language and foreign language learning contexts; 2) provide students practice in both fluency and accuracy; 3) use group and pair work to motivate students to talk, 4) use speaking tasks involving negotiation for meaning; 5) use communicative activities involving

both transactional and interactional speaking. Moreover, Valmont (2003) added that technology afford our students more opportunities to listen and to speak to others.

In summary, teaching listening and speaking are the most basic and important communication skills that teacher have to concern about. Students will know what the other person is saying, and can communicate or response with other also involves sharing information using, body language fluently and accurately. These are the skills that will make them better communicators.

**Teaching Grammar.**

Grammar plays an important role in understanding spoken English and improving your listening (Takahashi, 2005). According to Jim Scrivener, "grammar is not just a dry list of facts and rules. It is in our heads and it living resource that gives us the ability to communicate our ideas and feelings and to understand what other people say or write to us (Scrivener, 2003 as cited in Povjakalova, 2012) and Povjakalova (2012) also added that grammar is the essential language skill and it is important for learning foreign language.

Teaching grammar have been found useful, Hall (1998) believes that the finer points of FL grammar are difficult to pick up implicitly. They may be accessible to exploratory learning with the help of a large corpus, but usually the simplest way is to teach these structures explicitly

**Related Research on Multimedia-Based Instruction**

Numerous studies have been carried out in the area of MBI in English language environment in an attempt to find an effective technique to improve students' English ability. Some research focused on the impacts of multimedia on the learning process of language production, others sought to find out the effectiveness of

multimedia on specific skills of English such as listening or, speaking. Furthermore, the studies on multimedia were conducted to compare the effect of specific type of media presentation such as audio, video, animation or graphics and learner attitude toward English learning through multimedia. The findings can be the foundations for further research. This study was grounded by the following review of related research, the investigation of the use MBI in English language classroom both in ESL and EFL contexts.

**Studies on multimedia-based instruction in English learning in foreign countries.**

Robinson's study (1996) implemented MBI by teaching simple and complex structures of English, under several conditions. All subjects were presented the same target sentences on the computer, but, for example, the rule-instructed subjects were asked metalinguistic questions regarding the sentences, the rule-search subjects were asked if they identified any rule in the given sentences, and the implicit subjects were instructed to memorize the target sentences. The rule-instructed subjects performed significantly better than the rule-search subjects and the implicit subjects for the simple structure on the grammaticality judgment test. The results revealed that the rule-instructed subjects outperformed the other groups for the complex structure although the difference was statistically significant only between the rule-instructed subjects and the rule-search subjects.

In a study, Liu and Huo (2011) conducted the study on the use CALL in language classroom and the role of the computer and the teacher in language learning, the resource intensive nature of CALL initiatives, teacher resistance to CALL and the need for training in CALL delivery, the potential of the computer in L2 skills

development and in the acquisition of cultural knowledge. The result indicated that CALL increased the L2 students' language ability.

Al-Hammadi (2011) conducted the quasi-experimental study to investigate the effectiveness of multimedia software for developing listening skills among EFL Saudi secondary school students. The participants were 60 students randomly selected from all the third year secondary school students and randomly allocated into the control group and experimental group (30 students in each group). The design used for the study was the Pretest Posttest Control Group Design. Three research instruments for collecting data consisted of a) a list of listening skills needed for students collected from the prior studies; b) the computerized pretest and posttest for listening skills and c) multimedia software. The pretests were administered to students in the first week. The experimental group was trained on the use of the proposed software for four weeks; whereas, the control group did not receive any treatment. The reseults revealed that the software was effective for developing students' specific listening skills. In addition, the t-test results showed significant differences between the mean scores of the pretest and posttest in all listening skills including listening for the gist, listening for specific information, listening to guess the meaning of unfamiliar words from contexts and listening to use the context to make predictions.

Bret (1997) investigated the effectiveness of computer-based multimedia for developing listening comprehension of undergraduate students learning for business and language degree in EFL context. The study specifically compared learner success rates on comprehension and language recall tasks while integrating three different media including audio, video and multimedia in the classes. The materials used included six different video-base listening texts, worksheets, listening tasks, cloze

tests and questionnaire. The findings showed higher success rates on the multimedia than audio and video; performance on tasks revealed more effective comprehension and recall while using multimedia than either audio or video plus pen and paper worksheet. The data obtained from the questionnaire indicated possible reasons for the greater success of the multimedia. The study suggested that the multimedia-delivered listening comprehension tasks may be more efficient and that of the traditional tools of the audio cassettes player, and language laboratory, and video cassettes with paper worksheet.

In a study conducted with the grade students in the pre-kindergarten level, the Silverman and Hines (2009) investigated the use of multimedia to enhance read-aloud and English vocabulary instruction for English language learners and English speaking students. The study also aimed to compare traditional and multimedia-enhanced read-aloud vocabulary instruction and examined whether the effects differed for both groups of students. This study had two interventions: one with multimedia learning, the other learning without multimedia. In both interventions, the teachers used a scripted lesson on habitat using both narrative and informational texts. The intervention took place over four three week cycles, one cycle for each habitat studied. Students were introduced to the books in the same order and eight words per book were chosen as the target words. For the multimedia condition included four videos, one for each habitat. Students watched video clips after reading to facilitate their review of all of the words taught. The results revealed that while there was no effect of the use of multimedia for non English language learners, there was an effect for English speaking students, both on a researcher-designed measure and on a genera; measure of vocabulary knowledge used in the study. Moreover, the results

indicate that the gap between non English language learners and English speaking students in knowledge of words targeted during the intervention was closed, and the gap in general vocabulary knowledge was narrowed.

One study was conducted as a large scale study in EFL context by Yun, Miller, Jaeyeob Jung, and Ko (2008).  This study intended to investigate the effectiveness of response modes by item and feedback type in a web-based language learning program.  The subjects were one hundred and twenty two tenth graders in South Korea, with an average age of 16 years, from 4 separate classes randomly assigned into two groups for different varieties of item type (multiple choice and constructed response) and two forms of feedback (explicit and implicit). The results of the study suggest that the constructed response mode has a greater effect than multiple-choice mode on the recall and the transfer of the students' learning.  In addition, the explicit response mode has a greater effect than the implicit response mode on the recall and the transfer of the students' learning.  The result also showed that there was interactional effect between the item response mode and the feedback response mode in web-based language learning.

Acha's study (2009) examined the effect of three different presentation modes on children vocabulary learning with self-guided multimedia programs.  The participants were 135 Spanish children in grade 3, average age was 8 years).  The stduents were learning new vocabulary in a second language with a self-paced multimedia program constructed by the researcher.  The students were pretest at the beginning the study and randomly assigned into three groups: word-only, picture-only and word and picture.  During learning new vocabulary, the stduents were presented an interactive multimedia short story; the story consisted of 101 English words

presented in one page and the time for vocabulary learning was two weeks. The results revealed that the recall rate of children in the word-only group (i.e. the group exposed to one stimulus through one information-processing channel: visual) was better than the recall rate of children in the word and picture and the picture-only groups. These results supported previous research about cognitive load in e-learning environments and showed that children's learning processes are hindered by limited working memory.

Another study, in an EFL context was carried out by Shao (2012) with freshmen students in China. The study first aimed to explore the use of multimedia software to vocabulary acquisition. It also examined the effectiveness of multimedia application among Chinese EFL learners and the students' attitudes toward multimedia application. In the experimental study, the 80 participants were divided into two groups: one class of 40 students, experimental group received multimedia application-based instruction. The other class of 40 students, a comparison group received the traditional way of word acquisition instruction. The experimental study of multimedia application was implemented for about one semester. Results revealed that students had highly positive attitudes to the application of multimedia software. In addition, the result showed the effectiveness of multimedia software to the development of vocabulary acquisition. However, the results showed that the integration of multimedia application into the curriculum was not successfully confirmed. The researcher suggested that promoting MBI was proved to be a great obstacle for all the classrooms are equipped with the multimedia tools.

**Studies on multimedia-based instruction and English learning in**

**Thailand.**

Junjula, Leksirilak and Kaewpradidt (2010) developed Multimedia Computer

on English Vocabulary for the sixth grade Thai students and examined the efficacy of

the material.  In addition, the researchers attempted to compare a learning

achievement before and after using Multimedia Computer on English Vocabulary as

well as students' satisfaction with learning through the developed Multimedia

Computer on English Vocabulary.  The result showed the efficacy of the materials at

82.88/83.22 which was higher than the criteria. The result also revealed that the sixth

grade students' achievement after learning with Multimedia Computer on English

Vocabulary was significantly higher than before and their level of satisfaction with

learning through the developed Multimedia Computer on English Vocabulary was at

the highest level.

In their study, conducted with Thai school children, Yampinij, Kongkachuay

and Meejaleurn (2012) developed a computer multimedia game-based instruction on

English idioms for the 2$^{nd}$ educational range aiming at determining the quality of the

computer multimedia game-based instruction on English idioms for the 2$^{nd}$

educational range.  This study also sought to find out the learning achievement of

students who learned from computer multimedia game-based instruction as well as

their satisfaction towards the computer multimedia game-based instruction.  The

research tools used for data collection were the computer multimedia game-based

instruction, quality assessment form, learning achievement test, and the questionnaire

on satisfaction.  The sample group consisted of 30 stduents in Bannakhao School in

the academic year 2009.  The results of the study revealed that 1) the quality of the

computer multimedia game-based instruction on English idioms was good for the contents with the mean of 4.50 and the quality in terms of media technology was 4.75 on average or at the very good level; 2) The statistically significant difference in the mean scores of the pretest and posttest of students learning achievement of the students learning from the computer multimedia game-based instruction on English idioms was found at the .05 level; and 3) The students' satisfaction towards the computer multimedia game-based instruction on English idioms was 4.67 on average or at the very high level. The study suggested that the computer multimedia game-based instruction was effective in helping students' to achieve their objective of learning English idioms.

**Rubric of Speaking Ability.**

Speaking is probably the most difficult skill to measure. It involves a combination of skills that may have no correlation with each other, and which do not lend themselves well to objective testing. According to Thornbury (2008) as cited in Phisutthangkoon, 2012) there are two main types of scoring for assessing speaking ability; holistic scoring and analytic scoring. Holistic scoring is not aspect of writing but to look at a response as a whole. The holistic scoring requires evaluating the test by considering the major elements of content, organization, voice, word choice and sentence structure. The advantage of this type of scoring is that it is quick and adequate enough for informal testing of progress (Phisutthangkoon, 2012). Meanwhile, analytic scoring is done by giving a separate score for different aspects of the task. (Phisutthangkoon, 2012). Analytic scoring may be slower than holistic but provides more feedback.

In this study, the researcher used holistic scoring by using rubric for evaluating students' speaking ability including five categories: fluency, pronunciation, vocabulary, grammar, and communication strategy adapted from Phisutthangkoon (2012), Phuphapet (2004) (See Appendix A)

**Attitude toward Language Learning**

Multimedia-based instruction for cognitive and psychomotor learning across higher education appears to be the most effective as a complement to classroom instruction rather than a substitute for classroom instruction (Lowe, 2002). Previous investigations of the sixth grade students' attitudes towards MBI revealed that it enhanced learning, allowed for greater flexibility, and provided a platform for independent self-management of learning (Kenny, 2002). While students appreciate the increase in control MBI provides them over their learning, many students may find motivation to be a challenge in the absence of instructors or other students. In addition, learners may have preexisting attitudes about the value of MBI on their past learning experiences and knowledge of their personal learning preferences. In fact, students' attitudes toward the MBI format are significant predictors of course performance (Schrum and Hong, 2002). For example, students who believe they have difficulty learning from reading will place high value on image-rich multimedia, while students who state they learn best through interpersonal interaction will place low value on the time they spend using MBI (Wang, 2002).

The degree of control students are able to exercise in a course activity depends on the structure and flexibility designed into the activity by the teacher. Teacher satisfaction derives from congruence between the teacher's beliefs about learning and the methods the researcher uses to facilitate learning (Heimlich, and Norland , 2002).

Teacher motivation to use MBI is based on the premise that the sixth grade students have diverse needs and a preference for multimodal learning tools (Brecker, Joun and Ngo, 2009) and that multimedia may better serve multiple learning styles (Schrum and Hong, 2002). Students/subjects in the present study were provided video clips with concurrent text of psychomotor techniques (CD-ROM) to review and practice prior to the classroom meeting. This methodology is similar to learning in an online environment where students learn through interaction within the online environment, not during actual physical interaction with an instructor. In this way, the instruction represents a blended course model and provides insight into a blended physical therapy course design. The application of video demonstrations with audio narration and text for learning numerous psychomotor skills is supported by Mayer's multimedia learning principle of modality.

**Communicative Language Teaching (CLT)**

Communicative Language Teaching gained importance since its major goal is to develop learners' communicative competence (Richards and Rogers, 1986). Communicative language teaching aims to apply the theoretical perspectives of the Communicative Approach by making communicative competence the goal of language teaching and by acknowledging the interdependence of language and communication (Larsen-Freeman, 2010). That is, CLT aims to develop students' ability to communicate in the target language by using linguistic forms, meanings, and functions.

The key characteristic of CLT is that "almost everything that done is done with a communicative intent" (Larsen-Freeman, 2010, p.129). In the classroom, students are taught to use language through communicative activities such as games,

role-plays, and problem-solving tasks. Communicative activities have three features: information n gap, choice and feedback (Johnson and Morrow, 1981 as cited in Larsen-Freeman, 2010). To elaborate, an information gap occurs when one person in exchange know something while the other does not. In communication, the speaker has a choice of what he or she will say and how he or she will say it. In addition, true communication is purposeful; a speaker as communicator can evaluate whether his purpose has been achieved in accordance with the information he receives from his listener. If the listener does not provide the speaker the feedback, the exchange information is not true communication.

More importantly, in CLT the teacher plays the role as facilitator whereas students are communicators. The teacher's role is to facilitate communication in the classroom by establishing situations that are likely to promote communication. During the activities, the teacher also acts as an advisor, answering students' questions and monitoring their performances. On the other hand, students as communicators actively engage in negotiating meaning-in attempting to make them understood and in understanding the peers (Larsen-Freemen, 2010). However, the teacher might play the role as a "co-communicator" engaging in the communicative activity along with students (Littlewood, 1981 in Larsen-Freeman, 2010).

### Techniques and materials for CLT classroom.

Various techniques and materials are created associated with CLT classroom activities. Some of them proposed by Larsen-Freeman (2010) are such as authentic materials, scrambles sentences, language games, picture strip story and role play. First, language authentic materials are used to help students transfer what they learn in the classroom to the outside world and expose students to natural lineage in their real

life situations. For example, the can use a real newspaper article, or assign students to

listen to a live radio broadcast or television broadcast. For low achiever students, the

teacher can apply accessible materials such as weather forecast for predictions,

timetable or realistic materials that do not contain a lot of language. Another

technique is using scrambled sentences aiming at teaching the cohesion and coherence

properties of language. The students can learn how sentences are bound together at

the suprasegmental level through formal linguistic devices such as pronouns, which

make a text cohesive, and semantic propositions, which unify a text and make it

coherent. Language games are also used in communicative classroom because most

students, particularly young children enjoy playing the games. If the teacher design

games appropriately the students can have ore opportunities to use the language

through communicative practice. More over many communicative activities can be

practiced with picture strip stories. For example, the teacher can assign students to

work in small groups using problem-solving task as a communicative technique. In

doing the problem-solving task, three features of communication are then integrated.

First to arrange the picture to make a complete story, one student has to show the first

picture to other members of the group and ask them to predict what the second picture

looks like. In this case, the information gap exists because the students would not

know what the picture contains. Next they keep on working by selecting the pictures

that make up the story from the choices they are given. Finally, they would receive

feedback, not on the form but on the content of the prediction, by being able to view

the picture and compare it with their prediction. Also, roles plays can be used as an

effective technique in CLT because they give students opportunity to practice

communicating in different social contexts and in different roles. Role plays that are

designed properly will allow students to communicate with different communicative purposes. For example, the teacher can assign one students to play the role a s tourist and what he or she would say, and the other student can pact as a policeman who will give the tourist some information about the place or directions. In this situation, the teacher can make the role play very structured or less structured, but the latter one will give students more of a choice to produce the language. Role plays designed like this can also provide information gaps-the purpose or the need to communicate because students are not sure what other person or people will say. Students also receive feedback on whether they can communicate effectively (Larsen-Freeman, 2010, pp.132—135).

In brief, based on the communicative approach of language teaching teachers need to reconsider what is involved in communication. To achieve a goal of communicative language teaching, communicative competence, teachers have to prepare the lesson that combine communicative techniques and materials as well activities including authentic materials, language games, problem-solving tasks, or role plays. The communicative activities should also include three characteristics of communication: information gap, choice and feedback.

In this study, the researcher constructed teaching materials and designed the instructional model called MBI and taught the sixth grade Thai EFL students to learn English using authentic materials selected from the websites, printed text, software programs (PowerPoint Presentation), video clips, audio clips and animations. The approach of teaching in the experimental study was communicative approach and the PPP traditional approach of teaching English. With the well-planned and well-designed instructional model, the students had opportunity

to communicate in English, the target language and practice listening, speaking and learning vocabulary and grammar using the authentic language through the content of the multimedia.

**The PPP Approach to Communicative Language Teaching**

The number of different English language teaching methods are proposed by many researchers, but the most common employed employed by professional schools around the world, and it is also the most cited in research in ESL/EFL. PPP approach although there many disadvantages of this approach (Brno, 2009). PPP or 3Ps stands for Presentation, Practice and Production the communicative language teaching through the three stages. 'Presentation', is the beginning or introduction to learning language, and Production is the culmination of the learning process, where a learner has become a "user" of the language as opposed to a "student" of the language. Practice is the process that facilitates progress from the initial stage through to the final one To disseminate, the first stage 'Presentation', is where the teacher firstly finds out how much of the target language (for example the grammar or vocabulary to be taught) the students know. This is called "eliciting." The teacher will then present the language structure, usually on a board. The students are generally expected to listen during this part of the lesson and their opportunities to speak are limited. In the second stage, "Practice" is the process that facilitates progress from the initial stage through to the final one. To explain the process in brief, the beginning of a lesson involves the introduction of the new language in a conceptual way in combination with some kind of real (or at least "realistic feeling") situation. When this is understood, the students are provided with a linguistic "model" to apply to the concept they have recognized. With this "model" in mind, the students practice the new

language by means of various "controlled" activities. This could be in the form of

oral exercises, targeted at individual students, or in the form of worksheets during

early stages. Again, this stage is very teacher-led. Often more than one activity is

given, each one allowing the students progressively more freedom to produce the

language themselves. After sufficient practice, the students move into some kind of

"productive" activity, where a situation calls for the language to be used naturally

without correction or control. In general, for communicative language learning to be

most effective, the three stages need to occur and they must flow easily from one

stage to the next. (Tomlinson, 2011; Nunan, 1999). Figure 8 presents the PPP

approach of teaching English discussed above.
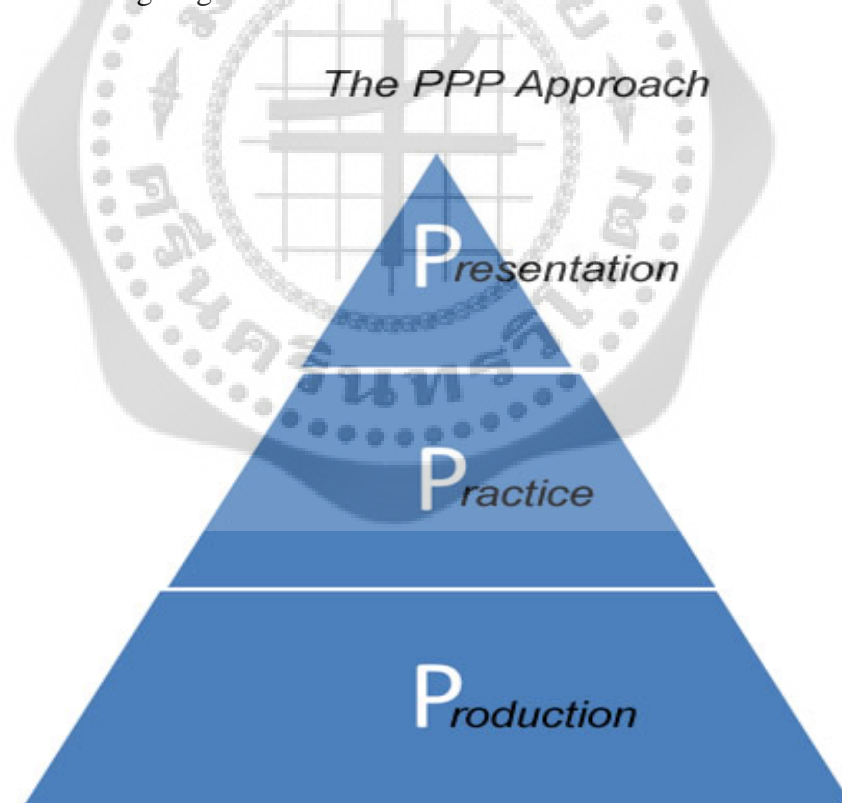


*Figure 8.* Traditional PPP Approach of Teaching English

Source: http://www.teflsurvival.com/ppp-approach.html

**Summary of the Chapter**

This chapter described the theoretical background used as the foundation of this present study. In the first part, a review of the theories of multimedia and MBI: types and the advantages were covered. Next, conceptualization of Communicative Teaching Approach: review of teaching listening, speaking, vocabulary and grammar is discussed. The rubric of speaking ability was highlighted and the concept of attitude toward language learning was addressed.  The next, Chapter three presents research methodology for answering the main research questions of the study.
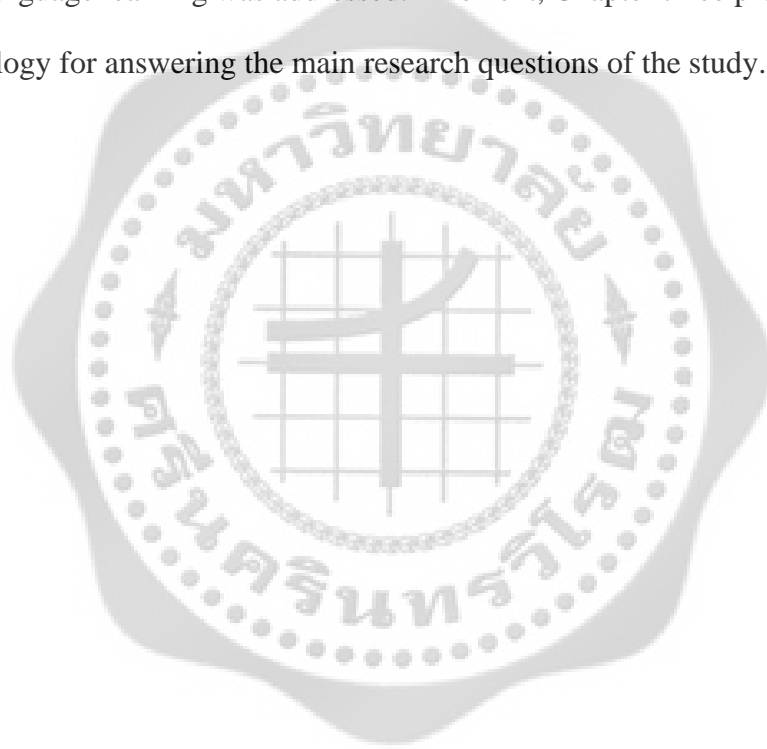
# CHAPTER III

# RESEARCH METHODOLOGY

The main purpose of the study was to determine the effectiveness of Multimedia-Based Instruction (MBI) for developing sixth grade students' English ability. It also aimed to examine the students' attitudes toward learning English through MBI. This chapter discusses the research methodology including research design, participants, context of the study, research instruments, and lesson plans for MBI. In the last section of the chapter, data collection and data analysis procedures are described.

**Research Procedures**

The study focused on the effectiveness of MBI on sixth grade students' English ability; listening, speaking, vocabulary and grammar. The research procedures for the study were as follows:

**Research design**.

This study was a quasi- experimental study with a-single group pretest and posttest design. The study embraced the nature of action research to obsrve the changes in students' English learning. MBI was constructed by the researcher to increase students' English learning achievement in listening, speaking, vocabulary and grammar. To investigate the effectiveness of MBI, students in the experimental group took the pretest at the beginning of class. They were classified into high proficiency and low proficiency students using scores from the pretest. Therefore ten high and ten low proficiency students were selected to compare the effect of MBI in developing students' English ability. At the end of the experiment, the posttest was administered

to all participants. The students in the experimental group received treatment;

Multimedia-Based Instruction for 8 weeks and in the last week of the experiment, the

Attitude Questionnaire towards Learning English through Multimedia-based

Instruction was administered to students.

**Variables.**

The independent variable was implementation of MBI.

The dependent variables were

- scores from the pretest and posttest of sixth grade students.

- sixth grade students' attitudes toward learning English through the use of

multimedia-based instruction.

**Sources of data.**

Data collected for this study were both quantitative data and qualitative data.

The quantitative data were obtained from the students' scores on the pretest and

posttest, and the self- rating scales from the attitude questionnaires. Qualitative data

were obtained from the open-ended section of the questionnaire.

**Population.**

The population of the study was sixth grade students in the second semester of

the academic year 2012 at Tessaban 1 Buriratdarunwittaya School in Buriram

province. There were a total of 200 students, allocated into four classes in according

to the capacity of the school management system. Each class consisted of

approximately 50 students.

**Participants.**

The participants in the study were 50 sixth grade students purposively selected

from four classes studying in the second semester of the academic year 2012. The

participants included male and female native Thai speakers with diverse levels of English ability including high proficiency, average and low proficiency students.  The students were classified into high and low proficiency students using the pretest scores. There were 10 high and 10 low proficiency students. (The high proficiency students had scores from 25 to 28 whereas the low proficient students received  scores from 16 to 18).

### The Context of the Study

Tessaban 1 Buriratdarunwittaya School in Buriram province provides all courses under the core curriculum of the Ministry of Education (2008). Students range from kindergarten to twelfth grade.  High school students have to enroll in English subjects every semester. English subjects are provided for students as either compulsory or elective subjects.  However, many students have negative attitudes toward learning English leading to low proficiency in English.  According to the government policy, computers were provided for students.  Therefore, students in the school have many opportunities to use computers in their classes.  Many studies have suggested that satisfaction and motivation are higher when students learn in classes that use multimedia materials. Therefore, the researcher was interested in helping to increase the students' English ability by teaching them English through MBI.

### Research Instruments.

Three instruments used in this study consisted of: 1)English pretest and posttest, 2) Learning English through MBI Attitude Questionnaire, 3) Innovative materials. The following session discusses the research instruments in detail.

**English Pretest and Posttest.**

The English pretest and posttest were parallel tests.  The purpose of the English pretest was to measure the English ability of the participants before the experiment; whereas the posttest was administered to assess the students' English ability after the implementation of MBI.  The pretest and posttest assessed the participants in four aspects: listening speaking, vocabulary and grammar knowledge. The English test contained three part.  Part 1 was the listening test aiming at measuring students' listening skill.  It consisted of 16 items in which students were asked to listen to three stories and chose the correct answers.

Part 2, was the speaking test was divided into two tasks: the first task was an information gap activity in which students were assigned to play the role and speak to fill in the gap in pairs.  The second part of the speaking test was the speaking task.  It included three tasks with different language functions and situations including 1) asking for information, 2) asking and giving directions, and 3) describing things. Students worked in pairs changed  roles while describing things, asking and giving, directions and asking for information from their partners.

Part 3 of the test assessed students' vocabulary and grammar knowledge.  This included 30 multiple choice items with three alternative answers (a, b and c).  The content of the pretest and posttest was based on the school syllabus and covered topics which were taught during the eight weeks of lessons.

**Establishing the Validity and Reliability of the Pretest and Posttest**

The researcher asked three experts to examine the English pretest and posttest to establish the validity of the content.  The three experts included one native speaker and two Thai teachers; they all have long experience in teaching English and have

background doing research in English language teaching.  The first examiner is a native speaker of English with many years of English teaching experience in Thailand. The second examiner is an experienced Thai teacher having experience in foreign countries and who has attended seminars and conferences in Asian and European countries.  The third one is a Thai instructor, an assistant professor at Buriram Rajabhat University who holds a Ph.D. in English Language Studies (ELS).  The background knowledge of the three experts ensures that they could effectively examine the English pretest and posttest.

The researcher provided response form for the experts and asked them to examine the content of the tests in accordance with test instructions, the relevance of the  questions to the contents of the course, the suitability of the tests to the research objectives, the research objectives themselves,  the appropriateness of all test items and the time allocated for the test.  After receiving the response forms from the experts, the Item-Objective Congruence Index (IOC) values were calculated to determine whether they were greater than 0.5.  The comments and feedback from the experts were collected for the test revision. The test was then piloted with 50 sixth grade students at Tessaban 1 Buriratdarunwittaya School who were not participants in the study to check the practicality of the test.  After the pilot test the researcher revised the.  Table 2 shows the specifications of the pretest and posttest.  Also see Appendix A.

Table 2

*Test Specifications of Pretest and Posttest*

| Content | Objectives of Assessment | Number of Items by Skills | | | | Total Weight |
| --- | --- | --- | --- | --- | --- | --- |
| | | Listening | Speaking | Vocabulary | Grammar | |
| 1. At the market | -meaning of vocabulary<br>- application in sentences | 4<br><br>- | -<br>- | 3<br>- | -<br>2 | 5 |
| 2. Weather | -meaning of vocabulary | - | - | 4 | - | 3 |
| 3. Clothes | -meaning of vocabulary | - | - | 3 | - | 5 |
| 4. Country | - meaning of vocabulary<br>-application in sentences | -<br>- | -<br>- | 4<br>- | -<br>- | 4 |
| 5. Directions | -meaning of vocabulary<br>-application in sentences | -<br>- | 4<br>1 | -<br>- | -<br>- | 5 |
| 6. Room in the house | -meaning of vocabulary<br>-application in sentences | 4<br>- | -<br>- | 3<br>- | -<br>- | 5 |
| 7. What does he/she do? | -spelling vocabulary<br>-meaning of vocabulary | -<br>- | -<br>5 | 3<br>- | -<br>- | 5 |
| 8. Festival & Holiday | | | | | | 5 |

Table 2 (Continued)

| Content | Objectives of Assessment | Number of Items by Skills | | | | Total Weight |
|---------|--------------------------|-----------|----------|------------|---------|--------------|
| | | Listening | Speaking | Vocabulary | Grammar | |
| | -meaning of vocabulary | 3 | - | - | - | |
| | -prior knowledge | - | - | 2 | - | |
| 9. Verb to be | -application in sentences | - | - | - | 4 | 3 |
| 10. Daily Routine | -meaning of vocabulary | 5 | - | - | - | 5 |
| | -application in sentences | - | - | 3 | 3 | |
| Overall | | 10 | 10 | 10 | 10 | 40 |

**Learning English through Multimedia-based Instruction Attitude**

**Questionnaire.**

The questionnaire was designed to obtain information on concerning the

students' attitudes towards the MBI activities used in the classroom. It was

constructed by the researcher and adapted from Chanchula, Leksirirat, and Kaewpradit

(2010). The questionnaire consisted of two parts. The first part included twenty

statements to be rated on a Likert-type scale. The students rated each statement based

on their attitudes and opinions towards MBI learning using a five point scale ranging

from "highest" to "lowest." The second part of the questionnaire included open-ended

questions. This encouraged students to provide information including their ideas,

concerns and feelings about learning English during the 8 weeks of studying through

MBI. This allowed students to express themselves more openly. The questionnaire

was examined by three experts in the field of teaching English. After the examination

the researcher revised the questionnaire for appropriateness of content and difficulty of language use.

**Teaching materials.**

The research teaching materials used consisted of 1) PowerPoint presentations, video clips from websites and audio clips, 2) teaching plans and lesson plans. The following section explains the teaching materials in full detail.

**Multimedia-Based Instruction materials.**

*Multimedia Instruction Software. (MIS)*

Three versions of multimedia instruction software were used. Mayer and Anderson (1991) define these as animation +text; animation + narration; animation + text + narration. Each version of MIS was prepared using Microsoft Power Point and presented using Window Visualize. Equipment included digital projector, a laptop, digital versatile disks, and a white screen board. The experimental courseware focused on the four skills in English. In addition, the experimental group participated in the lesson that used MIS and all three types of MIS created by the researcher.

*Animation + on-screen text only*

Fifty students in the experimental group watched the video which showed animation depicting conversations used in daily life. To reduce cognitive load, the corresponding words and pictures were presented near each other on the page. See the illustrations below for *Animation + narration only*.

*Animation + narration only*

The students in experimental group watched the video which showed animations depicting new vocabulary and correct usage of basic grammar. For this type of animation, the teacher as facilitator led students to pronounce the words; she also explained more about the lesson because this type of animation shows only images and text but does not include sound.

*Animation + on-screen text + narration*

Students watched the video which showed animations depicting explanations of the content via narration along with concurrent text. Using this method, students learn through MIS and various communication activities related to the content. Students have an opportunity to listen and speak along with the animation. Moreover, they have opportunities to build their confidence to communicate in English. See the examples below.
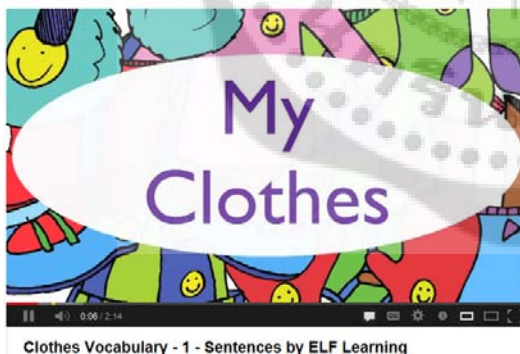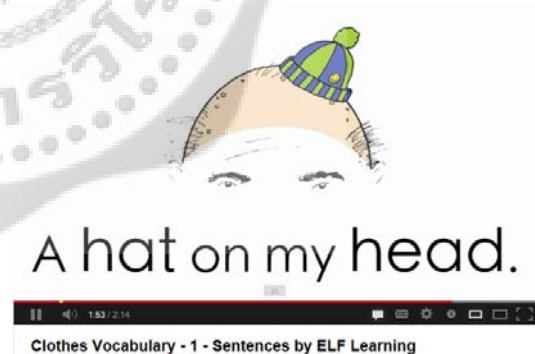


| Web Page | Lessons |

*PowerPoint Presentation.*

Seventeen sets or PowerPoint Presentation (PPT) were created by the researcher; the researcher combined images, animations and audio clips for each lesson. The PPTs shown using digital projectors. Example of presentations are shown below.
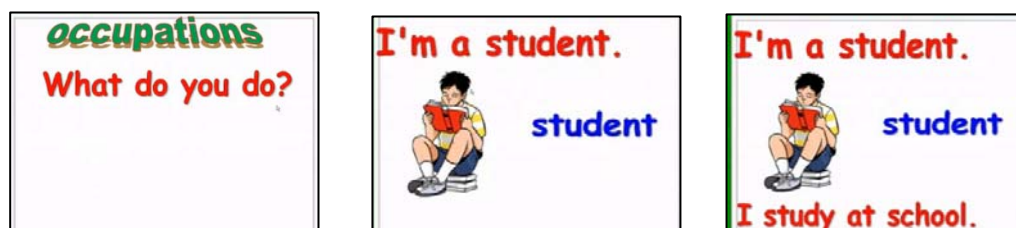
*Short stories*. (Narratives)

Short stories used in the studies were taken from the various websites.  The students were taught through short stories through the digital projectors.  The stories were with sounds.  Students had opportunities to listen and speak while they performed the activities.  Moreover, short stories with colorful images and audio could make students enjoy their classes more.  See the examples of narratives below.
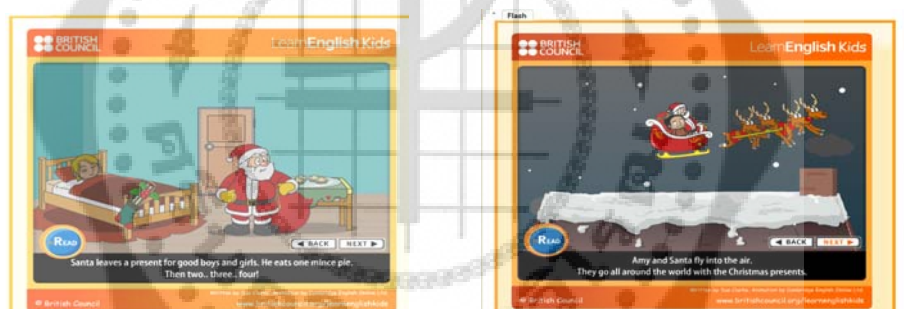


**Teaching plans.**

Twenty-six lesson plans were included in this study for eight-week. Each lesson plan was used for three sessions.  Each session lasted 50 minutes.  The lesson plans were developed based on 3Ps traditional approach of teaching English. This approach consists of 3 steps:  Presentation, Practice, and Production (PPP).  In the first stage the teacher presents the target language and gives students opportunity to practice using the language through various multimedia activities.  In the final stage students produce language by performing communicative activities in various situations. Students acquire listening, speaking, vocabulary and grammar learning

through multimedia in the form of web quests, multiple choices quizzes, short stories,

clips, PowerPoint Presentation, Images, animations and Multimedia Instruction

Software (MIS). The students attended the class with visual aids and were in the

computer room when they learned through websites. These interesting materials

enhanced the  lesson and class atmosphere. In addition  all activities were appropriate

for the learners' age, level and background knowledge. The teacher also clearly

explained the purpose of each activity and demonstrated it.  When students watched

and listened to the story, clip, PPT or animation and carried out the activity the

researcher acted as a facilitator and helped them as necessary.

Moreover, students gathered knowledge and language from the practice stage

by doing activities. The researcher observed and gave the feedback during this stage to

evaluate the activities and performance.  Information from MIS, PowerPoint

Presentation, audio and short stories were taught shown in the following table.  Table

3 illustrates the teaching plans for Multimedia-based instruction for the experiment.

Table 3

*Teaching Plans for Multimedia-Based Instruction*

| Week | Period | Topic | | Activities |
|------|--------|-------|--|-----------|
| 1 | 1 | Pre-test | Audio script from: | -Listening test |
| | 2 | Pre-test | | -Speaking test<br>- Information gap and tasks |
| | 3 | Pre-test | | -Grammar and Vocabulary test |
| 2 | 4 | Shopping | PowerPoint Presentation<br>-   Quantities and containers | Listening & Speaking<br> - New Vocabulary<br> - tongue-twisters<br> -Asking and giving<br>  for information |

Table 3 (Continued)

| | | | | |
|---|---|---|---|---|
| | 5 | Prices | PowerPoint Presentation<br>- Prices<br>- Number | Listening & Speaking<br>- Tell the price |
| | 6 | At the market | PowerPoint Presentation<br>- Short conversation<br>- At the market situation roleplay | Listening & Speaking<br>- Role play |
| | 8 | Season | - Season song<br>- 4 seasons in Thai<br>- The weather in Thai<br>- The weather aboard | Listening & Speaking<br>- New Vocabulary<br>- Sing song |
| | 9 | Clothes | PowerPoint Presentation<br>- Identify the appropriate clothes for each season | Listening & Speaking<br>- New Vocabulary |
| 4 | 10 | Country | PowerPoint Presentation<br>- Countries in the world<br>- The capital of each country<br>- Nationality | Listening & Speaking<br>- New Vocabulary<br>- Talking about countries in the world |
| | 12 | ASEAN | - ASEAN song<br>- Countries in ASEAN | Listening & Speaking<br>- Group work<br>- Sing song |
| 5 | 13 | House | PowerPoint Presentation<br>- Adjective | Listening & Speaking<br>-New vocabulary |
| | 14 | Room in the house | PowerPoint Presentation<br>- Where is the penguin song?<br>- Where is / Where are? | Listening & Speaking<br>- New Vocabulary<br>-Ask and answer for information<br>- Pair work |
| | 15 | What does he/she do? | PowerPoint Presentation<br>- What does he/she do? | Listening & Speaking<br>- Information gap<br>- Group work |
| 6 | 16 | Relationship with other people | PowerPoint Presentation<br>- Conversation practice | Listening & Speaking<br>- information gap |
| | 17 | Festivals around the world | - Festivels in Europe<br>- Festivels in Asia | Listening & Speaking<br>- New Vocabulary<br>- Ask and answer for information |

Table 3 (Continued)

| | Week | Period | Topic | Activities |
|---|---|---|---|---|
| | 18 | Festivals in Thailand | PowerPoint Presentation<br>- Festivels in Thai<br>- Mind mapping | Listening &Speaking<br>- New Vocabulary<br>- Present in group |
| 7 | 19 | Verb to be | PowerPoint Presentation<br>- Nouns<br>- Pronouns<br>- Verb to be | Listening & Speaking<br>- New Vocabulary<br>- Pair work |
| | 20 | Present Simple Tense | PowerPoint Presentation<br>- Simple song<br>- Learn through website | Listening & Speaking<br>- New Vocabulary<br>- play games on web |
| | 21 | Daily routine | - Daily routine song<br>- Learn through PPT | Listening & Speaking<br>- New Vocabulary<br>- Sing song |
| 8 | 22 | Travel (Places) | PowerPoint Presentation<br>- Popula Places<br>- Ask and answer the information about the places | Listening & Speaking<br>- New Vocabulary<br>- Pair work |
| | 23 | Directions | PowerPoint Presentation<br>- Asking and giving directions<br>- Where is it? song | Listening & Speaking<br>- New Vocabulary<br>- Sing song<br>- Role play |
| | 24 | My local | Images of the places to visit in your local area<br>- Discussion after learning through video clip | Listening & Speaking<br>- Group work |
| 9 | 25 | What do you want to be? | PowerPoint Presentation<br>- Learning through the PPT<br>- Conversation practice | Listening & Speaking<br>- New Vocabulary<br>- Pair work |
| | 26 | Horoscope | PowerPoint Presentation<br>- Learning through website | Listening & Speaking<br>- New Vocabulary<br>- Matching game on web |
| | 27 | Do you like school? | - Vocabulary<br>- Conversation practice | Listening & Speaking |
| 10 | 28 | Posttest | Audio scripts from: | -Listening test |
| | 29 | Posttest | | -Speaking test |

Table 3 (Continued)

| Week | Period | Topic | Activities |
|---|---|---|---|
| 30 | Posttest | | -Grammar and Vocabulary test |

**Construction of the lesson plans.**

This study consisted of twenty-six lesson plans. The lesson plans were constructed according to the following procedures;

1.  The researcher studied the curriculum, the course objectives and course description.

2.  The researcher designed lesson plans based on the 3Ps principles of teaching; presentation, practice and production using multimedia as a teaching tool.

3.  The experts in English language teaching and learning examined the lesson plans in terms of the correctness of the content and relevancy to the course objectives. Lesson plans pilot tested with students in another class.

4.  The researcher revised, modified and changed some weak points of the lesson plans that needed to be improved after the pilot study.

**Data Collection Procedure**

The data for each research question were collected in accordance with two research questions.

To answer the first research question, "Is Multimedia-based instruction effective in enhancing sixth grade students' English ability?" the researcher collected data according to the following procedures

1.  Administered the pretest including listening, speaking, vocabulary and grammar to students during the first week of the experiment.

2.  The students were taught using the MBIlesson plans for eight weeks. Each

lesson plan was carried out over three periods per week. In total, there were twenty-six periods excluding the time for administering the pretest and posttest.

3. The posttest of listening, speaking, vocabulary and grammar were administered to participants in the last week of the experiment.

To answer the second research question, "What are sixth grade students' attitudes toward learning English through Multimedia-based instruction?" data were collected from the responses of the attitude questionnaire as follows:

4. The "Learning English through Multimedia-based Instruction Attitude Questionnaire" was given to students to examine their attitudes toward learning English through MBI.

5. The two sets of the English tests were marked and scored for data analysis.

**Data Analysis**

The data were analyzed both quantitatively and qualitatively in accordance with the two research questions mentioned as follows:

Data analysis for the first research question:

1. The pretest and posttest scores of listening, speaking, vocabulary and grammar test from were scored, analyzed and calculated for the overall means and standard deviations using the SPSS program; finally, they were interpreted statistically.

2. The rubric of the speaking ability was adapted from Phisuttangkoon (2012) and Phuphapet (2004). The speaking rubric comprised 5 components: fluency, pronunciation, vocabulary, grammar and communication strategy (See Appendix A).

3.  The overall means of the pretest and posttest were compared using the paired t-test. The result revealed the effectiveness of MBI in developing students' English ability.

4.  To assure that learning English through MBI develops students' English ability, the mean scores for each skill on the pretest and posttest were compared and calculated to determine any significant differences.

5. To determine the effect of MBI of students with different English proficiency levels, the overall mean scores as well as the mean scores for four skills of the English pretest and posttest of high and low proficiency students were compared using the independent t-test.

Data analysis for the second research question:

The data of self-rating scores from the questionnaire concerning students' attitudes towards learning English through MBI were analyzed and calculated for the mean and standard deviation and interpreted into five levels as follows.

4.51 - 5.00 means highly positive

3.51 - 4.50 means positive

2.51 - 3.50 means neutral

1.51 - 2.50 means rather negatives

1.00 - 1.50 means negative.

Qualitative data obtained from the open-ended part were also summarized and discussed descriptively.

**Summary of the Chapter**

The research method used in this study has been described in the chapter. The participants and context of the study as well as research instruments used for data collection were discussed.  Also, the implementation of MBI was detailed followed by the data collection and analysis procedures.  Chapter 4 presents results of the study according to the research questions.

# CHAPTER IV

# RESULTS OF THE STUDY

The main objective of the study was to examine the effectiveness of using MBI to improve sixth grade students' English ability. The study also investigated students' attitudes towards learning English through MBI. This chapter presents the results of quantitative data analysis concerning, the effectiveness of MBI. In addition, it reports the results from the students' questionnaire revealing their attitudes towards learning English through MBI.

The following section presents the findings for the first objective.

**The Effectiveness of Multimedia-Based Instruction**

The students' pretest and posttest scores from the English ability tests were calculated using descriptive statistics for the means and standard deviations. The mean scores were then compared to determine it there was a significant difference between the pretest and posttest means using independent t-test.

The results revealed a significant difference at the .01 level in the overall means of pretest and posttest scores. Table 4 illustrates the results of the overall means scores. Figure 9 shows a bar graph for comparison of the overall mean scores.

Table 4

*Differences in the Overall Mean Scores of the English Pretest and Posttest of Students*

| Students | N | Pretest Scores | | Posttest Scores | | t | p-value |
|---|---|---|---|---|---|---|---|
| | | *M* | *S.D.* | *M* | *S.D.* | | |
| Experimental group | 50 | 12.06 | 1.99 | 20.96 | 3.20 | 14.563 | 0.000** |

* Significant at the .01 level (p<.01)

      The posttest mean scores indicated a significant difference value, higher than the .01 level. The results demonstrated a significant difference between the pretest and posttest scores at the .01 level ($t$=14.563, p<.01).

      Figure 9 Compares the Overall Mean Scores of the Pretest and Posttest.
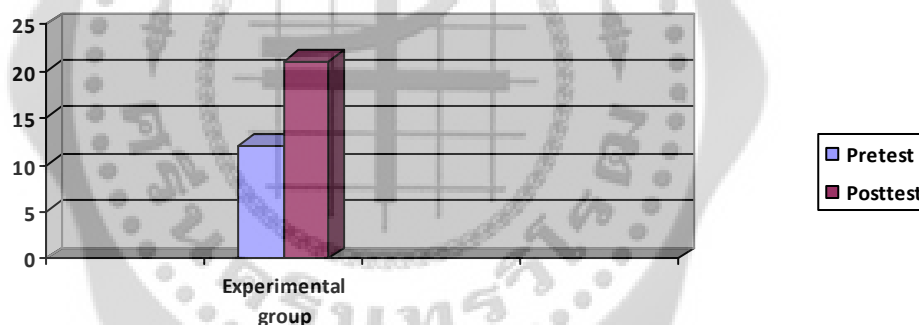


*Figure 9.* The Comparison between the Overall Means of the Pretest and Posttest of the Students

      To support the results of the first objective, the mean scores students' English ability on pretest and posttest in four skills were also compared. Table 4 shows the comparison of the mean scores in terms listening, speaking, vocabulary and grammar skills.

Table 5

*The Differences in the Mean Scores of Listening, Speaking, Vocabulary and Grammar of*

*the Pretest and Posttest of the Experimental Group*

| English Skills | n | Pretest | | Posttest | | t | p-value |
|---|---|---|---|---|---|---|---|
| | | *M* | *SD* | *M* | *SD* | | |
| Listening | 50 | 2.66 | 0.52 | 4.94 | 0.79 | -26.01 | 0.000** |
| Speaking | 50 | 2.96 | 0.88 | 5.40 | 0.95 | -30.06 | 0.000** |
| Vocabulary | 50 | 3.65 | 0.83 | 5.56 | 0.93 | -25.01 | 0.000** |
| Grammar | 50 | 2.78 | 0.76 | 5.06 | 0.98 | -24.14 | 0.000** |

 * Significant at the .01 level (p<.05)

   The results in Table 5 show significant differences between the pretest and

posttest of the four skills at the .01 level. The mean scores were higher than the pretest in all

skills. The highest mean score of the posttest was for vocabulary skill (*M*=5.56), which was

higher than the pretest (*M*=3.65). The mean score of speaking skill (*M*=5.40), was higher

than the pretest (*M*=2.96). The mean score of English grammar ability (*M=5.06),* was

higher than the pretest (*M=2.78),* The mean score of listening skill (*M=4.94*) was higher

than the mean score of the pretest (*M*=2.66)

   Figure 10 graphically demonstrates the mean scores between the pretest and

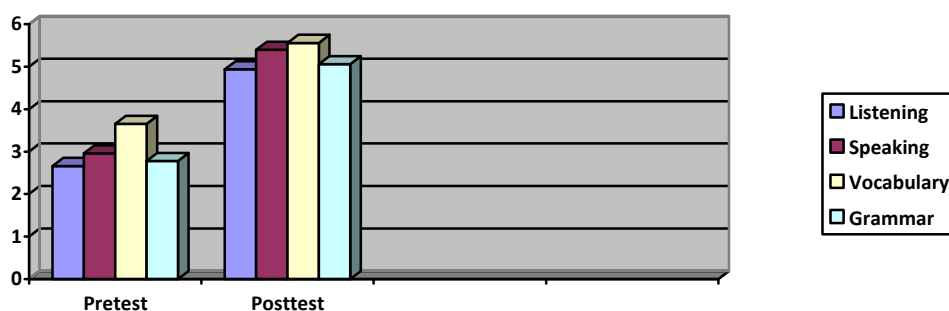posttest of the four skills of the students.

*Figure 10.* Comparison of the mean scores between the pretest and posttest of the four

skills of the students

Further analysis of the mean scores of the high and low proficiency students was

conducted to determine whether there was a significant difference between students with

different English proficiency levels. Table 6 illustrates the mean scores of the two

groups.

Table 6

*Differences in the Mean Scores of the Pretest and Posttest High and Low Proficiency*

*Students*

| Students | N | Pretest Scores | | Posttest Scores | | t | p-value |
|---|---|---|---|---|---|---|---|
| | | *M* | *S.D.* | *M* | *S.D.* | | |
| High Proficiency Students | 10 | 14.70 | 0.82 | 26.10 | 1.20 | -14.00 | 0.000 ** |
| Low Proficiency Students | 10 | 9.30 | 1.25 | 17.30 | 0.67 | -10.01 | 0.000 ** |

* Significant at the .01 level (p<.05)

Table 6 show that the mean score of the posttest of students in both groups were

significantly higher. The mean scores on the posttest of the high proficiency students

(*M*=26.10) was higher than the (*M*=14.70). The mean scores of the posttest of the low

proficiency students (*M*=17.30) were higher than the pretest (*M*=9.30).

Figure 11 shows the pretest and posttest mean scores of high and low and
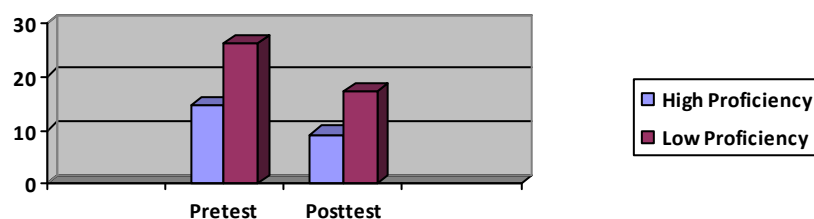
proficiency students in the experimental group.



*Figure 11.* Comparison of the pretest and posttest mean scores of high and low

proficiency students

To determine whether there was any significant difference in the mean scores of four skills between the pretest and posttest of the high proficient students differences in mean scores were further analyzed mentioned. The result are illustrated in Table 7.

Table 7

*Differences in the Mean Scores of Four Skills of High Proficient Students Learning English through Multimedia-based Instruction*

| English Skills | n | Pretest High Proficiency | | Posttest High Proficient | | t | p-value |
|---|---|---|---|---|---|---|---|
| | | M | SD | M | SD | | |
| Listening | 10 | 2.80 | 0.63 | 5.80 | 0.78 | 8.90 | 0.000** |
| Speaking | 10 | 4.00 | 0.81 | 6.90 | 0.31 | 2.85 | 0.000** |
| Vocabulary | 10 | 4.70 | 0.48 | 7.00 | 0.00 | 5.45 | 0.000** |
| Grammar | 10 | 3.20 | 0.42 | 6.40 | 0.84 | 2.17 | 0.000** |

 * Significant at the .01 level (p<.05)

The results show significant differences between the pretest and posttest of the four skills at the .01 level. The mean scores on the posttest were higher than the pretest in all skills. The highest mean score of the posttest was the vocabulary skill (*M*=7.00), which was higher than the pretest (*M*=4.70), followed by the mean score of speaking skill (*M*=6.90), which was higher than the mean score of the pretest (*M*=4.00). The mean score of English grammar ability (*M=6.40)* was higher than the pretest (*M*=3.20)*. The mean score of listening skill (*M=5.80)* was higher than the mean score of the pretest (*M*=2.80). Figure 12 illustrates these findings.
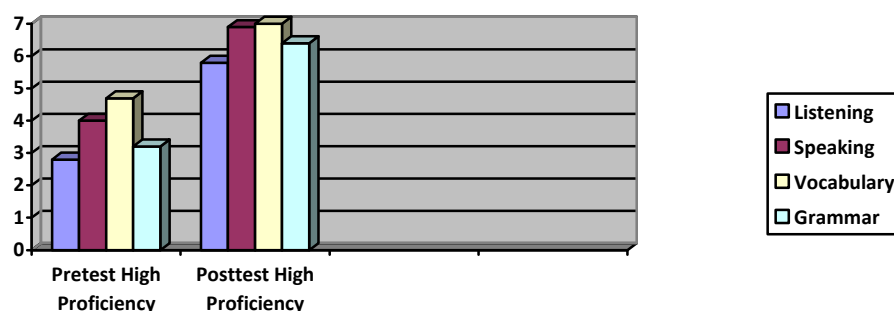
*Figure 12*. Comparison of the mean scores for the pretest and posttest of four skills among high proficiency students

To determine whether there was a significant difference in the mean scores of four skills between the pretest and posttest of the low proficiency students, differenceswere analyzed further. The result are illustrated in Table 8.

Table 8

*Differences in the Mean Scores of Four Skills of Low Proficient Students*

| English Skills | n | Low Proficiency Pretest | | Low Proficient Post-test | | t | p-value |
|---|---|---|---|---|---|---|---|
| | | *M* | *SD* | *M* | *SD* | | |
| Listening | 10 | 2.20 | 0.42 | 4.10 | 0.31 | -1.12 | 0.000** |
| Speaking | 10 | 2.30 | 0.67 | 4.40 | 0.51 | -2.95 | 0.000** |
| Vocabulary | 10 | 2.80 | 0.63 | 4.70 | 0.48 | -3.68 | 0.000** |
| Grammar | 10 | 2.00 | 0.66 | 4.10 | 0.31 | -4.77 | 0.000** |

* Significant at the .01 level (p<.01)

Table 8, it reveals significant differences between the pretest and posttest of the

four skills of the low proficiency students at the .01 level. The posttest  mean scores were

higher for all skills.  The mean score of vocabulary skill ($M$=4.70) was higher than the

pretest ($M$=2.80).  The mean score of speaking skill ($M$=4.40) was higher than the mean

score of the pretest ($M$=2.30).  The mean score of English grammar ability ($M$=4.10) was

higher than the pretest ($M$=2.00). The mean score of listening skill ($M$=4.10) was higher

than the pre-test ($M$=2.20).  Figure 13 illustrates the pretest and posttest mean scores of

the low proficiency students.
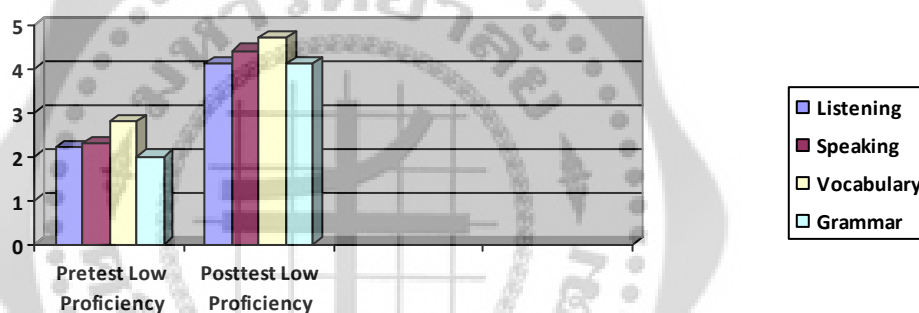


*Figure 13*.  Comparison of mean scores of the pretest and posttest in four skills of low

proficiency students

The researcher further compared the mean scores in four skills between the high

proficiency students and low proficiency students if there was a significant difference in

their skills.  This analysis sought to measure improvement in their English ability after the

experiment. Table 9 demonstrates the results of data analysis in terms of four English

skills.

Table 9

*Differences in the Mean Scores of the Posttest between the Low proficiency students and the High proficiency students in the Experimental Group – Independent t-test*

| English Skills | n | Posttest High Proficiency | | Posttest Low Proficiency | | t | p-value |
|---|---|---|---|---|---|---|---|
| | | *M* | *SD* | *M* | *SD* | | |
| Listening | 10 | 5.80 | 0.32 | 4.10 | 0.42 | -10.57 | 0.000 ** |
| Speaking | 10 | 6.90 | 0.52 | 4.40 | 0.67 | .07.10 | 0.000 ** |
| Vocabulary | 10 | 7.00 | 0.48 | 4.70 | 0.63 | -07.27 | 0.000 ** |
| Grammar | 10 | 6.40 | 0.32 | 4.10 | 0.74 | -08.38 | 0.000 ** |

 * Significant at the .01 level (p<.05)

        Table 9 Indicates, a significant difference in the mean scores of the posttest of the high and low proficiency students at the .01 level. The mean scores of all skills of the high proficient students were higher than the low proficient students.  Figure 14 graphically demonstrates the findings.
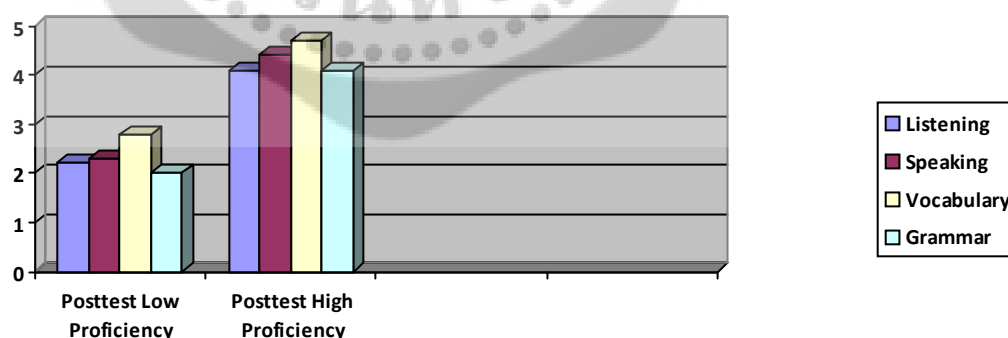


*Figure 14.*  Comparison between the mean scores on the posttest of the low and high students

The second objective was to study learners' attitudes towards their English lessons after learning English through MBI. The following section presents the findings for objective two.

**Students' Attitude towards Multimedia-Based Instruction**

The questionnaire was used to disclose students' viewpoints regarding how they felt after learning through MBI. Students were required to respond to the questionnaire by rating each item on a scale of 1 to 5 (Lowest to Highest). Students self-rating scores from the questionnaires were analyzed and calculated for the mean and standard deviations. These were categorized into five levels from negative to highly positive. The results showed that students had a positive attitudes towards MBI at the highly positive level ($M$=4.60). The results of students' attitudes towards MBI are shown in Table 10.

Table 10

*Students' Attitude towards Multimedia-Based Instruction*

| Statements | $M$ | $S.D.$ | Interpretation (level of students' satisfaction) |
|---|---|---|---|
| 1. Learning through multimedia is knowledgeable and enjoyable. | 4.76 | 0.43 | Highly positive |
| 2. Learning English through Multimedia-Baed Instruction gives us a positive attitude towards English. | 4.56 | 0.61 | Highly positive |
| 3. Learning through multimedia helps me improve my English ability. | 4.58 | 0.53 | Highly positive |
| 4. Learning through materials helps me improve my grammar. | 4.55 | 0.51 | Highly positive |
| 5. Learning English through multimedia has many benefits for Thai students. | 4.72 | 0.67 | Highly positive |
| 6. Learning English through Multimedia-based Instruction is amazing. | 4.60 | 0.44 | Highly positive |
| 7. I like learning English through computer | 4.78 | 0.44 | Highly positive |
| 8. Video clips and animations help me enjoy learning English | 4.75 | 0.45 | Highly positive |
| 9. I enjoy learning English through multimedia | 4.68 | 0.55 | Highly positive |
| 10. I think I'm a pretty good language learner. | 4.49 | 0.43 | Positive |
| 11. I'm afraid people will laugh at me if I don't say thing right. | 4.40 | 0.50 | positive |
| 12. I think that I could learn English better if I really put my mind to it. | 4.60 | 0.55 | Highly positive |

Table 10 (Continued)

| Statement | M | S.D. | Interpretation (level of students' satisfaction |
|---|---|---|---|
| 13. I think multimedia is interesting. | 4.52 | 0.67 | Highly positive |
| 14. The teaching of English should start as early as the first grade in school | 4.60 | 0.89 | Highly positive |
| 15. English music is more enjoyable than music in any other language | 4.40 | 0.50 | positive |
| 16. When I hear someone speak English well, I wish I could speak like him. | 4.64 | 0.53 | Highly positive |
| 17. The use of English in many careers helps get things done easily. | 4.42 | 0.55 | Positive |
| 18. The development of our country  is possible mainly by educated people who know English well | 4.52 | 0.55 | Highly positive |
| **Total** | 4.60 | 0.43 | Highly positive |

Table 10 shows that the overall mean score of students' attitude toward learning English through MBI were highly positive with a mean score of 4.60. The result is showed that students had positive attitudes towards the use of MBI.  Learners had the highest positive attitudes towards items 1 followed by (*M*=4.78).  They liked learning English through computers.  The next highest positive mean score was item 7 (*M*=4.78). They responded that learning through multimedia helped them gain knowledge. However, four items yielded positive mean scores. In  items 10, 11, 15 and 17, they thought they were not a pretty good language learner (*M=*4.49) and people would laugh at them when they said something wrong (*M*=4.40).  Item 15 showed that students believed English music was more enjoyable then music in any other language (*M*=4.40).  They also felt that use of English in many careers (item 17) helps getting things done easily(*M*=4.42).

**Students' Opinions towards Multimedia-Based Instruction from**

**Open- ended Questions**.

The research focused on students' views towards learning English in general and their opinions toward learning English through MBI during the 8 weeks of the research projects.

Students commented that they enjoyed learning English through PowerPoint presentations and video clips because they understood the lessons more clearly. Four students commented that they gained more knowledge about English vocabulary and grammar through a variety of multimedia. They also reported that they learned to communicate better. Two students reported they enjoying learning through computers. The results showed that they gained more knowledge of English through the MBI. They explained that the PowerPoint presentation and the visual clips displayed words and picture, so they remembered and understood the meaning of words more easily. In addition, the voicing of new vocabulary on the websites allowed students to hear how to say words correctly. They could also see how the words were used in sentences. Moreover, they did exercises by themselves by utilizing their technical abilities and experience of using computers. The students thought that MBI was beneficial and helped them to develop their English ability.

**Summary of the Chapter**

This chapter presented the results of the study showing the differences between the English ability of students learned through the MBI before and after the experimental group. Moreover, the differences between the mean scores of the pretest and posttest of the high and low proficiency students were described. In addition, students' attitudes towards their English lessons after learning English through MBI were presented. Chapter five summarizes the research and the main findings followed by discussion of the findings; implications as well as recommendations for further studies are also presented. The chapter ends with conclusion of the research.

# CHAPTER V

# CONCLUSION AND DISCUSSION

The main purpose of this study was to investigate the effectiveness of using MBI to develop sixth grade students' English ability. The study also examined the attitudes towards learning English through MBI. This chapter therefore presents a summary and the main findings of the research. Students' development of English ability and their attitudes towards English learning are discussed based on the findings. In the last section the implications and limitations of the study, plus recommendations for future studies are described.

**Summary of the Research**

This was an experimental study with a single group pretest-posttest design that combined the characteristics of action research. The objectives of the study were (1) to examine the effectiveness of MBI to develop sixth grade students' English ability; (2) to investigate the learners' attitudes towards English lessons after learning English through MBI. The participants were 50 students in the sixth grade purposively selected from 200 students in 4 regular classrooms. The research instruments used for collecting data were; 1) English ability achievement tests and 2) the questionnaire concerning students' attitudes towards learning English through MBI. The teaching materials used in this study included twenty-six multimedia-based instruction lesson plans.

At the beginning of the experiment, the English ability achievement tests were administered to students in the experimental group. The researcher taught the experimental group using the twenty-six MBI lesson plans. The English ability achievement posttest was administered at the end of the experiment. All students' listening answer sheets were corrected by the researcher and the students' speaking tests

were rated by three raters using analytical scoring. The data were statistically analyzed by mean and standard deviation using SPSS (Windows) software. Dependent t-test statistics were calculated to determine the significant difference between the mean scores of pretest and posttest. Significant differences in the mean scores of four skills were analyzed to detemine the development of students' English ability after learning through MBI. The independent t-test was employed to calculate the significant differences between mean scores of the pretest and posttest of the high and low proficient students. Additionally, participants responded to the questionnaire exploring their attitudes towards MBI. The data, self-ratings from the questionnaires were calculated for the means and standard deviation scores and interpreted for the levels of attitudes they had towards English learning. The data from the open-ended part of the questionnaires were also summarized and reported descriptively.

**Summary of the Main Findings**

This section summarizes the results from the scores of the English pretest and posttest. The first research question investigated the effectiveness of the MBI on students' English ability. The results revealed the major findings as follows:

Firstly, there was a significant difference between the overall mean score of the pretest and posttest at the .01 level. The mean scores on the posttest ($M=20.96$) were substantially higher than that the pretest mean scores ($M=12.06$). This confirmed that MBI could successfully enhance the students' English ability.

Secondly, the results show significant differences between the mean scores of four skills on the pretest and posttest at the .01 level. The mean scores of the posttest were higher then on the pretest in all four skills. The highest mean score of the post-test among the four skills was the mean score of the vocabulary skill ($M=5.56$), which was higher than the mean score of the pre-test ($M=3.64$), followed by the mean score of speaking skill

(*M*=5.40), which was higher than the mean score of the pre-test (*M*=2.96), the mean score of English grammar ability (*M=5.06),* which was higher than the mean score of the pre-test (*M*=2.78)*,* and the mean score of listening skill (*M=4.94),* which was higher than the mean score of the pre-test (*M*=2.66)

     Thirdly, the analysis of results of the mean scores between the pretest and posttest of the high and low proficient students revealed that the post-test of the high proficiency students (*M*=26.10) were higher than the pre-test mean scores (*M*=14.70). The results also demonstrated that there was a significant difference between the pretest and post-test scores of the high proficient students in the experimental group at the .01 level. For the low proficient students, the analysis of results showed that the posttest mean score (*M*=17.30) was higher than that of the pretest (*M*=9.30), and the statistically significant difference was found at the .01 level.

    Fourthly, the further analysis between the pretest and posttest mean scores of the high and low proficient students in terms of four separate skills: listening, speaking, vocabulary and grammar revealed that the mean scores of the posttest of high proficient students were significantly higher than those of the posttest.  Moreover, significant difference between the mean score of the pretest and posttest of high proficient students was found in all four skills at the .01 level.  Similarly, the comparison of the pretest and posttest mean scores of four skills of the low proficiency students showed that the posttest scores were significantly higher than those of the pretest.  In addition, there were significant differences between the mean scores of the pretest and posttest of the low proficient students in all four skills at the .01 level.

    Additionally, the comparison of the posttest mean scores of the high and low proficient students demonstrated that the mean scores of the high proficient students were significantly higher than those of the low proficient students in all four skills.

Statistically Significant differences were found in the posttest mean scores of all four skills of high and low proficient students at the .01 level.

Finally, the results obtained from the attitude questionnaires towards the used of multimedia-based instruction revealed that the students had highly positive attitudes when overall mean was at a highly positive level (*M*=4.60).  The results of the qualitative data through open-ended questionnaire revealed that the students enjoyed learning English through multimedia-based instruction because video clips and animations through multimedia helped them enjoy learning English, which promoted their self-confidence.

The following section discusses the findings in details including the students' achievement in English learning through MBI and the students' attitudes towards MBI.

**Discussion**

The results of two major topics, 1) the effectiveness of Multimedia-Based Instruction, and 2) learning English through MBI  attitude questionnaire are discussed below.

**Discussion of the finding related to the first research question.**

*The effectiveness of Multimedia-Based Instruction.*

The main research question of the study was to investigate the effectiveness of MBI on students' English ability, specifically listening, speaking, vocabulary and grammar.  The results revealed that overall; students improved their English ability after learning through multimedia.  They also had high scores in all four skills on the posttest. This confirmed that the multimedia contributed to their English learning achievement. This was true for, both high and low proficiency students.  However, the high proficient students gained higher scores in all four aspects.

Students' English ability in the four language aspectson the posttest was higher than on the pretest.  This suggests the effectiveness of MBI on students' English ability.

To comfirm the result, differences in the mean scores of the four skills were compared. There are observed differences between the mean scores in the pre-test and post-test of four skills listening, speaking, vocabulary and the grammar Test of students in the experimental group. These differences are most likely due to listening, speaking, vocabulary and grammar instruction these groups received. This indicates that the students' knowledge of listening skill, speaking skill, vocabulary and grammar improved.

To support the first objective the mean scores of the high and low proficiency were compared. The mean score of the post-test of the students in both low proficiency group and high proficiency group were significantly higher. This shows that the students improved their English ability after learning through the MBI. Moreover, differences in the mean scores of the posttest between the low proficiency students and the high proficiency students reveal that before studying, the students were different in their background knowledge of listening, speaking, vocabulary and grammar. However, after learning, a significant difference in the mean scores between low proficiency students and high proficiency students was observed.

Therefore, the results revealed a significant difference at the 0.01s level in the overall means scores of pre-test and post-test of the students in the experimental group. It was found that multimedia-based instruction could be effective. As a result, the multimedia-based instruction successfully enhances the students' English ability. Several of factors contributing to the effectiveness of the multimedia-based instruction in enhancing the students' English ability were as follows:

According to the data in the study, the findings showed that the mean score of the English ability post-test of the experimental group ($M$=20.96) was higher than the pre-test. This indicated that the English ability of the students taught through the multimedia-based instruction was significantly higher. The findings were consistent with Camel et el.

(2003).  Camel et el., indicated that ICT tools in teaching can lead to increased students'
learning competencies.  The results in the mean score of the English ability achievement
post-test of the experimental group ($M$=12.60) was higher.  This might be because all
students had an opportunity to listen and speaking though the video as including visual
and audio, which helped them remember information, language. That could promote the
production and contribute to long-term memory.  However, there is a variety of
multimedia equipment; audio software contains options like play, stop, record, etc. It does
not contain images or animations. Power point presentation contains text and images.
Audio files can be inserted, if necessary (Paveen and Rajesh, 2011). Flash animations
contain text, audio, images, and animations. Videos can be played in any media player. It
contains sub-texts for students to easy understanding of the conversations.

In addition, English Language Teaching is one of the fastest growing sectors in
the worldwide nowadays. Multimedia instructional environments are widely recognized
to hold great potential for improving the way that people learn (Mayer and Moreno,
2002). Computers deliver multimedia presentations for entertainment, advertising, or
education. Edutainment is the term used to refer to the applications which incorporate
multimedia entertainment with educational objectives. Multimedia incorporates text,
audio, graphics, animations, or real video into English lessons (Stemler, 1997 as cited in
Praveen, and Rajesh., 2011). After the learning period, the students were required to
create the conversation themselves, describe and answer the questions from the videos.
These activities encouraged their imagination, critical thinking and creative thinking.

Moreover, the multimedia can provide a sensory and real learning experience; it
presents a greater potential for learning (Lindfors, 1987). There are many advantages of
using multimedia tools in the classroom. These include more active learning, diversified
teaching methods, better student attention, less time and energy for professors, and visual

stimulation. However, there are some downfalls to using technology when teaching the courses. They are equipment failures, need for back-up plans, anxiety for teachers, time spent learning new technologies, etc. (Dale, 1969).

**Discussion of the finding related to the second research question.**

*Students' attitudes towards multimedia-based instruction.*

The second objective addressed in this study was to study learners' attitudes towards their English lessons after learning English through MBI. Analysis of the students responses to the post experiment attitude questionnaires and comments from the open-ended part revealed positive attitudes towards English learning through the MBI. Insights into the students experience learning during the eight-period experiment using the MBI indicated that most students had highly positive attitude (*M*=4.60) toward lessons presented through the PowerPoint Presentations, animations, video clips, audio clips and text contents selected from the websites. The highest level of attitude fell into Item 1 (Learning through multimedia is knowledgeable and enjoyable), Item 7 (I like learning English through computer), and Item 8 (Video clips and animations help me enjoy learning English). Apparently, students showed their enjoyment in learning English with the computer and multimedia materials that were presented in the lesson. They also reported that they gained more knowledge through multimedia learning. Among a variety of multimedia presented, they like to learn with video clips and animations the most. Interestingly, students reported they did not think that listening to English music would have more fun than music in any other foreign languages. They rated this item-item 15 the lowest (Item 15-English music is more enjoyable than music in any other language). Students were also worried about their correctness when speaking. They were not confident when speaking English the rating for Item 11 was the lowest (I am afraid people will laugh at me if I don't say thing right.).

The results from the open ended questionnaire were corroborated with the quantitative results when most students commented that they enjoyed learning English through multimedia, specifically video clips and PowerPoint Presentations. Moreover, they reported that they gained more knowledge about vocabulary and grammar, and they also had more opportunities to practice speaking and listening. They believed that they could speak more correctly than before the experiment because they could listen to and hear the correct examples of the language from the authentic text from the websites presented by the teacher.

Several explanations for these findings include the following possibllities..

First, all students revealed positive attitudes towards multimedia learning under the study and found the multimedia useful and fun because it is a new way of learning English and practicing English skills. The result of the study was in line with the study by Al-Jarf (2005). Al-Jarf's study found that students learning vocabulary and grammar online had positive attitudes because the way of learning with computer and the media online heightened students' motivation and self-esteem. It also created a warm-climate between students and teacher and among students themselves; therefore, they enjoyed working and doing exercises with computer.

Another explanation is that according to Gardner (1985), positive attitudes lead to improved student language proficiency and play a very important role in language learning. This might be because the MBI satisfied the students in all aspects; listening, speaking, vocabulary and grammar. They liked to learn English through MBI because they thought that multimedia helped them to improve their English ability, made the class more enjoyable and interesting. In addition, the students had more confidence to communicate in English after they learned English through MBI.

In summary, the students' positive attitudes towards MBI could affect the development of their English ability. The result showed that their satisfaction with learning English through multimedia-based instruction was highly positive. Furthermore, this study revealed that multimedia-based instruction could successfully improve the students' English ability at the .01 level.

**Implications of the Study**

The results indicated that MBI could successfully improve students' English ability. Some implications for the English teachers to consider when using multimedia, particularly for primary students are include the role of the teacher and the role of multimedia.

First, multimedia learning emphasizes individualized learning, so teacher should be aware of the different proficiency levels of students. Teachers should walk around the class as a facilitator to help the low proficiency students. Teachers have to be patient and encourage them to understand what they have to do. They might have the technical problems about computers or language problem.

Moreover, MBI should be applied as a teaching tool for Thai students from the primary level to higher education levels of students to meet the requirements of the digital age. This effective tool provides students an opportunity to develop their learning ability in English and it also helps develop positive attitudes.

In addition, selecting the media with the best characteristics for communicating information is very important. For example, graphics help students to retain spatial information better than text. Also, the methods and techniques, and ways of teaching should be varied according to students' needs and interests.

To promote students to learn successfully, the media elements should be also presented together so that they support each other. Presentation of multimedia should use

both verbal and visual channels so that students could integrate content with prior knowledge.

Additionally, teachers need to encourage students to actively process and integrate rather than receive passively: allow them to control and work out on the multimedia material and give them the feedback and appropriate assessment for multimedia learning that matchws the presentation of media.

Finally, teacher should present new media in the English class with other components of language and encourage students to work on their own and devise some language activities.

**Limitations of the Study**

Although this study clearly contributed to English teachers' understanding of multimedia learning, there were limitations to consider.

First, the focus of the implementation of the study was not long enough to obtain in-depth results of the benefits of using multimedia in the classroom technical problems occurred while using the computer. Moreover, the study tested for statistical significance, a mixed research design combining qualitative data should be conducted to observe students' behavior while learning, practicing and doing exercises through the computer. The period of the experiment was limited because of school. During the experiment, an annual sport event took place. After that, the students had to attend school tutoring for future education for two weeks. Thus, the period of experiment was forced to extend beyond the planned schedule. Finally, the students' questionnaire in this study was only open-ended comment. If a semi-structured interview were conducted, the study would yield more profound data and results that would have better the effectiveness of using MBI.

**Recommendations for Further Studies**

The results of the study showed the effectiveness of MBI on developing students' English ability as expected. However, in developing EFL students' English ability through multimedia, the following recommendations are made both for teachers and researchers.

1. Further studies should be carried out to investigate the effectiveness of multimedia for different groups of students at various levels of education, primary, secondary and tertiary levels.

2. This study was limited to 8 weeks of MBI integrating listening, speaking, vocabulary and grammar. Therefore, longer study should be conducted and regular time is recommended to investigate separate skill or combine listening with speaking and reading with writing.

3. This study was designed as a single group pretest-posttest design. Further studies should be carried out to compare between a control group and an experimental group.

4. Qualitative study such as observing students using CALL, CAI, or online learning should be conducted. This kind of research is might be beneficial and shed light on other techniques involving multimedia.

5. A similar study could be conducted taking teachers' attitudes, and students' perception into consideration. This would be useful for teachers in developing students' motivation to learn.

**Conclusion**

This chapter has discussed the main findings of the study. The findings showed that MBI enhanced the sixth grade students' English ability after learning through MBI. The students had highly positive attitudes towards MBI. This study showed benefits and

great opportunities for students to use language during MBI. English learning through MBI also improved students' English skills including listening, speaking, vocabulary and grammar. The results of the study suggested that using multimedia can be an appropriate teaching method to help students to get a sense of the socio-cultural context in which language is used (Yang & Fang, 2008). It can also raise students' language awareness within the framework of multimedia learning in both verbal and visual channels. According to the language teaching methods, this study indicated significantly higher achievement scores for the teaching methods and positive attitudes toward the MBI. In conclusion, MBI can fully improve students' achievement and positive attitudes. It will be helpful and useful to ensure and fulfill more effective result of teaching and learning among EFL learners.
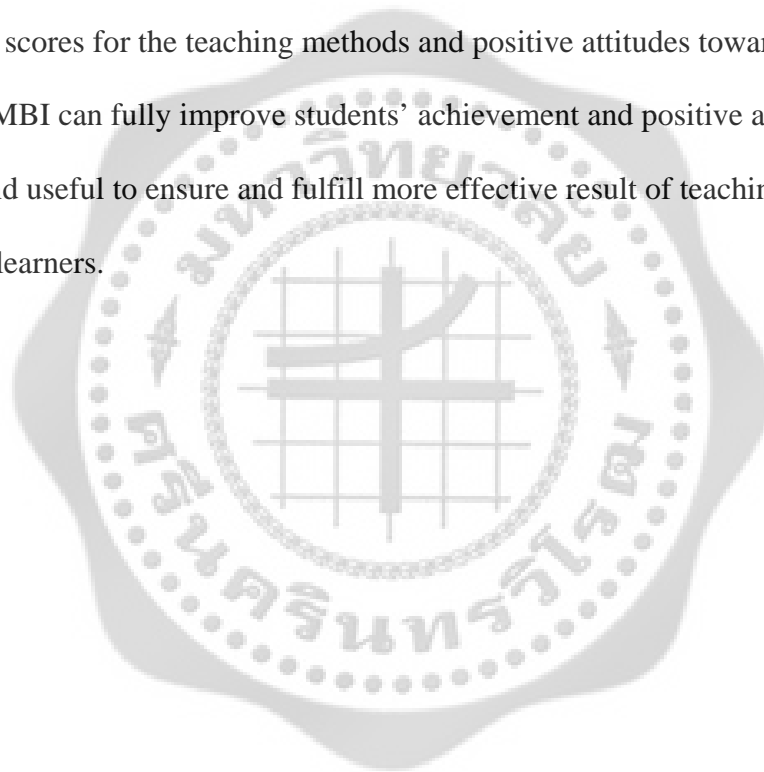
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APPENDIX E

Pictures

REFERENCES

APPENDIX A

Pretest and Posttest

Rubric of speaking test

APPENDIX C

Lesson plan and the example of PowerPoint Presentation

APPENDIX B

Learning English through Multimedia-based Instruction Attitude Questionnaires

APPENDIX D

Example of worksheets

APPENDICES

**Pre-test and Post-test**

# Listening Comprehension Test

Instructions: Listen to the story then write the number 1-5.

**Going to School**

_____ 1. get dressed

_____ 2. wait for school bus

_____ 3. wake up

_____ 4. put schoolbag on

_____ 5. eat breakfast

Instruction:  Listen to the story then answer the questions. (6-11)

**Having a Picnic**                                     **Holiday**

6. What did Susan do with her family?
    a. have a picnic
    b. write a letter
    c. have a pig

9. Where did Jane go on vacation?
    a. to the mountains
    b. to the beach
    c. to the

7. What did they bring?
    a. toys
    b. food
    c. juice

10. What does her brother like to do?
    a. jump over waves
    b. play in the sand
    c. walk on the beach

8. What did they sit on?
    a. bench
    b. chairs
    c. blanket

11. What is Jane favorite thing to do?
    a. Find sea shells
    b. play with a ball
    c. swimming

Instructions: Listen to the conversation then choose the correct sentence.

## **Shopping**

A: I like that shirt.
B: ……12…….
A: How much is it?
B: ……13……. The tag is missing.
A: Ask the clerk.
B: I will.
A: Oh, look. Here's another shirt just like it.
B: Does it have a price tag?
A: Yes, …….. It's only $20.
B: That's a great price.
A: I think I'll buy ……… of them.
B: You'd better try them on first.

12.     a. So do I.            b. up to you
          c. It's ugly.          d. I don't think so.

13.     a. five dollar        b. twenty dollar
          b. I don't know.     d. expensive

14.     a. it do              b. it do not
          c. it does          d. it does not

15.     a. both            b. one
          c. all             d. two

## Scripts for listening part

### Going to School

The first thing I do on school days is wake up. Then take a shower and eat a good breakfast to give me energy. Next I get dressed. Then I put my schoolbag on to take to school. After that I wait for the school bus to come to take me to school.

**http://www.kidslearningstation.com/easy- listening/comprehension-school.asp**

### Having a Picnic

Susan went on a picnic with her family. They packed lots of food to eat. They sat on a blanket. It was a nice day. Susan had a great time.

http://www.kidslearningstation.com/beginner -listening/comprehension-picnic.asp

### Holiday

Jane went on holiday to the beach. She likes to play in the sand. Her brother likes to jump over waves. Her favorite thing to do is find sea shells.

**http://www.kidslearningstation.com/beginner-listening/comprehension-beach.asp**

### Shopping

A: I like that shirt.
B: So do I.
A: How much is it?
B: I don't know. The tag is missing.
A: Ask the clerk.
B: I will.
A: Oh, look. Here's another shirt just like it.
B: Does it have a price tag?
A: Yes, it does. It's only $20.
B: That's a great price.
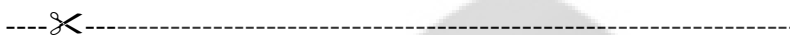A: I think I'll buy both of them.
B: You'd better try them on first.

**http://www.eslfast.com/easydialogs/ec/shop01.htm**

# Speaking Test

Instructions:  Work in pair as A and B, asking for the given personal information.

| A | B |
|---|---|
| 11 years | |
| Japan | |
| Pink | |
| Tom Yum Kung | |
| Swimming | |

Ask for: Age, Country, Color, Food, Sport

----✂--------------------------------------------------------------------

| A | B |
|---|---|
| | 12 years |
| | America |
| | Green |
| | Spaghetti |
| | Tennis |

Ask for: Age, Country, Color, Food, Sport

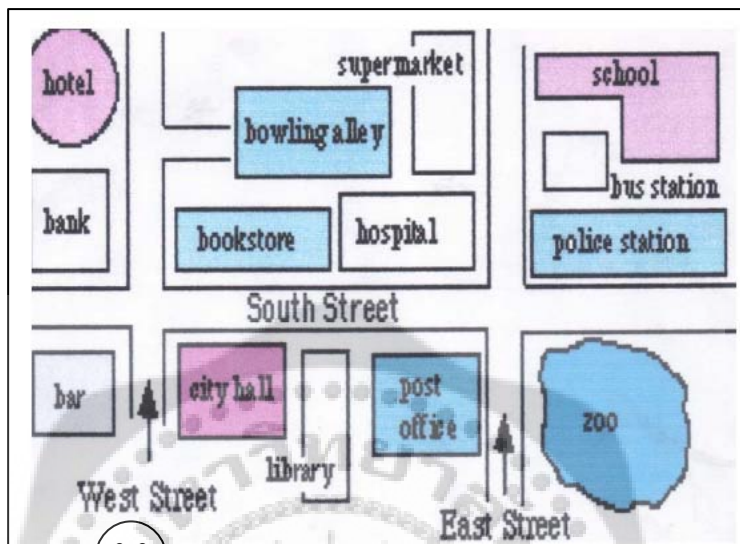Instructions:  Work in pair, ask your partner about things in their room. Draw the differences.

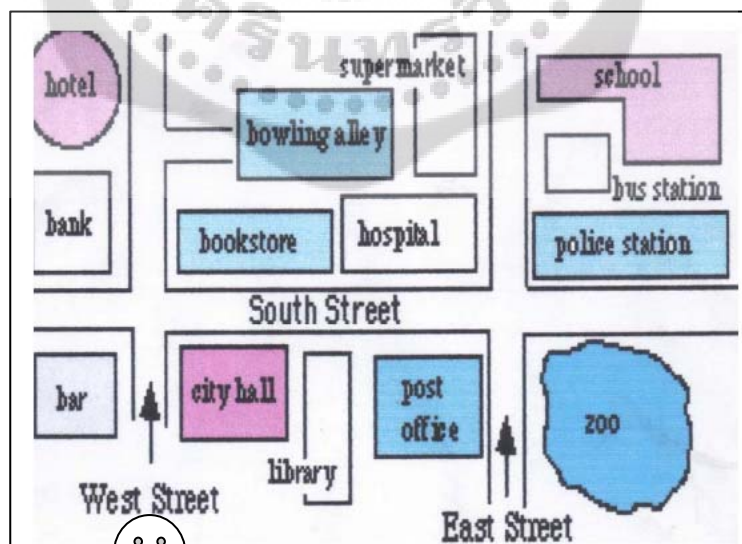

Ask for: horse, cat, ball



Ark for: shorts, teddy bear, doll

# Speaking Test

Instructions: Work in pair as A and B, asking and giving for the direction.



You are here.

**A: Want to go to the zoo.**

------------------------------------------------✂------------------------------------------------



You are here.

**B: Want to go to the school.**

# Rubric of Speaking Test

| | 5 | 4 | 3 | 2 | 1 |
|---|---|---|---|---|---|
| **Fluency** | Speaks effortless and consistently without pauses or hesitation; consistently communicates all ideas without difficulty | Speech is mostly smooth but with minimal pauses or hesitation; has slight difficulty in communicating all ideas | Speaks with some pauses and hesitation; is able to communicate some ideas with some difficulties | Students often hesitant and irregular sentences may be left uncompleted, but the students is able to continue | Is unable to speak or give only one word or very short utterance with a long pause; unable to communicate ideas |
| **Pronunciation** | Pronounces was very clear and easy to understand | Pronounces almost clearly without interfering comprehension | Students was slightly unclear with pronunciation at times, but generally is fair | Often pronounces with errors; difficult to understand; have to repeat frequently | Students was difficult to understand, quiet in speaking, unclear in pronunciation |
| **Vocabulary** | Rich, precise and impressive usage of vocabulary words learned in and beyond of class | Students utilized the words learned in class, in and accurate manner for the situation given | Has adequate vocabulary; minor errors do not interfere with communication | Has limited vocabulary; has difficulty in communicating | Has insufficient vocabulary resulting in comprehension breakdown |
| **Grammar** | Consistently uses correct grammatical structures | Rarely uses incorrect grammatical structure, minor errors do not interface with communication | User some incorrect grammatical structure. Some errors interfere with communication | Often uses incorrect grammatical structure; errors interfere with communication | Is unable to use grammatical structure to communicate correctly |
| **Communication Strategy** | Uses gestures appropriately | Tries to use gestures to help in speaking when having difficulty in using vocabulary | Tries to use gestures but they are inappropriate | Speaks rarely using gestures | Never uses gestures when speaking |

Adapted from Phisutthangkoon (2012), Phuphapet (2004)

# Grammar and Vocabulary Test

Instructions:  Choose the correct answer.

1. We…….. students.
    a.  is
    b.  am
    c.  are
    d.  -

5. She……a teacher.
    a. is
    b. am
    c. are
    d.  -



2. Where is the elephant?
    a. in the kitchen
    b. in the bedroom
    c. in the bathroom
    d. in the living room

6. What is he doing?
    a. He's sleeping.
    b. He's taking a bath.
    c. He's cooking.
    d. He's reading book.

3.  Where is the monkey?
    a. It's on the box.
    b. It's in the box.
    c. It's under the box.
    d. It's over the box.

7.  Where is the snake?
    a. It's on the rock.
    b. It's in the rock.
    c. It's under the rock.
    d. It's over the box.

4. 

Where is the buffalo?
    a.  On the monkey.
    b.   Over the elephant.
    c.  Between the elephant and the monkey.
    d.  Under the elephant.

8. Every morning, I have to ……….up
   at 6.00 O'clock.
       a. brush     b. take
       c. sleep     d. wake

9. She……….a shower at 6:30 O'clock every
   morning.
       a. take     b. takes
       c. took     c. taken

10. They ……… milk before bed every night.
      a. drink      b. drinks
      c. eat      d. eats

11. We can't play in the playground. ........it's raining.
      a. or      b. and
      c. because      d. so

12. Tom reads a lot of books. …….. he gets high score in the final tests.
      a. and      b. but
      c. or      d. so

13. I go to school …………. car.
      a. by      b. under
      c. in      d. on

14. Where can I buy some watermelons?
      a. police office  b. post office
      c. market      d. hospital

15. Pim:  I forget my dictionary. today?……………………
  Joy:    Yes. Here you are.

      a. Can I borrow yours?
      b. Could you read for me?
      c. I'll go to buy one.
      d. Please spell the word.

16.  Mana: Do you have rambutans?
    Fruit seller: Yes, How many do you want?
    a. No, thanks.
    b. Three, please.
    c. Yes, please.
    d. Two kilos, please.

17.
a. shirt
b. skirt
c. blouse
d. coat

18.
a. boots
b. slippers
c. shoes
d. pants

19.
a. dress
b. blouse
c. shirt
d. t-shirt

20.  How many members does ASEAN have?
    a. 7 countries
    b. 8 countries
    c. 9 countries  .
    d. 10 countries

21. What the weather like

a. It's a snowy day.
b. It's a sunny day.
c. It's a rainy day.
d. It's a cloudy day.

22.

Look at the picture.
What season is it?
a. Summer
b. Spring
c. Rainy
d. Winter

23.

Look at the picture.
What season is it?
a. Summer
b. Spring
c. Autumn
d. Winter

24.

Look at the picture.
What season is it?
a. Summer
b. Rainy
c. Autumn
d. Winter

25. This book………….mine.
    a. is not        b. are not
    c. am not        d. will not

26. We………. in Japan.
    a. is not        b are not
    c. am not        d. will not

27. Which festival is celebrated on
    25 December.
        a. Easter day
        c. Christmas day
        d. New year
        d. Valentine's day

28. …………is the traditional
    Thai New Year?
        a. Loi kratong's day
        b. Songkran's day
        c. $5^{th}$ December
        d. $12^{sd}$ August

Directions: Choose **_much_** or **_many_** to fill in the blank. (32-33)

32. How _____ pens are there on the table?
33. How _____ hairs do you have?

Directions: Match the flag with the nationality. (34 – 37)

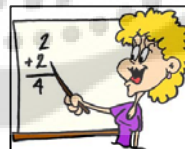35.             a. Malaysian

36.             b. Indonesian

37.             c. Vietnam

Directions: Complete the vocabulary and matching the word with picture.
              (38-40)

38. … o … i c …              •    

39. t … a c … … r              •    

40. d … n t … s …              •    

**Learning English through Multimedia-based Instruction Attitude Questionnaires**

**Directions: Check in the table below as you opinion.**

5 = Highest          4 = High          3 = Moderate

2 = Low          1 = Lowest

| Questions | 5 | 4 | 3 | 2 | 1 |
|---|---|---|---|---|---|
| 1. Learning through multimedia knowledgeable and enjoyable. การเรียนรู้ผ่านสื่อมัลติมีเดียเพิ่มพูนความรู้และสนุกสนาน | | | | | |
| 2. Does learning through multimedia help me improve my English ability? การเรียนผ่านสื่อมัลติมีเดียช่วยพัฒนาทักษะทางภาษาอังกฤษของฉัน | | | | | |
| 3. Do learning materials help me improve my grammar? การเรียนผ่านสื่อการเรียนช่วยพัฒนาไวยากรณ์ภาษาอังกฤษของฉัน | | | | | |
| 4. Does learning English through multimedia have many benefits for Thai students? การเรียนผ่านสื่อมัลติมีเดียมีประโยชน์ต่อนักเรียนไทย | | | | | |
| 5. Learning English through Multimedia-Based Instruction is amazing. การเรียนภาษาอังกฤษโดยใช้สื่อมัลติมีเดียน่าอัศจรรย์ | | | | | |
| 6. I like learning English through computer. ฉันชอบเรียนภาษาอังกฤษจากคอมพิวเตอร์ | | | | | |
| 7. Video clips and animations help us enjoy in learning English. วีดีโอคลิปและภาพเคลื่อนไหวทำให้ฉันสนุกในการเรียนภาษาอังกฤษ | | | | | |

| Questions | 5 | 4 | 3 | 2 | 1 |
|---|---|---|---|---|---|
| 8. I enjoy learning English through multimedia<br>ฉันสนุกกับการเรียนภาษาอังกฤษผ่านสื่อมัลติมีเดีย | | | | | |
| 9. Learning English through Multimedia-Based Instruction gives us the positive attitude towards the English subject.<br>เรียนภาษาอังกฤษผ่านสื่อมัลติมีเดียทำให้มีทัศนคติต่อวิชาภาษาอังกฤษดีขึ้น | | | | | |
| 10. I'm afraid people will laugh at me if I don't say thing right.<br>ฉันกลัวคนหัวเราะถ้าฉันพูดผิด | | | | | |
| 11. I think that I could learn better in English if I really put my mind to.<br>ฉันคิดว่าฉันสามารถเรียนภาษาอังกฤษได้ดีขึ้น ถ้าฉันใส่ใจการเรียน | | | | | |
| 12. I think multimedia is interesting.<br>ฉันคิดว่าสื่อมัลติมีเดียน่าสนใจ | | | | | |
| 13. The teaching of English Should start as early as the first grade in school.<br>ครูควรเริ่มสอนภาษาอังกฤษตั้งแต่เร็วที่สุดตั้งแต่ระดับเริ่มต้นในโรงเรียน | | | | | |
| 14. English music is more enjoyable than music in any other language.<br>เพลงสากลสนุกกว่าเพลงในภาษาอื่น | | | | | |
| 15. When I hear someone speaks English well, I wish I could speak like him.<br>เมื่อฉันได้ยินคนอื่นพูดภาษาอังกฤษได้ดี ฉันปรารถนาที่จะพูดได้อย่างเขา | | | | | |
| 16. I enjoy learning English through multimedia.<br>ฉันสนุกกับการเรียนภาษาอังกฤษผ่านสื่อมัลติมีเดีย | | | | | |

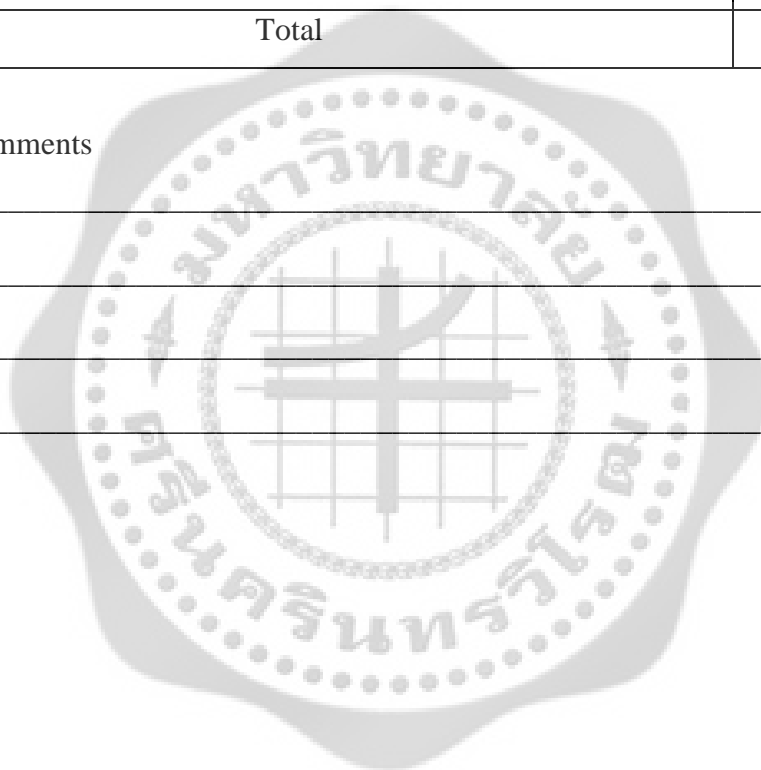| Questions | 5 | 4 | 3 | 2 | 1 |
|---|---|---|---|---|---|
| 17. The use of English in many careers helps in getting things done easily.<br><br>การใช้ภาษาอังกฤษในการประกอบอาชีพช่วยให้การทำงานง่ายขึ้น | | | | | |
| 18. The development of our country is possible mainly by educated people who know English well.<br><br>ประเทศจะพัฒนาได้โดยคนที่มีการศึกษาและสามารถใช้ภาษาอังกฤษได้ดี | | | | | |
| Total | | | | | |

Other comments

_____

_____

_____

_____

# Lesson Plan 4

**Lesson Topic:** Countries and Nationalities

**Level:** Grade 6

**Lesson Description:**

In this lesson, students will learn new vocabularies about countries and nationalities using PowerPoint Presentation (PPP).

**Lesson Rationale:**

1. This lesson will help students develop their listening and speaking skill through the PPP.

2. This lesson will help students practice asking and answering questions to review the contents of "Countries and Nationalities"

**Lesson Objectives**

1. After watching the PPP, students will be able to answer the questions from the given exercise at least six answers correctly.

2. Students will be able to ask and answer the questions to review the contents of "Verb to be at least 80 percent of grammar accuracy in each sentence.

**Alignment of the lesson with the curriculum:**

This lesson will align with the curriculum in the strands of English for communication, English for connection, and English for communities.

**Content Outline and activities**

- Unknown vocabularies from the PPP.

- Asking and answering the questions to review the content.

- Enjoy the PPP by repeating the vocabularies in the PPP.

**Total Time:** 150 minutes

**Period 1:** 50 minutes

**Learning activities:** (minutes)

**Presentation:**

1. Introduce the lesson by motivating students through showing the PPP on the projector. Teacher pause the projector then asking question "Where is she come from?" Waiting for students to answer.



**Practice:** (minutes)

2. Introduce new vocabularies set through the PPP, students practicing pronunciations from the PPP. Then teacher and class explain the meaning together. Teacher as a facilitator correct the mistakes or help students when they need.

3. The students are going to see the PPP to recognize the new vocabularies and learning the story about how different between country and nationality.

4. Teacher asks questions related to the PPP:

- Where is she/he come from?.

- What is her/his nationality?.

5. Then teacher asks questions related to students' experiences with questions "Where are you come from?" "What is your nationality?"

**Production:**

7. Give students an exercise "Worksheet 1.4" Let them do this exercise by ask and answer the questions in pair then write down on the worksheet.

**Use of Content Area Literacy Strategies:**

This lesson is about country and nationality. After the lesson students will know the different use of country and nationality's vocabularies correctly in each sentence. They can speak the correct sentences that they have learned to use for communicating with other people. The vocabulary words can be applied to and from social studies.

**Student Assessment Procedures:**

1. After giving an exercise, check the students' answers and give them scores in their worksheet.

2. When students ask and answer the questions in pairs, observe their participation and focus on the grammar accuracy that they use.

**Resources Needed:**

**For teacher:**

Tool – a PowerPoint presentation.

**For students:**

–

**Use of Instructional Technology:**

a visualizer, a projector, and a screen

**<u>Accommodations for students with special needs</u>:**

**Low motivation or passive students:**

For some low motivation or passive students, I will work in pair with him/her ask the questions, wait for a few seconds, and then call their names to answer my questions. Do like this again and again with other students sometimes to draw students' attention and make them be more active.

**Gifted students:**

For a gifted student, I will give him/her some more difficult tasks than other students; for example, I will give them a harder vocabulary or complicated questions.
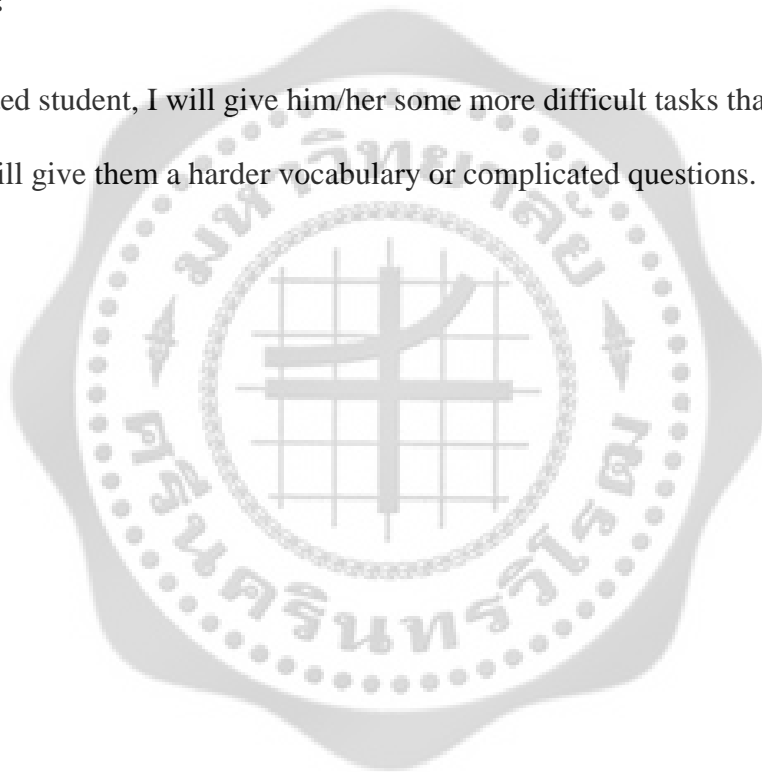
# Worksheet 1.4

Name................................................................Class........No.......

<u>คำสั่ง</u>: ให้นักเรียนจับคู่สนทนาโดยถามคำถามคู่ของตนแล้วเติมคำตอบที่

ถูกต้องลงในช่องว่าง

**A**                                                    **B**

                                    

1. She's from ....................                    1. She's from india. She's ..............

                                    

2. Where.....................                          2. She is ................................

She's from China.

**The Example of PowerPoint Presentation**

# Classroom environment

# Classroom environment

**Students doing classroom activities**





Students doing classroom activities