

TEACHERS' QUESTIONING TECHNIQUES AND
STUDENTS' CRITICAL THINKING SKILLS:
ENGLISH LANGUAGE CLASSROOM
IN THE THAI CONTEXT

By

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CHAPTER I

INTRODUCTION

Within our complex, overwhelming information knowledge-based society, as well as the world of change today, critical thinking is becoming an increasingly important and necessary skill for all citizens. Critical thinking is an individual's cognitive skill and reasonable and reflective thinking ability in forming judgment to analyze and evaluate facts and opinions, make inferences, interpret information, and solve problems (Chan, 1986; Duron & Waugh, 2006; Ennis, 1996; King, 1995; Norris & Ennis, 1989; Paul, 2005; Walker, 2003). Critical thinking, a vital component of our lives, is one of the most essential cognitive activities for human beings.

Critical thinking, first of all, can contribute to the development of our own awareness of the assumptions we have about ourselves and others. Semali (2004) maintains that when we think critically, we can make our own judgments, choices, and decisions, which enable us to be actively engaged in creating our personal and social worlds. Second, critical thinking helps people solve their problems more effectively. The process of critical thinking links causes and results, and therefore, assists in predicting the future, solving problems, or making decisions (Wongchareunsuk, 2001). Because critical thinking skill can influence individuals' ability to solve problems, it is

essential for students today. Students need to “develop and effectively apply critical thinking skills to their academic studies, to the complex problems that they will face, and to the critical choices they will be forced to make as a result of the information explosion and other rapid technological changes” (Oliver & Utermohlen, 1995, p. 1). Lastly, critical thinking is a necessary skill required in the workplace because it can help students deal with mental and spiritual questions, and it can be used to evaluate people, politics, and institutions, and to avoid social problems (Hatcher & Spencer, 2005).

Students today need the ability to think independently, to solve problems, and to deal with the changes and problems in their lives. The lack of critical thinking skills might affect not only students’ learning success but also their personal lives when they graduate, and enter the workforce (Nimkannon, 2007; Rfaner, 2006; The Conference Board, 2006).

In recent years, the development of critical thinking has become widely recognized as a high priority goal for several levels of education. It has seen an explosion of interest among educators, administrators, and teachers in various disciplines, including in the field of language teaching (Brown, 2004; King, 1995; McPeck, 1981, 1990; Paul, 2005; Penneycook, 1997; Rfaner, 2006; Walker, 2003).

Critical Thinking and Language Teaching

In the field of language teaching, critical thinking has been emphasized and implemented during the final decade of the 20th century (Day, 2003). Critical thinking in language learning is defined as a cognitive skill. It consists of two notions: self-reflecting about language learning and active, persistent, and careful reasoning (Dearn, 2003; Ennis, 1962; 1987; Oxford, 1990; Thadphoothon & Jones, 2002). According to Johnson and

Johnson (1994), critical language thinkers are individuals who can sort “sense from nonsense” (p. 54). Pennycook (1997) posits that language learners are considered critical thinkers when they make sense of the text or discourse. As Hymes (1974) posited, a critical language learner needs to be aware of the language as it is used within the speech community.

Today, most linguists agree that in an academic English program, the objectives of the curriculum should not be limited to a linguistics component alone, but also should include developing the art of critical thinking (Brown, 2004). Critical thinking also plays an important role in encouraging language learners to use the language to communicate appropriately in the society. In language teaching, the communicative approach emphasizes the use of language as a communication tool and hypothesizes that learners become proficient by using the language and not just by learning about the language, using the language, and knowing the language meanings (Bachman & Palmer, 2000). To become proficient in a language, learners need to use creative and critical thinking through the target language as well (Brown, 2004; Kabilan, 2000).

Critical Thinking and Language Teaching in Thailand

In the Thai context, English is taught as a foreign language. It plays an important role in developing the country. The advancement of information and technology and the adoption of the internet have resulted in a major change in business, education, science, and the technological development, all of which require high proficiency in English. English is used as the means to communicate, negotiate and execute transactions by participants when one partner can be a native speaker of English (Wiriyaichitra, 2002). With the importance of English as a world language, as well as the challenges of new

technology, and education reform by the new Thai Constitution, English education and the development for English language teaching and learning in Thailand are updated. The new English curriculum at all levels of education is in line with the 1999 National Educational Act, and the National Scheme on Education, published by the Office of the National Education Commission (ONEC), a policy maker of Education Reform in Thailand. The scheme introduces a strategic plan for the years 2002-2016 including three objectives: balancing human development, building a society of morality, wisdom and learning, and enhancing social development. In a series of targets related to these objectives, two are related to the summary of the problem for encouraging critical thinking in Thailand. These objectives state that “all Thais will have knowledge, critical thinking ability and a thirst for knowledge in science and technology as well as social and human sciences” (ONEC, 2002, p.18). Thus, based on the 1999 National Educational Act and the National Scheme on Education, the new English curriculum focuses on four concepts: culture, communication, connection, and communities. In addition, one of the most essential directions for English language teaching and learning in several levels of education in Thailand is developing language students’ critical thinking skills.

In Thailand higher education, there has been an attempt to revise English curricula. According to the 1996 and the more recent 2001 English curricula, the paradigm shifted from English as an elective to English as a compulsory subject. Based on the new policy on English instruction of Liberal Education (2000), students are required to learn at least 12 credits: six credits in general English, and six in English for academic or specific purposes.

According to the National Education Act (1999, 2002-2006), in the new English curriculum, there are three objectives in English courses. First, students will be able to use knowledge of English language in communication, understand the culture of native speakers, know the differences between Thai and the English language, be able to use English in studying other subjects, and be able to use English for lifelong learning and pleasure and to use English in their work. Second, students should acquire skills involving communication strategies, thinking skills, critical and creative thinking, self-evaluation, learning skills, knowledge seeking skills, technology skills, and collaborative working skills. Third, the students should have a positive attitude and appreciation for the English language and its culture. To achieve these objectives, the emphasis of teaching and learning process in the language classroom is placed on communicative language teaching approach, student-centered culture, and the development of critical thinking skills.

Statement of the Problem

In Thailand, critical thinking is a vital component in English language teaching (National Act, 2002-2006; Wiriyaichitra, 2002). Encouraging language learners to develop their systematic and critical thinking skills is becoming an essential issue in all levels of education (National Act, 2002-2006; Wiriyaichitra, 2002; Wongboonsin, 2007).

Despite recognition of critical thinking as an essential goal in every level of educational institutions in the Thai context, until now English language teaching in Thailand has been criticized for not equipping Thai students with sufficient language ability and critical thinking skills for the changing world (Wiriyaichitra, 2002). A number of studies demonstrate that students' thinking skills are not successfully promoted

(Chaisuriya, 2000; Nimkannon, 2007; Wallace, 2003). Students still lack critical thinking ability and today college graduates from schools and colleges come to work without basic thinking skills. Furthermore, these studies posit that students do not know how to think critically.

Cognitive theory proposed by Bloom's (1956) and Wu's (1993) taxonomy of questioning techniques would explain this under-development of critical thinking skills in terms of the missing element of teachers' use of higher level cognitive questions and questioning techniques in the classroom (Brown, 2004; Cotton, 1988; Tusi, 1995, 2000). According to Bloom's (1956) taxonomy of six developmental cognitive levels of learning, each level requires a different mental process or way of thinking. The ability to solve problems through critical thinking requires higher order thinking skills, which Bloom (1956) insists can be taught through higher level questioning techniques. Wu (1993) posits that his taxonomy of questioning techniques is an essential tool in encouraging students' interaction and thinking skills through five different questioning techniques: repetition, rephrasing, simplification, decomposition, and probing.

In the language classroom, the more opportunities that are given to students to generate responses, the more they can improve language ability, and interactive and critical thinking skills (Lynch, 1996). Students' responses in the language classroom enhance skills of critical thinking, the organizing, and reorganizing of information (Scarcellar & Oxford, 1992; Ulichny, 1996).

As educational theories have long called for the inclusion of critical thinking skills in the curriculum and higher cognitive learning ability can drive critical thinking skills (Bereiter & Scardamalia, 1987; Bloom, 1956; Cole & Williams, 1973;

Newman,1990), it is important and worthwhile to investigate the degree to which, and the ways in which, teachers use various cognitive level of questions to foster students' critical thinking skills, teachers' questioning techniques, and how students respond to questions of varying cognitive levels in the language classroom.

Purpose of the Study

Through the lens of Bloom's (1956) taxonomy of six developmental cognitive levels of learning and Wu (1993)'s taxonomy of questioning techniques, the purpose of this study was to investigate questions and questioning techniques Thai English teachers use to promote students' responses and encourage their critical thinking skills in the language classroom.

Research Questions

To investigate English teachers' questions and questioning techniques that promote students' responses and enhance their critical thinking skills, the following five research questions were developed:

1. What questions and questioning techniques do Thai English teachers use in the English classrooms? And, why?
2. What responses to questions and questioning techniques are evidenced by their students? And, why do students report that they do or do not respond?
3. To what degree and in what ways does cognitive theory explain the relationship of cognitive levels of students' responses to cognitive levels of teachers' questions?
4. What other realities about teachers' questions and questioning techniques, and students' responses are revealed?

5. How helpful is cognitive learning theory for explaining the phenomenon under review?

Theoretical Framework

In this study, two theoretical frameworks were employed to explain the development of students' critical thinking skills in the language classroom: Bloom's (1956) taxonomy of questions and Wu's (1993) taxonomy of questioning techniques.

Bloom's (1956) Taxonomy of Questions

According to Bloom (1956), critical thinking is viewed as cognitive skills that involve the development of intellectual skills and a process of intellectual judgment. Based on Bloom (1956), in intellectual or cognitive process, cognitive skills take information and data as an object and these data are encoded, transformed, organized, integrated, categorized, stored, and retrieved. Cognitive skills play a crucial role in the appropriate identification, discovery, encoding, and organizing of information. The cognitive process needs the recall or recognition of specific facts, procedural patterns, and concepts that serve in the development of intellectual abilities and skills. The other examples of the cognitive process are weighing and assessing our judgments, choosing methods of problem-solving, and judging whether one's skills are sufficient to the task.

Bloom (1956) claims that thinking is a constant re-examination of what we hold as truth or knowledge. Critical thinking may begin with an initial assumption we have made and then we discover problems or contradictions regarding our assumptions. Consequently, we will make inferences, reach tentative conclusions, and apply our cognitive skills to our own initial assumptions as solutions for solving problems. When

the problems have been solved successfully and appropriately, we will be successful and reach our goals.

In the teaching and learning process, a strictly cognitive process and critical thinking are recursive. Students perceive concepts and materials, question, gather data, evaluate, and re-define conclusions. To help develop students' critical thinking skills, in 1956 Benjamin Bloom created a taxonomy organizing the functions or the cognitive skills, which is concerned with the knowledge and understanding of facts. This taxonomy is a thinking hierarchy. Thinking and learning behaviors are classified from the simplest to the most complex. Based on Bloom's (1956) taxonomy, cognitive skills development and critical thinking can be encouraged by six levels of thinking hierarchy: knowledge, comprehension, application, analysis, synthesis and evaluation. This taxonomy is natural, there is successive relationship between each level, and this classification represents the natural way learners develop from one simple stage to the complex one (Brown, 2004). The first two levels, knowledge and comprehension, are convergent thinking in nature. The learning moves toward a common, pre-established concept determined by the text being studied or by the teacher. The last four stages application, analysis, synthesis, and evaluation are divergent thinking that differs or deviates from any pre-established concept. This kind of thinking can be generated by the learners, not the teachers.

Bloom's (1956) taxonomy of the cognitive domain is an important tool in organizing critical thinking skills. It has a very concrete structure that helps to foster the development of critical thinking skills in the classroom, so that students should be able to apply critical thinking to any disciplines and most importantly, to their own personal

lives. Utilization of this taxonomy should encourage students to be critical thinkers who are capable of establishing clarity and accuracy, assessing relevance, and of demonstrating the ability to think with depth, reach, and logic: skills that are fundamental to critical thinking (Brown, 2004; Rawadieh, 1998). Brown (2004) asserts that the most important aspect of Bloom's taxonomy is that it teaches and encourages thinkers to be critical of their own thinking. It reassures awareness and assessment of the thinking process itself, and creates metacognition. He further maintains that if students do not have the awareness and self assessment, they can not be critical thinkers.

Wu's (1993) Taxonomy of Questioning Techniques

In the language classroom, questioning techniques help develop students' critical thinking skills by encouraging them to respond to teachers' questions (King, 1995, Wu, 1993). They provide the students with opportunities to listen to questions again or by making complex and difficult questions more understandable (Wu, 1993). Based on Wu's (1993) taxonomy, five types of questioning techniques are frequently used in the language classroom: repetition, rephrasing, simplification, decomposition, and probing. Repetition is asking an original question again. Rephrasing is reforming an original question in another way, especially to make the forms of questions easier for students. Simplification is a kind of rephrasing by means of which the content of the questions is simplified. It also can be done by making the scope of the answers more specific which helps students understand the question better and therefore can answer the question. Decomposition is the way that teachers use to break down an original question into smaller parts to encourage students to respond to the questions. Probing is the way in soliciting more information from students. It requires students to expand and develop

their responses by making it clearer, more accurate, or more original with supporting rationale or factual information.

Wu (1993) reveals that these questioning techniques were employed frequently by the teachers in the language classroom. This is consistent with Ekasingh (1991), Ellis (1994), Morrow (1997), Richards (1990), Thomas (1987), and Thongmark (2002) who found that the teachers used rephrasing, repetition, simplification, decomposition, and probing when the students could not exercise their critical thinking and respond to the teachers' questions. Based on the high frequency of occurrence of these questioning techniques in the language classroom and based on the frequently used as a questioning techniques framework by the researchers, Wu's (1993) taxonomy of questioning strategies is considered an appropriate framework for classifying the teachers' questioning techniques in the language classroom for this study.

In language teaching, according to Bloom (1956), Byrne (1989), King (1995), Mehan (1979), Sinclair and Couthard (1975), and Wu (1993), language classroom interaction such as teachers' questioning is essential because it requires students to exercise cognitive skills to practice the use of the target language. Questioning leads to a sequence of acts, such as an initiation act, a response act, and an evaluation act, which are considered very important processes in encouraging students to apply their cognitive skills to encode, transform, organize, integrate, categorize, store, and retrieve data to formulate their own responses. As questions are crucial in language teaching and learning process and in fostering students' interactive and critical thinking skills, it is worthwhile to investigate the teachers' use of questions varying cognitive levels and

questioning techniques to encourage students' critical thinking skills in the language classroom.

Procedures

In this study, a qualitative research design was employed to investigate teachers' questions and questioning techniques, as well as students' critical thinking skills. The questions and questioning techniques the teachers used in the language classroom, and the students' critical thinking skills were explored by means of classroom interaction analysis.

Data Needs

The data needed in this study were verbal interactions in the classroom consisting of teachers' questions and questioning techniques, and students' responses to these techniques. Needed as well were the students' rationales for exercising or not exercising their critical thinking skills and teachers' rationales for the use of various levels of cognitive questions and questioning techniques in the language classroom. In this study, questions are interrogative, imperative or declarative form of utterances addressed by teachers to elicit verbal responses from students.

Questioning techniques refer to statements which follow initial questions and which teachers use to elicit verbal responses from students after those initial questions fail to elicit students' responses. They can occur in two circumstances under which a difference in the teachers' use of wait-time can be noticed. First, they may be used immediately after an initial question. This occurs when teachers consider that their students cannot respond to their initial question. In this case, teachers use a questioning strategy without giving students wait-time for responding to the initial question. Second,

questioning strategies may be used after teachers give students wait-time for responding to their initial question but still do not get responses.

Students' responses are utterances immediately following teachers' questions and questioning techniques. Once the teacher speaks again or other students speak, the response is considered to have ended.

Data Sources

The participants of this study consisted of two Thai English teachers and their two classes of first year English language majors. The teachers graduated with a Master's degree in English, Teaching English or Applied Linguistics. They had at least three years experience teaching English as a foreign language, and they taught regular classes of English Listening-Speaking in the academic year 2008 at the Faculty of Liberal Arts and Management Sciences, Prince of Songkla University, Surathani Campus.

The two classes of students taught by these two teachers were from the Faculty of Liberal Arts and Management Sciences. About 40 students were in each class, making up the approximate total of 80 students. They took the English Listening-Speaking course in the first semester of academic year 2008. These first year students were selected as participants of the study because they were English language majors studying in the Language, Communication, and Business program, approved in the year 2007. The fall semester of academic year 2008 was the first year of recruiting students and the semester selected for data collection. As this study aimed to explore questions and questioning techniques Thai English teachers used to promote students' critical thinking skills in the language classroom, it was therefore appropriate for the study to be conducted with language major students. More importantly, as the Language, Communication, and

Business program was first operated in the year 2007, the data gathered helped depict where the first entry students' critical thinking skills were and teachers' use of teaching methods, classroom activities, and materials to promote students' critical thinking skills in the classrooms. This information can be important baseline descriptive data of classroom activities and the development of students' critical thinking, which, in turn, is essential for conducting a reduplicative study with these groups of students when they are in the second, third, or fourth year to examine the continuum of their critical thinking skills and their cognitive growth.

Another data source was teaching materials taken from a Touchstone textbook. The Touchstone textbook used for teaching the English Listening-Speaking course was selected based on its integrated language ability and learning skills. For instance, it is interaction-based, it personalizes the learning experience, it promotes active and inductive learning, and it encourage students to be independent language learners.

The documents the teachers used in the classroom such as teachers' lesson plans, students' assignments, handouts, worksheets, unit quizzes, and mid-term examination papers were reviewed to authenticate the findings from the other instruments (Hitchcock & Hughes, 1995; Mason, 1996).

Data Collection Strategies

Five data collection strategies were employed in this study: classroom observation, questionnaire, focus group interview, faculty individual interview, and document review.

Classroom observations. The class for the observation was English Listening-Speaking, a foundation English course that all first year students at Thai Southern

University (TSU) were required to study. Six lessons from three units during the first three months of the first semester of the academic year 2008 at the Faculty of Liberal Arts and Management Sciences, TSU were videotaped to capture for subsequent review classroom lessons containing teachers' questions, questioning techniques, and students' responses. Units one to three from a "Touchstone" textbook were used for regular teaching of the English Listening-Speaking course in the academic year 2008.

In this textbook, one unit consists of four lessons: A, B, C, and D. Lesson A presents the main grammar structure of the unit with some relevant new vocabulary. It also includes a "speaking naturally" pronunciation exercise, a "talk about it" group discussion, and a "listening" task. Lesson B is concerned with the main vocabulary of the unit and builds on grammatical structures taught in lesson A. This lesson provides students a "speaking naturally" pronunciation exercise, a "talk about it" group discussion, and a "listening" task as well. As for Lesson C, it teaches a "conversation strategy" and some common expressions useful in conversation, followed by a listening activity encouraging this conversational language. In this lesson, grammar taught in the previous lessons, which the students have already been taught, is also recycled. Lesson D focuses on reading and writing activities to practice students reading and writing skills. This lesson also provides additional listening and speaking activities.

In this study, lessons A and D of units one to three were selected for the videotape recoding because they offered a lot of opportunities for the analysis of classroom interaction and the reflection of students' critical thinking in the language classroom. (see Appendix C for teaching materials and teaching procedures of these lessons). After the observations, the 12 videotaped lessons were transcribed for teachers' questions and

questioning techniques used in the language classroom. Then, the transcriptions of teachers' questions and questioning techniques were reanalyzed to identify questions and questioning techniques which failed to elicit students' responses.

Questionnaire. The questionnaire adapted from Thongmark (2002) was used to help document the rationale for students' using or not using critical thinking skills in the classroom (see Appendix D). According to Thongmark (2002), in developing the questionnaire, the researcher first organized an informal talk with her students who were not participants of her study to get preliminary information about students' rationales for their inability to respond to teachers' questions in the classroom. On the basis of the obtained preliminary information, the researcher designed the questionnaire into two main parts. The first part contained three constructs explaining why the students were silent after the teachers' questions. Construct one was that the students understood the teacher's questions, but they could not answer them. As for construct two, the students understood the teacher's questions, but they did not answer them. Construct three stated that the students did not understand the teacher's questions and then they could not answer them. After the last explanation of each construct, there was one open-ended item that tapped reasons other than given in the list.

As for the second part of the questionnaire, it contained one open-ended item, inviting the students to give comments and suggestions they had with the teachers' questioning and their responding to the teachers' questions. The questionnaire was translated into Thai, the national language of Thailand, to accommodate for student-participants with inadequate command of the English language and it was then piloted

with a group of students to obtain the clarity of all items pertaining to each of the three contributes.

Focus group interviews. Focus group interviews were organized for the two classes of students to probe the questions to support the questionnaires to help document the rationale for students' exercise or not of their critical thinking skills in the classroom. The interviews limited to a few numbers of respondents, were conducted with a group of eight students who frequently responded to teachers' questions and another group of eight students who rarely answered the teachers' questions. These semi-structured interviews helped me obtain in-depth information from the participants (Merriam, 1998; Mertens, 1998, 2005). The interview items in this study were translated into Thai (the national language of Thailand) to accommodate for student-participants with inadequate command of the English language.

Five semi-structured interview questions were employed in the student focus group interviews. They were used immediately after the questionnaire. Before use, these questions were piloted with a group of students who were not participants of the study. In this study, the following five questions were used for the interview.

1. What do you like best about learning in the language classroom?
2. Why did you respond/not respond to your teacher's questions?
3. What would have made it more likely that you would/could respond?
4. Do questions in class help you learn? Why?
5. What is the most effective teaching method or classroom activity that teachers use to encourage your verbal responses in the language classroom?

Faculty interviews. Individual interviews were designed for teachers to elicit information relating to the concepts of critical thinking perceived by teachers and to investigate the rationale of the teachers' uses of various cognitive levels of questions and questioning techniques in the classroom. These interviews also aimed to gather in-depth information about teachers' knowledge and understanding of teaching critical thinking and factors affecting the development of students' critical thinking skills in the language classroom. Five semi-structured interview questions were employed in the individual interviews. These questions were used immediately after the observations. Before use, these questions were piloted with a few English teachers who were not participants of the study. There were five questions for these the interviews.

1. To your understanding, what are the concepts, components and process of critical thinking?
2. How does critical thinking affect language learning?
3. According to your teaching experiences, how has critical thinking affected your instruction and students' learning of language?
4. How is critical thinking hindered in the language classroom?
5. How does critical thinking foster language acquisition?

Document review. Documentation review is useful in research because it allows the researcher to get comprehensive and historical information already existed (Mertens, 2005). Marshall and Rossman (1999) also proposes that “the review of document is unobtrusive method, rich in portraying the values and beliefs of participants in the setting” (p. 116) and “it can be conducted without disturbing the setting in any way” (p. 177). In this study, documents used in the classrooms during the observation sessions

such as teachers' lesson plans, textbook, students' assignments, handouts, worksheets, tests, and mid-term examination papers were reviewed.

Data Analysis

Qualitative analysis was employed to categorize cognitive levels of questions and questioning techniques, and to analyze the students' responses (Coombes, 2001; Marshall & Rossman, 1999; Mertens, 2005; Richards, 2003).

Teachers' questions and questioning techniques. The theoretical frameworks used to categorize teachers' questions and questioning techniques were Bloom's (1956) taxonomy of cognitive levels of learning and Wu (1993)'s taxonomy of questioning techniques. According to Bloom's (1956) taxonomy, questions were classified into six categories: knowledge, comprehension, application, analysis, synthesis, and evaluation. In Wu (1993)'s taxonomy of questioning techniques, questioning techniques were classified into five categories: repetition, rephrasing, simplification, decomposition and probing.

Students' critical thinking through their responses to teachers' questions and questioning techniques. The students' responses to the teachers' questions and questioning techniques were analyzed by considering in their responses. The analysis of responses was divided in the six levels based on Bloom's (1956) questions classification.

This study investigated the teachers' use of questions and the students' responses which encourage students to use the target language and to think critically. The students' responses to the teachers' questions and questioning techniques in Thai were not be taken into account because responding to teacher's questions and questioning techniques in Thai did not require students to produce the answers in English which did not enhance

students' practice using the target language in the classroom. Additionally, repetition in responses was not counted because the students did not provide new information.

Students' responses to questionnaire. The data obtained from the first part of the questionnaire was concerned with the rationales why students were silent after the teachers' questions. These rationales were tallied for frequency and then ranked on their frequency of occurrence.

The data obtained from the second part of the questionnaire were related to the students' comments about teachers' questioning and their responding to the teachers' questions. The comments were grouped on the basis of the commonality in responses and then ranked on their frequency of occurrence.

Students' responses to focus group interviews. The students' responses, comments and suggestions were categorized into three main themes. The first theme was related to students' understanding of the concepts and the need of critical thinking skills. The second theme was about students' perceptions pertaining to their teachers' techniques of questioning, and the third was concerned with students' rationales for exercising or not exercising their critical thinking skills in the language classroom. After coding, the students' responses, comments, and suggestions were sorted for recurring themes.

Teachers' responses to individual interviews. The teachers' responses, comments and suggestions were grouped in three general categories. The first category was related to teachers' concepts of critical thinking, including its components and process. The second was concerned with teaching critical thinking, and the third was about factors affecting the development of students' critical thinking skills in the language classroom.

After grouping, the teachers' responses, comments and suggestions were sorted for recurring themes or concepts.

Significance of the Study

This study is significant in the field of education in several ways, especially in three main areas. The first area is in research, relating to developing students' critical thinking skills. The second area is theory, testing theories used in this study. As for the third area, practice, the study might be a useful and practical guide for language teachers and their understanding of teaching critical thinking. The importance of the study in each area is discussed respectively.

Research

This study helped in understanding the degree to and the ways in which teachers' use questions of varying cognitive levels and encourage students' critical thinking skills in the language classroom. It also helps fill the gap in the literature because of the lack of research on this particular field-second language acquisition, especially in Thailand.

Theory

This study is beneficial for other researchers by clarifying the usefulness and applications of employing Bloom's (1956) taxonomy of questions and Wu's (1993) taxonomy of questioning techniques in analyzing the teacher's questioning in the language classroom discourse. The use of taxonomy of Bloom (1956) and Wu (1993) in a study of students' critical thinking skills in the language classroom in tertiary levels and in different contexts can be helpful for other language researchers to adapt and employ these taxonomies in their own context more effectively.

Practice

The significance of this research is twofold. First, it can depict classroom interaction in term of the levels of cognitive questions and questioning techniques the teacher employs to enhance students' critical thinking skills, the degree to which each type of them promotes students' thinking, and factors prohibit students' ability to think critically. Second, this study could raise teachers' awareness of the role of questions and questioning techniques in fostering critical thinking, as well as provide them with useful implications for the use of higher-cognitive-level questions and questioning techniques to help develop students' critical thinking skills. This will further help teachers understand how students develop their critical thinking skills.

Thus, knowing how to use questions and questioning techniques to encourage Thai language learners think independently and critically in the language classroom is very important in helping develop Thai language learners' critical thinking skills. So that the students can be better equipped with critical thinking ability and they will be prepared to be critical thinkers for Thai society.

Summary

The purpose of this study was to examine the degree to and the ways in which Thai English teachers use different cognitive levels of questions and questioning techniques to promote responses and critical thinking skills from students majoring in Languages, Communication and Business. To explore this phenomenon, Bloom's (1956) taxonomy of questions and Wu's (1993) taxonomy of questioning techniques served as a tool to analyze teachers' questions and questioning techniques.

Reporting

Chapter II reviews the literature related to the study. Chapter III delineates the qualitative research methodology used to conduct the study. Chapter IV presents the data collected in the language classrooms at Thai Southern University at Suratthani, Thailand. Chapter V provides an analysis and interpretation of the data. Chapter VI presents a summary of findings, conclusions, implications, recommendations for future research, and final statement.

CHAPTER II

REVIEW OF LITERATURE

As we enter the 21st century, significant and fundamental change is coming from all directions. Many changes, the influences and the advancement of information and technology, and the complex society require the needs to prepare students to live in this rapidly changing world successfully (Anderson, 1996; Paul, Elder & Bartell, 1995; Rfaner, 2006; Schneider, 2002; Sotillo, 1991). One important way in preparing students to live in the world today successfully is equipping them with critical thinking ability and skills (Dreher, Smith, & Mikulecky, 2000; Hatcher & Spencer, 2005; Lipman, 1991; Oliver & Utermohlen, 1995; Schneider, 2002).

Critical thinking is an important learning and life skill. It will enable students to make sense of an overwhelming abundance of information and make skillful and responsible choices in life. This will further enable them to solve problems effectively in their real life situations. Critical thinking is also considered an essential tool for democracy society (Beyer, 1995: Bond, 1988), and for independent and life long learning, the learning goals in educational arena today. In response to the need, developing students' critical thinking skills has been an increasing emphasis in higher education.

This chapter reviews the literature related to the study. The first section presents the concepts, the components and process of critical thinking. The second section focuses on teaching critical thinking in language learning and the roles of teachers' questioning in fostering students' critical thinking in the language classroom. This section also reviews research on classroom questioning and critical thinking in the field of language teaching. The last section presents theoretical guides, including Bloom's (1956) cognitive theory and taxonomy of questions and Wu's (1993) taxonomy of questioning techniques that can guide our understanding of teaching critical thinking.

The Concepts of Critical Thinking, its Components and Process

Critical thinking has been recognized as essential in all levels of education for several years. As the same time, teaching critical thinking in some ways remains a mystery (Atkinson, 1997; Chaisuriya, 2000; Collins, 1991; Hongladarom, 2000; Nimkannon, 2007; Rfaner, 2006; Wallace, 2003). However, Wallace (2003) insist that one important factor to successful teaching of critical thinking is the teachers' understanding of the concept of critical thinking. Thus, it is necessary to conceptualize the concept of critical thinking.

What is Critical Thinking?

Critical thinking has been used and defined by many different terms, including creativity, decision making, reasoning, rational thinking, reflective thinking, evaluative thinking, and problem solving. Over the years, there are numerous definitions of critical thinking. For instance, Dewey (1933) defines critical thinking as reflective thinking which involves the mental process of the act of inquiry and searching to resolve doubt,

hesitation, perplexity, or mental difficulty. He also proposes that critical thinking is a fundamental goal of all levels of education.

According to Gilbert (1960), critical thinking is defined as a group of skills employed in problem-solving which is composed of steps of identifying problems, gathering information, organizing and analyzing information and then making conclusions based on valuable evidence. This is consistent with Facione (1990), and Lewis and Smith (1993) who describes critical thinking as skills which require higher-order thinking for problem solving. This thinking skill also involves various mental activities and comes along with decision making and creative thinking.

McPeck (1981) also posits that “critical thinking does not merely refer to the assessment of statements, but includes the thought process involved in problem solving and active engagement in certain activities” (p. 13). In McPeck’s view, critical thinking requires the judicious use of mode of doing thing to produce a more satisfactory solution or insight to solve the problems at hand. He further asserts that critical thinking in each discipline involves knowledge and skills in a particular field. A critical thinker in one discipline might not be a critical thinker in another discipline. As McPeck (1990) noted, critical thinking involves a combination of willingness to engage in “commenting, and criticizing the pattern of reasoning peculiar to the given discipline” (p. 17), knowledge-based and critical skills in intimate relation. Kurfiss (1988) has similar view with McPeck (1981) and contends that critical thinking is an investigation which aims to explore a situation, phenomenon, questions or problems to make a hypothesis and make conclusion about it that integrates all available information and can therefore be convincingly justified. In relation to the same issue, Halpern (1996) defines critical

thinking as “the use of those cognitive skills and strategies that increase the probability of a desired outcome” (p. 5). He insists that when we are critical thinkers, we can evaluate the outcome of our thought process and judge of our decisions and of how well our problems have been solved.

As for Ennis (1996), critical thinking is referred to as reasonable and reflective thinking emphasizing deciding what to believe or do. In this thinking process, creative acts are needed in formulating hypotheses, having alternative ways of viewing a problem, making related questions, possible finding solutions, and planning for investigating something. Paul (1990) views critical thinking as self-directed thinking related to the perfections of thinking appropriate to particular mode or domain of thought. In Paul’s view, critical thinking occurs in two forms: weak sense of critical thinking and strong sense of critical thinking. Weak sense critical thinking occurs to serve the interests of a particular individual or group, to the exclusion of other relevant persons and group, it is sophisticated. Strong sense critical thinking takes into account the interests of diverse persons or groups, it is fair-minded.

Paul and Scriven (2004) provided the definition of critical thinking as the disciplined intellectual process of active and skillful in conceptualizing, applying, analyzing, synthesizing, and evaluating information we gathered and generate from our observation, experience, reflection, reasoning, or communication, as a guide to belief and action.

Based on Duron, Limbach, and Waugh (2006), critical thinking has been defined as the ability to analyze and evaluate information. This is inline with Bloom (1956) and Fraenkel (1980) who view critical thinking as higher order of thinking for evaluating

concepts and materials. According to them, critical thinking is the heart of evaluation which is described as a process of determining the worth of things, and the comparison among them as well. Bloom (1956) and Fraenkel (1980) claim that critical thinking will happen when we try to make an intelligent judgment by using a particular criterion to compare two or more alternatives, and judge whether which alternative is better. This is in line with Beyer (1995) who views critical thinking as “the process of making judgments” (p. 8). This means that reaching judgment involves determining the degree to which a thing meets particular criteria.

As the literature reviewed above, Dewey (1933), Ennis (1989), and Paul (1990) define critical thinking by emphasizing its form and function, while others such as McPeck (1981), Beyer (1995) view critical thinking as the skills and ability to provide reasonable judgments. However, in this study, critical thinking is conceptualized as the use of cognitive skills and reasonable and reflective thinking ability to respond to questions, concepts and materials and to form judgment to analyze, evaluate facts and opinions, make inferences, interpret information, and solve problems (Bloom, 1956; Dewey, 1933; Ennis, 1996; Halpern, 1996). As the literature reviewed, only knowing the concept of critical thinking may be insufficient to develop students’ critical thinking, thus we as teachers should realize the importance of the components and process of critical thinking as well.

What are the Major Components and Processes of Critical Thinking?

The components and processes of critical thinking have been proposed differently by researchers. According to Scriven and Paul (2004), critical thinking has two components: a set of skills in generating and processing information and belief and the

intellectual habit based on commitment of using information and belief generating and processing skills to guide behavior. From the point of view of Keeley and Browne (1994), the important component of critical thinking is an awareness of a set of interrelated critical questions, the ability and willingness to ask and answer them at appropriate times.

According to James and Constance (2007), critical thinking is composed of seven components: perception, assumptions, emotion, language, argument, fallacy, logic and problem solving. Perception is the way we receive and translate our experience. It is a significant filtering system because it defines how we think. Assumptions are central to critical thinking. They make us comfortable with present beliefs and alternatives. Emotion is a part of every thing we do and think, it is impossible to live without emotion. Critical thinkers will not ignore or deny emotion, instead they accept and manage it effectively.

Language is a vital component because thinking can not be separated from it. There are three primary purposes of language: inform, persuade, and explain. Arguments, especially the sound ones are the goal of critical thinking. They are used to persuade that something is or is not true or should or should not be done. They contain three basic elements: issues, reasons, and conclusions. Fallacy is reasoning which does not meet criteria for a sound argument. It is incorrect patterns of reasoning. Logic is comprised of two methods of reasoning: deductive and inductive. Deductive is the process of perceive facts, certainty, syllogisms, validity, truth of sound arguments and conclusions. Inductive is the logic thinking that diverse facts, probability, generalizations, hypotheses, and analogies. Logic problems solving is the way to understand the problems and strategies

and process applied to solve problems. James and Constance (2007) propose that six cognitive skills are important requirements for effective critical thinking: interpretation, analysis, evaluation, inference, explanation, and self-regulation.

Critical thinking skills in the context of teaching English. As for critical thinking skills in the context of teaching English, Day (2003) provides the scopes of critical thinking in three characteristics: differentiation between facts and opinion, examination of assumptions and flexibility and open-mindedness in looking explanations, causes, and identification of solutions to problems.

According to Davidson (1998), Hatch (1983) and Dong (2006) for the purpose of English teaching, critical thinking skills require the specific linguistic and cognitive skills and thinking strategies. To accomplish a variety of academic tasks in teaching and learning process, it requires these major skills: information processing, inquiry, reasoning, creative thinking, and evaluation skills, all of which are vital for academic success. Carroll (1986) posits that these skills are considered to be the most relevant to teaching English as a second language to non-native speakers.

Information-processing skills are the ways to introduce ideas, which is important to remember to refer back to them in some significant way afterwards, or to provide relevant examples for each, and or for some. To process information, one needs skills such as gathering relevant information, analyzing a text (*text* refers to any form of language input, such as: a story, an article, an audio or video clip, a statement, an advertisement), interpreting a text, summarizing and paraphrasing. Gathering relevant information is researching skills in finding information, assembling the data in a meaningful way and then determining how to apply it to accomplish the goals. Analyzing

a text means analyzing different forms of language input, such as: a story, an article, an audio or video clip, and a statement, an advertisement. To analyze these language inputs, students need skills such as prioritizing, classifying, sequencing, comparing and contrasting. Interpretative language inputs are assigning meaning to them. Summarizing and paraphrasing is making abstracting key points of language inputs and putting them into students' own words.

Inquiry skills are skills in asking and answering relevant and purposeful questions to generate thought and to sustain conversations. Some examples of questions which could be used to encourage students thought and to sustain a dialogue include *Why do you think that? Can you give me another reason? What do you mean by that, and how do you know that is true?*

Reasoning skills are expressing an opinion and providing solid support to justify a response logically and one withstanding scrutiny. To acquire reasoning skills, students need three sub-skills. The first is drawing inferences to reach a conclusion. The second skill is solving problems in making decisions. Students need to question the logic of a response, reason logically to determine if the proposed solution is a good one. The third is using clear and precise language. Precise and clear language reveal appropriate word choice and structuring an argument with discourse markers for indicating opinions, reasons, agreement, disagreement, and elaboration in simple and clear way.

Creative thinking skills are students' generating new ideas and making intelligent guesses, including making predictions, considering consequences of an action or policy, or examining an issue from different points of view.

Evaluation skills refer to the way students evaluate the quality of a process or product according to specific criteria, to distinguish false from accurate facts and opinion, and to examine biases, prejudice and stereotypes in a text or introspectively.

As for critical thinking process, based on James and Constance (2007), critical thinking consists of three steps. The first step is becoming aware that assumptions exist. The second step is concerned with making assumptions explicit. As for the last step, it is assessing accuracy, which requires us to make sense of the assumptions, consider whether these assumptions fit reality as we understand and live it, and the conditions these assumptions seem to hold true and false.

Based on the components and process of critical thinking discussed above, there is something in common, for example, the perception and process in understanding facts and information and the awareness in making sense of the information and assumptions. The above definitions, components, and processes of critical thinking imply that one needs to have critical thinking ability because it is important for living in the complicated society today for our inundation with information and the open communication of multi-media facets that we have to be able to gauge the trustworthiness and creditable of the perspectives and supposed facts reaching us. That critical thinking will help us evaluate the logic and reasonableness of information. And that critical thinking will provide us gateway into the conversations themselves. That is to be educated we must model the critical and sophisticated filtering of information to evaluate what is worthy of response or not.

Thus, it is necessary for students today to be trained and equipped with critical thinking skills, and it should be taught in all levels of education. Unrau (2000) proposes

that developing students' ability to think critically is important in school. No matter what the field, critical thinking ability will enable students to construct sound arguments and hypotheses, and evaluate conclusions. Unrau (2000) further states that "critical thinking needs to pervade every aspect of the curriculum in every subject area" (p. 13). As noted by Paul (1985), Welsh and Paul (1988) and Schneider (2002), equipping students with the skills and strategies to think critically is responsibility of teachers and educators in all disciplines, language teaching included (Bataneh & Zghoul, 2006; Brown, 2004; Day, 2003). In the field of language teaching, according to Dong (2006), although English language learners might be limited in ability to express their opinions and ideas in English, this does not mean that they do not have critical thinking skills and critical thinking skills are considered very necessary for language learners. This is consistent with Cummins (1994), Dong (2004), and Genesee (1994) who place the emphasis on the need for language teachers to teach and develop English language learners' critical thinking skills, along with language and literacy ability.

Teaching Critical Thinking in the Language Learning

In language teaching and learning, Dong (2006) asserts that "Learning a language is closely connected to learning to think critically in specific subject matter..." (p. 23). By giving instructions focusing on students' needs and meaningfully linking cognitive and linguistic elements in the learning process, language teachers can help language learners develop the critical thinking skills they need (Dong, 2006). When the emphasis of developing critical thinking is placed in language learning, the teaching paradigm shifted from traditional teaching approaches emphasizing information transmission, passive learning, accent on memory, practice, and rote learning to active learning and

learning to think critically to meet the changing society need (Klimoviene, Urboniene, & Barzdzikiene, 2006; Thadphoothon & Jones, 2007). So, what kinds of classroom activities and approaches of active learning affect the enhancement of students' critical thinking in the language learning?

In the language classroom, there are many different classroom activities and teaching approaches useful for promoting language students' critical thinking skills. Stapleton (2002) and Wade (1995) propose that students' critical thinking skills can be enhanced through writing assignments. With written assignments, teachers can teach students to think critically by requiring students to make arguments relating to the topics, issues, and problems relevant to their previous knowledge and experiences. In addition to written assignments, Bataineh and Zghoul (2006) suggest reading activities that also help inspire students' critical thinking skills. They further assert that the reading classroom is the logical place to begin teaching students to think because the process of making judgment, evaluating relevance and adequacy of what is read in reading activities are powerful in encouraging students to think critically. However, apart from these useful teaching activities, one of the most effective and productive ways in equipping language students with critical thinking skills in the language classroom is through teachers' questioning (Bloom, 1956; Cotton, 1988; Elder & Paul, 1997; King, 1995).

Bloom (1956), Cotton (1988), Elder and Paul (1997, and King (1995) propose that one highly effective way in eliciting classroom interaction and that has greatly influenced the development of students' critical thinking is the use of higher-cognitive-level questions and questioning techniques by the teachers in the classroom. Asking questions and using the answers to understand the world around us is what drives critical

thinking. Correspondingly, Duron, Limbach, and Waugh (2006) indicate that questioning techniques can also be used to foster the thinking ability of students and to initiate critical thinking, the activities and assessment must be target the higher levels of Bloom's (1956) taxonomy. When students are involved in active learning, for example, dialog, debate, writing, problem solving, as well as higher-order thinking, such as analysis, synthesis and evaluation, the encouragement of critical thinking can be accomplished in any content areas. (Duron et al, 2006).

Clasen and Bonk (1990) posit that although there are many strategies that can influence students thinking, teacher questions have the greatest impact. As Elder and Paul (1997) mentioned, developing students' critical thinking depends on the types of questions the teachers ask, and also the cognitive level of questions and the art of questioning. These are essential to the art of learning and developing students' critical thinking skills. Since teachers' questioning is an important tool in promoting students' critical thinking skills, it is necessary to illustrate the roles of teachers' questioning in fostering language students' critical thinking skills in the language classroom.

Roles of Teachers' Questioning in Fostering Language Students'

Critical Thinking Skills in the Language Classroom

The importance of teachers' questioning in the classroom has received a great deal of attention from teachers and educators in all disciplines for several years. According to Stevens (1912), questions are an essential instructional tool in the teaching process, they can be used to enhance students' inquiry and get the students involved in the learning process and experience. Correspondingly, Dewey (1933) maintains that in essence questioning is the core of teaching. The effectiveness of teaching is closely

intertwined with the efficient use of teachers' questions. In developing students' critical thinking in all disciplines at all levels of education, questions are believed to play an important role (Godfrey, 2001). Along the same line, Freire (1970, 1973) points out that producing critical and creative language learners is not an easy task, but it can be achieved by engaging the pedagogy of teachers' questioning. As Limbach and Waugh (2005) noted, one way to increase the emphasis on critical thinking is to ask questions that can stimulate interaction between teacher and learners and challenge the learners to define his or her position and this will encourage students to think critically.

In the language classroom, questions are also considered an effective mode of teaching in various ways. For instance, teachers can ask questions to arouse students' curiosity, focus their attention on the lesson, maintain their interests, motivate students to investigate and learn new knowledge, and test the students' knowledge and understanding of what they have learned.

Barners (1969), Brualdi (1998), Morgan and Saxton (1991) agree that teachers can engage students in the learning process and gain their participation in the lessons. When the students participate in the lessons or classroom activities, the teachers can encourage students to think critically by asking the questions requiring students to formulate and express their own ideas and opinions on the basis of the previous knowledge they have learned or their real experiences. According to Johnson (1995), many of the questions the teachers use in the language classroom are designed to encourage the students to get involved in active learning through the practice of using the target language through interaction. This practice offers language learners the opportunities to perform their cognitive skills when they process information and follow

up new inputs such as new vocabulary and grammatical structures to which they have been exposed during lessons and to formulate their own ideas and apply them in different contexts. This practice also provides the students with opportunities to think critically when they modify, adjust, evaluate, and make decisions in their language production. The more opportunities for students to interact, make judgments, decisions or evaluation, the better they can expand their current language capacity, and improve reasoning and critical thinking skills (Long, 1983; Pica, 1996; Swain, 1985).

However, in teaching and developing students' critical thinking skills, not all questions will stimulate students' higher-order thinking (Beyer, 1997). Based on Clasen and Bonk (1990) and Graves, Juel, and Graves (2004), the level of student thinking is directly related to the level of questions the teachers asked and the degree to which students are asked to engage in higher-order thinking. Teachers need to ask higher-order questions. King (1995) also asserts that to encourage students' critical thinking skills and their cognitive growth, asking challenging and higher cognitive level questions is effective strategy. Similarly, Pascarella and Terenzini (2005) posit that "disposition to think critically involves, among other traits, such factors as the inclination to ask challenging questions, and follow the reason and evidence...encourage students' critical thinking skills and ability to solve problems" (p. 157). This is consistent with Bloom (1956) who proposes that the ability to solve problems through critical thinking requires higher order thinking skills, and it can be taught through higher level questioning techniques. In relation to this issue, based on Beyer (1997) and Unara (2000), the students' cognitive performance and critical thinking development are tied to teachers' asking thoughtful questions that encourage students to engage in analysis, problem

solving and inquiry rather than using lower-order questions requiring simple recall of previous knowledge.

Based on the above review, it seems that low-cognitive level questions could not help in enriching students' critical thinking, whereas high-cognitive level questions have a great positive effect on the enhancement of students' higher-order thinking.

According to Bloom (1956), Ornstein (1995), and Arends (1994), high cognitive-level questions or thought questions are those requiring the students' interpretation, application, analysis, synthesis or evaluation of subject matter. These questions will go beyond memory and factual information and require students' greater effort and time to think critically about cause and effect relationships to find the effective solutions for the problems in the complex situations. Higher cognitive-level questions are also called divergent questions (Cross, 1991; Freiberg & Driscoll, 1992), open questions, "w" "h"-questions (Kearsley, 1976), and referential questions (Long & Sato, 1983).

Low cognitive-level questions or factual questions, on the other hand, are those concerning knowledge of subject matter or the recall of facts and specifics. These questions require lower cognitive process such as memorizing facts and information, summarizing information, or paraphrasing. Low cognitive-level questions are synonymous with convergent questions, closed questions, "yes-no" questions, and display questions (Cross, 1991; Freiberg & Driscoll, 1992; Kearsley, 1976; Long & Sato, 1983).

In language teaching, Talebinezahd (2003) states that teachers can encourage language students' critical thinking skills by asking "w" "h"-questions which require students to think critically and use more complex language to respond to teachers'

questions, as opposed to posing questions that require the students' recall and recognition of previously learned knowledge, specific facts and information or questions that can be simply answered with "yes or no" or with stated specific facts or topics.

As Talebinezahd (2003) postulated, questions in the language classroom should be referential questions because real language circles around referents or world language in order to create messages and therefore is not based on form but meaning. Thus, in a language classroom, teachers can use higher cognitive-level questions to elicit meaningful students' interaction and reactions to signal that the students are permissible to think critically in expressing their ideas and opinions and to ask questions as well.

Richards and Rodgers (2001) note that "language learning is also believed to be motivating when students are focusing on something other than language, such as ideas, issues, and opinions" (p. 210). To encourage language students' higher thinking skills and make students active participants in the language acquisition and capable of gaining new knowledge, asking higher order questions to give students' opportunities to express their ideas and distinguish facts from opinions will help develop students' critical thinking skills (Cam Le, 2005; Richards & Rodgers ,2001).

As reviewed earlier, cognitive-level of teachers' questions influence the development of language students' critical thinking skills and their cognitive growth, it is essential to review and study the previous research on teachers' questioning in enriching students' critical thinking skills in the field of language teaching.

Research on Classroom Questioning and Critical Thinking in the Field of Language Teaching

In the language classroom, there has been numerous research studies that have undergone into the emphasis on teachers' use of questions for promoting classroom interaction and encouraging students' critical thinking skills. These research studies can be grouped into three main focuses: the frequency of different types of questions the teachers asked in the classroom, the cognitive level of questions, and the correlation between cognitive level of teachers' questions and the cognitive level of students' responses.

Research on Types of Teachers' Questions

Long and Sato (1983) compared the conversations of six teachers in ESL classrooms of beginning adult learners with the speech of thirty-six native speakers (NS) in informal conversations outside the classroom with non-native speakers (NNS). The findings revealed that compared with outside the classroom display questions, questions that have students display their knowledge were predominant inside the classroom. This is consistent with Tsui (1985) who examined verbal interaction pattern in ESL classroom of a non-native teacher and eighth grade students in a Chinese-medium school and a native teacher and eighth grade students in English-medium school in Hong Kong by analyzing the recording of their interaction in a comprehension reading lesson. Another similarity is the findings by Pica and Long (1986) who investigated recorded speech of 10 ESL teachers with informal NS/NNS recorded conversations made outside the classroom. In this study, it was found that in the classroom interaction between NS-NNS,

display questions were more common than referential questions, and the proportion of display questions to referential questions is higher inside the classroom than outside it.

In addition to these research studies, Thongmark (2002) investigated teachers' questions and students' responses in Foundation English classes in the university level in the Thai context. This research focuses on types of questions and questioning strategies that teachers employed in the English classrooms. The researcher observed the eight videotaped Foundation English classes taught by the four Thai English teachers and their four classes of the first year students. The results of the study showed that display questions were the most frequently used by the teachers and that they elicited the greatest number of responses and words per responses from students. As for questioning strategies, repetition was dominated and it elicited the greatest number of students' responses. However, it was found that simplification elicited the greater number of words per response. In this similar context, Chinkumtornwong (1985), Ekasingh (1991), Suasongsilp (1990), and Thamaraksa (1997) studied the forms and functions of teachers' questions in English classes in the university level. The findings of these research revealed that the teacher asked more display questions than other types of questions. The key factor that made the students unable to answer the teachers' questions is the students' not understanding of key vocabulary in the questions, the lack of eye-contact and inappropriate wait-time. Nevertheless, these studies did not give the explanations as to how asking more display questions had an impact on the students' responses and which questioning strategies encourage the students to answer the teacher's questions in the classroom.

Research on the Cognitive Level of Teachers' Questions

There have been a number of studies conducted to examine the cognitive level of teachers' questions in the language classroom. For instance, Nunan and Lamb (1996) investigated teachers' use of questions and found in their study that in language education teachers always ask the questions in the same ways, and most of the questions the teachers ask are low-cognitive level questions that are considered not beneficial in encouraging students' higher order thinking skills. This confirms Hussin's (2006) study who conducted a qualitative study to investigate dimensions of teachers' questioning in the language classroom in Malaysia. This study closely looked at the levels of questions that teachers posed to their students during lessons, teachers' conscious knowledge and beliefs about questioning, and students' perceptions of questions asked by their teachers. It involved seven English language teachers and two intact classes of five Science students. The findings of the study revealed that the majority of questions posed by EFL and science-as-content-taught-in-English classes were low-level and factual, and these questions were not designed to encourage learners' critical thinking. In this study, the three teachers asked a total of 782 questions consisting of academic, non-academic, and pseudo-questions in 16 observation sessions. Sixty-seven percent of the total questions asked were in the academic category. The majority of the academic questions were low-level (87%) and the remaining questions (13%) were high-level. In the low-level category, questions at the factual level (63%) outnumbered questions at the empirical level (37%). This pattern of questioning was repeated with the high-level category in which questions at the productive level (69%) outnumbered questions at the evaluative level (31%). Hussin (2006) further maintains that there was a mismatch between national

curriculum and policy which emphasize helping learners become critical thinkers as a long-term goal of education, while teachers seem concerned with the short term goal.

Tan (2007) examined classroom teachers' questioning behavior and its impacts on students' development in the Chinese context. In this study, nine university English classes were observed, six classes were English major students and another three were non-English major. The observation took place through six videotaped and three live lessons. The focus group discussions with students and semi-structured interviews with the nine English teachers were also organized. Four teachers had three year experience of tertiary teaching. Two were middle-aged with more than ten years' teaching, and three other were veterans with rich teaching experiences. In this study, it was found that many of the questions the teachers asked were lower cognitive level questions, 87% of the total. Most of the students' responses (85%) were in chorus or by the teacher nomination, while only 15% of responses were answered by individual student. The findings also revealed that the purposes of teachers' questioning were to check text comprehension, get students to focus on the texts, enhance and protect teacher's and students' confidences and academic reputations, maintain classroom discipline, create teacher authority, and to gain students' respect and acceptance. Additionally, the results of the study showed that teachers' questioning behavior was likely to have negative potential impact on the students.

Research on the Correlation between Cognitive Level of Teachers' Questions and the Cognitive Level of Students' Responses

Cole and Williams (1973) conducted a study to investigate the correspondence between cognitive level of questions the teacher poses in the classroom and the cognitive

level, length, and syntactic complexity of students' responses at the elementary school level. It was found that there was a strong positive correlation between these three variables, and it is likely that posing higher level questions can stimulate higher cognitive level responses with more syntactic complexity. This finding is similar to the results of the study conducted by Arnold, Atwood and Rogers (1973) who concluded that there was correlation between the cognitive level of teachers' questions and students' responses and that asking higher cognitive level questions is a valid strategy in encouraging students' cognitive growth. This also confirms Suzuki's (2000) study that investigated the relationship between input, interaction and learners' production with a focus on form, function and topic of teacher questions. The findings revealed that referential questions, personal topics and longer wait-time encouraged students' longer language production; whereas display questions, impersonal topics and shorter wait-time resulted in shorter learner production.

In addition, Godfrey (2001) investigated the extent and degree English for speakers of other language (ESOL) and mainstream teachers use questions to promote students' critical skills. This study put the emphasis on cognitive level questions, wait-time behavior, use of comprehension checks, confirmation checks, and clarification requests, as well as the length, syntactic complexity and cognitive level of students' responses. The results of this study revealed that responses in higher-cognitive level questions were significantly longer and more complex syntactically in both ESOL and mainstream classes.

However, there have been numerous studies conducted to point out that there is not correlation of students' higher level thinking and higher cognitive level of teachers'

questions. For example, Wu (1993) studied the relationship between question types used by the teachers and students' responses, students' attitude toward the use of English and patterns of interaction of the four teachers in EFL classrooms in Hong Kong. In this study, it was found that the teachers posed more referential and closed questions than display and open questions and referential questions and open questions did not encourage a greater number and word of responses from the students than display and closed questions. The students' responses to referential and open questions are restricted rather than elaborated. In relation to this issue, the findings of the study by Long and Crookes (1984) revealed that there was no difference in the average syntactic complexity of the referential and display questions.

Based on the above review, the major findings can be summarized that in most studies, display questions were the most frequently used by the teachers in the language classrooms. However, the dominance of referential questions was also found in some studies (Brock, 1986; Wu, 1993). Besides, in some contexts referential questions elicited longer, more syntactically complex answers from the students, while they did not in others. In term of the cognitive level of questions, the teachers asked lower cognitive level questions far more frequently than higher order thinking questions. It was found in some research that there was correlation between the cognitive level of teachers' questions and the cognitive level of students' responses. However, this was not always true in all cases where the responses of higher cognitive level questions were significantly longer, and more syntactic complexity than the responses of lower cognitive level questions (Long & Crookes, 1984; Suzuki, 2000).

Thus, as the literature reviewed, it can be concluded that although the research was conducted in the same context, it was found that different studies revealed different findings. More importantly, lower cognitive level questions were used far more frequently than higher order thinking questions.

According to the research reviewed above, it was also found that there is a relatively small number of studies on teachers' questioning emphasizing the cognitive level of questions and students' critical thinking skills, included those in the Thai context, and unfortunately the previous studies did not explain how different types and cognitive-levels of questions may have an impact on the quality of responses of language learners and their cognitive development. Thus, it is necessary to further study Thai English teachers' use of questions to enrich Thai language students' critical thinking skills in the language classroom in the Thai context, emphasizing the cognitive-levels of teachers' questions and the cognitive-level of students' responses in particular.

Based on Surjosuseno and Watts (1999), and Thongmark (2002), to examine the cognitive level of teachers' questions to encourage students' critical thinking skills in the language classroom, Bloom's (1956) cognitive theory and his taxonomy of questions and Wu's (1993) taxonomy of questioning techniques are essential and useful tools. Thus, Bloom's cognitive theory and his taxonomy of questions and Wu's (1993) taxonomy of questioning techniques are employed as a theoretical frame work of the study and they will be reviewed in the following section.

Theoretical Frameworks of the Study

Bloom's (1956) Cognitive Theory and Taxonomy of Questions

Bloom's taxonomy was created by Benjamin Bloom in 1956. It has been used in various ways in education. As originally designed by Bloom (1956), the taxonomy was an attempt to establish a sequential and cumulative hierarchy depicting the stages of learning moving from the most elementary to the most complex. It consists of six hierarchical and cumulative levels of cognitive process; knowledge, comprehension, application, analysis, synthesis, and evaluation.

Knowledge. It is the lowest level of cognitive process and a prerequisite for all other higher levels. In this level, questions are asked to require students' ability to remember and recall knowledge, concepts, and materials previously learned. The knowledge level of questions involves the recall of specifics and universals, the recall of methods and processes, or the recall of a pattern, structure, or setting.

Comprehension. This level of Bloom's taxonomy requires students to go beyond knowledge by understanding what they have learned. With comprehension the students must not only have knowledge, but must also understand what they know (Bloom, 1956). To answer this type of questions correctly, students are required to interpret the facts and understand the meaning of information and comprehend the way it applies in a specific situation. Some of the key verbs to use in asking comprehensive questions are: describe, rephrase, relate and explain.

Application. With application, the next higher level of cognitive process, students are encouraged to be able to apply knowledge they have learned and gained in class to various situations. Teachers have always recognized that a student does not really

understand an idea or what they have learned unless they can apply that idea, principle, or knowledge in new problem situations. In other words, students must be able to use their knowledge in new situations. Application questions can be asked in verbal directives such as: solve, choose, determine, employ, interpret, demonstrate and relate.

Analysis. In this level, students must be able to break down or separate comprehended knowledge into parts and applied it in different situations. So, in the classroom, analysis questions will require students to go beyond knowledge and application for analyzing their problems. Verbs usually associated with the analysis level are: analyze why, support, categorize, classify and put in order.

Synthesis. Another higher cognitive level which requires the creative combination of knowledge analyzed from several topics to create something which previously did not exist. Synthesis is putting together of elements and parts so as to form a whole, working with elements, parts and combining them in a way as to constitute a pattern or structure not clearly there before (Bloom, 1956). With synthesis questions, students must be able to put all the parts together into a whole. They must use their own ideas, background and experiences in synthesizing process. The synthesis objective can be appraised by questions using verbs such as design, create, construct, develop, devise and plan.

Evaluation. It is the highest level which is defined as the making of judgments about the value, for some purpose, of ideas, experience, solutions, methods, and materials. The judgment, may be either quantitative or qualitative and the criteria may be either those determined by the students or those which are given to them, involves the use of criteria as well as standards for appraising the extent to which particulars are accurate, and effective (Bloom, 1956). In Bloom's taxonomy of educational objectives,

evaluation is placed as the highest category of objectives because it requires some competence in all the previous categories - knowledge, comprehension, application, analysis and synthesis. Evaluation encourages students to make applied judgments about something they know, and have analyzed, synthesized, on the basis of criteria which can be made explicit to give their viewpoint. There will be no correct answer. Verbs used in the evaluation objective are judge, evaluate, criticize, choose, estimate, predict and argue.

Since 1956, sixty years ago, Benjamin Bloom presented his taxonomy as a basis for planning educational objectives, teaching-learning activities and assessment items. His taxonomy has been used in various ways in education. It is useful in planning learning objectives, questions and assessment and in providing guidelines of teaching and learning activities in the classroom to improve students' thinking skills and their cognitive growth.

In the language art education, several studies have undergone the analysis of cognitive levels of questions the language teachers used in the language classroom by employing Bloom' cognitive taxonomy. For example, Janice (1991) studied questions and responses patterns in second language leaning classrooms in Indonesia. Teachers' questions and students' responses were analyzed via adapted Bloom's (1956) taxonomy of questions. It is evident from the results of the study that classroom interaction was marked by lower-level teacher questioning and rote echoic responses. The data also showed that several teachers followed a general pattern which started with low level questioning as a review and introduction to new materials, gradually higher level questioning as the materials were explained, and a repetition of low level questions for the lesson review. Janice (1991) maintains that using adapted Bloom's (1956) taxonomy

of questions revealed an in-depth analysis of the cognitive levels of questioning in the classroom.

In addition to this study, Surjosuseno and Watts (1999) employed Bloom's taxonomy to classify the cognitive levels for critical reading in English as a Foreign Language (EFL) classes. They concluded that Bloom's Taxonomy, when modified to suit the needs of the particular context, can be particularly useful as a tool for planning to teach critical reading in EFL classes. All six processes are useful in developing learners' critical reading and thinking abilities in EFL since analysis, synthesis and evaluation processes are founded on knowledge, comprehension and application processes and each type of process is interdependent in relation to the others. They further maintain that this taxonomy correctly highlights the complexity of critical thinking and critical reading processes and provides a framework which encourages EFL teachers to plan a variety of learning activities which encourage students' critical thinking and reading skills.

Sanchez (1999) explored language interactions occurred within literature circles and how might this affect the oral language development of English learners by using Bloom's (1956) taxonomy. It was found that the types of language interactions that occurred within literature circles vary cognitively with regard to Bloom's Taxonomy. All six thinking levels occurred during the two day observation with the Synthesis level gaining the most number of responses. The second largest number of responses was at the Comprehension level, followed by the Application level and then the Knowledge level. The Analysis and Evaluation thinking levels represented the lowest number of responses.

As the literature reviewed above, Bloom's (1956) cognitive theory and taxonomy of questions are essential tools in organizing and analyzing critical thinking skills in

language teaching (Brown, 2004; Rawadieh, 1998; Surjosuseno & Watts, 1999). Kloss (1988) posits that this taxonomy is appropriate framework for analyzing and testing for students' levels of cognitive growth and knowledge achievement. The teachers who want to improve students' thinking skills and their questioning whether for the tests or class discussions will discover that constructing them based on Bloom's model will make their tasks much easier. In so doing, they will mix questions in all cognitive levels to perform the necessary critical thinking to answer (Kloss, 1988).

In the classroom, the assessment of the degree of knowledge and critical thinking skills acquired by a student is a difficult task. The language instructors must determine the level of knowledge and thinking ability they desire the student to obtain in a course. The Bloom taxonomy model will assist an instructor in encouraging students to learn and it provides a framework to which the instructor can relate desired goals and levels of learning and an understanding of how to test for a degree of success in achieving learning goals of these levels of learning.

Contemporary Perspectives on Bloom's (1956) Taxonomy

Bloom's (1956) taxonomy of questions is considered a useful tool in analyzing students' critical thinking, cognitive levels of learning and questioning. It is widely used in various disciplines at several levels of education (Gegen, 2006; Rawadieh, 1998) including the field of language teaching (Janice, 1991; Sanchez, 1999; Surjosuseno & Watts, 1999).

Despite Bloom's (1956) taxonomy has been widely used in setting learning objectives and in organizing critical thinking skills, inevitably, criticism on this taxonomy has been made by other researchers and educators. Paul (1993), for example, postulates

that Bloom's (1956) taxonomy is impossible to be value neutral as Bloom attempted. Paul (1993) and Furst (1994) claim that this taxonomy cannot be value neutral because it cannot avoid using terms which implicitly or explicitly convey value judgments. They further maintain that since human behavior always changes as does the value of all education, in daily life human beings always form and use value judgments. Being value neutral is incompatible with the values presupposed in critical thinking education.

Additionally, Paul asserts that the term "recall" and "knowledge" in Bloom's (1956) taxonomy is confusing. Paul states that obtaining knowledge involves thought and hence learners cannot recall knowledge without understanding the knowledge they have learned. In Paul's view, achieving knowledge always assumes at least minimal comprehension, application, analysis, synthesis and evaluation. This position is supported by Newman (1993) who argues that knowledge cannot be developed before it is comprehended. He further adds that teachers should not only provide knowledge but also shows students the way how to comprehend, apply, synthesize, and evaluate it.

Another critique on Bloom's (1956) taxonomy is placed on hierarchical levels of thinking and cognitive process. Mazano and Kendall (2007) and Paul (1993) posit that Bloom's (1956) taxonomy represents the authors' belief in a sequential, hierarchical link between each level which fails to acknowledge the interdependence of the levels. Further, Paul (1993) argues that the distinctions in cognitive levels are important, there is not necessarily a sequential, hierarchical link between the levels since "the categories themselves are not independent but interdependent" (p. 375). Paul suggests that it is unnecessary for teachers to use the order of questions in Bloom's cognitive levels because these levels are blurred. This is in line with Anderson and Sosniak (1994) who also

suggests that it is not necessary to refer to levels of complexity since students' inability to evaluate may not mean that the problem is difficult, but merely that learners are unfamiliar with the particular topic or process. Thus, in the classroom teachers can jump from asking questions in the knowledge level to the application level and back to the comprehension level as provided in the following sequence of questions: What is critical thinking? (knowledge level), In what way do you use and apply critical thinking in your daily life? (application level), and to your understanding, what is the meaning of critical thinking? (comprehension level).

Based on the discussion on the critiques of Bloom's (1956) taxonomy, with respect to the distinction between recall and knowledge, Surjosuseno and Watts (1999) posit that Bloom intended to imply that knowledge could be recalled once acquired using any process, and that this acquired knowledge is of a specific type including the facts, figures and data which act as the foundation for higher order thinking. Thus, related to this issue, Surjosuseno and Watts (1999) disagreed with Paul's (1993) disposition.

With respect to the sequential, hierarchical link between each level of Bloom's Taxonomy, Surjosuseno and Watts argue that although it is not necessary to be sequential and hierarchical in the learning processes, however, when the various processes are used in planning objectives, questions and assessment, the range of learning processes is extended from the lower-level cognition tasks to include higher-level cognition. Thus, according to Surjosuseno and Watts, Bloom's (1956) taxonomy provides a helpful framework for setting goals, objectives, planning, questions, activities and assessment and as a tool to ensure appropriate coverage of a variety of types of cognitive demands made on students. This is consistent with Janice (1991), Karlin (1980), Kloss (1988),

Sanchez (1999), and Singh et al (1997) who insist that Bloom's (1956) taxonomy remains a useful tool in teaching in EFL classes. This taxonomy correctly highlights the complexity of critical thinking process and it is considered a framework which helps encourage teachers to set a variety of learning objectives and plan classroom activities which encourage students' critical thinking skills.

With the usefulness of Bloom's (1956) taxonomy in analyzing students' critical thinking and cognitive levels of learning, it is worthwhile to employ Bloom's taxonomy as a framework to investigate teachers' use of various cognitive level questions to enrich language students' critical thinking skills in the language classroom.

Wu's (1993) taxonomy of questioning techniques

In the language classroom setting, where foreign language learners should have a great number of tools for initiating and maintaining language, encouraging the learners to respond to teachers' questions can provide stepping stones for developing their interactive ability and skills. It also fosters cooperation, promotes critical thinking, allows them to become creative and innovative, and enhances their sense of competence and self worth (Brown, 2004). In the classroom, questions are used for different purposes in an attempt to elicit responses from students to sustain classroom interaction and promote their thinking skills. However, it was found that not all questions achieve the purposes in eliciting responses from the students. Thus, when teachers' questions failed to encourage students to provide responses, teachers have to use other questioning techniques to encourage students to respond to teachers' questions by providing them with opportunities to hear the questions again or by making difficult and complex questions more understandable (Cole & Chan 1987; Ekasingh, 1991; Wu, 1993).

Based on Wu's (1993) taxonomy of questioning techniques, five questioning strategies are suggested to help students answer teachers' questions in the language classroom: repetition, rephrasing, decomposition, simplification and probing.

Repetition. It is asking an original question again. The teacher repeats the question in the hope of enabling students to respond to that question.

Rephrasing. It is reforming an original question in another way. When there is no response from students, the teacher asks the question again in different words and structures to make the forms of questions easier for students.

Simplification. It may be regarded as a kind of rephrasing by means of which the content of the questions is simplified. The teacher can simplify a situation by making the scope of the answers more specific which helps students understand the question better and thus can answer the question.

Decomposition. It refers to the strategy teachers use to break down an original question into smaller parts to encourage students to respond to the question.

Probing. It is the strategy for soliciting more information from students. Its purpose is to encourage students to develop the quality of their responses. It requires students to expand on and develop a minimally adequate response by making it clearer, more accurate, or more original with supporting rationale or factual information.

In the language classroom, there is a considerable number of questioning techniques for helping students to respond to teachers' questions and elicit their thinking skills. Some are provided in language teaching handbooks. For example, Cole and Chan (1987) propose six questioning techniques: pausing, prompting, repeating, rephrasing, changing level of cognitive demand or question switching, and providing additional

information. Apart from Cole and Chan (1987), Ellis (1994), Stevick (1988), Richards (1990), and Thomas (1991) suggest five questioning techniques, namely repetition, rephrasing, simplification, decomposition, and probing. As noted by Ekasing (1991), rephrasing, repetition, simplification and questions switching were frequently used by the teachers. Morrow (1997) also points out repetition is essential questioning technique and it was used more often in the language classroom.

Based on the above literature review, it can be seen that among questioning techniques provided in the language teaching handbooks, that the teachers employed in the classroom and that proposed by Wu (1993), two of which, such as repetition and rephrasing have the same functions. Besides, of all questioning strategies, repetition, rephrasing, decomposition, simplification and probing were frequently found in research and in the teaching handbooks. These questioning are covered and clearly defined in Wu's (1993) taxonomy of questioning techniques. Thongmark (2002) used Wu's (1993) taxonomy of questioning techniques to analyze teachers' questioning techniques in her study of teachers' questions and students' responses in English classes in the Thai context, and found that Wu's (1993) taxonomy of questioning techniques directly addressed roles of questioning strategies in the study of classroom interaction, teachers' questions and questioning strategies employed in the language classroom. Therefore, Wu's (1993) taxonomy of questioning techniques is considered appropriate in analyzing teachers' questioning techniques in the language classroom in this study.

Summary

The literature reviewed in this study has revealed that various cognitive levels of questions elicited different cognitive process of critical thinking. Higher order questions

are considered important for encouraging students to think critically in the classroom. The significance of using Bloom's (1956) taxonomy of questions and Wu's questioning techniques as theoretical frameworks in this study lends credence to research calling for developing students' critical thinking skills in the language classroom. These frameworks provide a conceptual analysis of what cognitive levels of questions and which questioning techniques influence the development of language students' critical thinking skills and their cognitive growth.

CHAPTER III

METHODOLOGY

The primary purpose of this study was to explore the questions and questioning techniques used by Thai English teachers to promote students' responses and their critical thinking skills in the English language classrooms. To obtain the data, various collection strategies including classroom observations, questionnaires, individual interviews, focus group interviews, and document analysis were employed to provide rich and in-depth descriptive information and insight about these human phenomena, human interaction, and human discourse.

In the field of language teaching, qualitative research methods have been widely accepted and frequently used since the research focus has shifted from exploring the experience of experience to the essential meaning of experience (Burns, 1996; Peacock, 1998; Richards, 2003). One of the main reasons for the recent growth of qualitative research in teaching English for speakers of other language (TESOL) is the idea of getting close to practice, to getting a first hand-sense of what actually goes on in the classroom (Richards, 2003). Richards also proposes that qualitative research design is appropriate in the field of language teaching because it explores the complexities and conundrums of the immensely complicated social world that we experience, and qualitative data can provide valuable information and insight. Another profound

strength of qualitative research is its transformative potential for the researcher. In qualitative inquiry, investigation relies on engagement with the lived experience, and the place of the researcher in the research process itself is an important notion of inquiry and discovery.

According to Richards (2003), there are seven core strategies in qualitative research that are relevant to TESOL: ethnography, grounded theory, phenomenology, case study, life history, action research, and conversation analysis. Of these seven types of qualitative research in TESOL, an explanatory case study was chosen.

Yin (1994) has defined an explanatory case study as one that asks how and why questions about a contemporary set of events or phenomena in which the researcher has little or no control over those events or phenomenon. Yin (2003) posits that the unique strength of a case study is its ability to deal with a full variety of evidence including documents, artifacts, interviews, and observations. According to Merriam (1988), case studies provide insights into the phenomenon under study by emphasizing description and interpretation within a bounded context and that, “a case study can test or build theory, incorporate random or purposive sampling, and include quantitative and qualitative data” (p. 2).

Researcher’s Roles in the Study

In qualitative research, Fitzpatrick, Sanders, and Worthen (2004) and Patton (2002) posit that the researcher plays an important role, primarily that of a data collector, analyst, and interpreter of data. As the researcher of the study, I entered into the lived experience of teacher and student participants, decided what to observe in their teaching and learning processes, which questions to ask, whom to interview, and how to analyze

the meaning of that experience within guided frameworks (Hatch, 2002). My personal values or assumptions must be acknowledged at the onset to control my biases that do not influence the flow of data collection, analysis and interpretation. Acknowledging my personal biases helped establish the accuracy of the findings and trustworthiness of the study.

With regard to my work, my perceptions of teaching English and developing students' language ability and thinking skills have been shaped by over six years of personal experience teaching several English courses in the university. As I am one of eight English teachers at the faculty of Liberal Arts and Management Sciences, I know all the teacher and student participants very well. Certainly, for someone with such extensive experiences and knowledge, my personal assumptions and biases might be inevitable.

However, I believe my past experiences are beneficial for my research for they have provided me with a working knowledge of English language teaching including the use of questions and questioning techniques to encourage students' responses and their critical thinking skills. My understanding of the profession provided me with greater insight to conduct more in-depth data collection and analysis.

In my position of university English lecturer, I have a good opportunity to understand the classroom setting. My experience can help me to interrelate data contributing to understanding of classroom phenomenon. However, I will be careful that my teaching role and being a colleague of teacher participants do not negatively influence the participants' contributions to this study. Furthermore, I will be careful in casting the

data against the literature and not base my interpretation solely upon my own perspectives, preferences, experience, and assumptions.

Research Setting

The setting of the study was at a university in the south of Thailand. To protect the identity of the institution and the confidentiality of the participants, the university was named as a Thai Southern University (TSU) throughout the study. As one of the five campuses of TSU, it was founded in 1990. TSU, a state-assisted, public regional University, is considered by the public to be a leading university in the upper South of Thailand. It has provided services for the community since its beginnings. According to its policy and procedures manual of August, 2004, the vision and mission of TSU, are as follows:

Vision

Thai Southern University will be seen as a leading university in the upper south of Thailand, will be responsible for producing graduates, serving community services and preserving Thai customs and cultures, will eventually be the true leader of Bio-Technology and Management Sciences based on research.

Mission

Guided by our core values and the continuous improvement principle, the university hence renews its founding mission to ensure realization of our corporate vision. The renewed mission responds objectively to every aspect of our aspirations and is summarized under three different themes.

- To build up our repertoire of knowledge based on local issues, which will be subsequently linked to the global network.

- To integrate and apply knowledge based on practical experiences to teaching so that our students will be exposed to the real world and will be well equipped with global competence.

- To be a university of the future, opening its doors and making itself more accessible to the people from all walks of life.

According to above overarching vision, TSU provides three types of services: producing graduates, doing research and providing community services.

In 2008, TSU was reorganized into four main sections: the Campus Office, Surathani Community College, the Faculty of Science and Industrial Technology and the Faculty of Liberal Arts and Management Sciences. The Campus Office has important roles in supporting the academic work for teaching and learning processes. Surathani Community College provides extensive courses and academic services for the community and preserves the Thai culture. The Faculty of Science and Industrial Technology provides foundation courses in Science and Technology and bachelor's degree programs in numerous fields including Bioproduction Technology, Industrial Management Technology, Rubber Industry Management, Bioprocessing Technology, and Information Technology. The Faculty of Liberal Arts and Management Sciences offers Bachelor's degree programs in Languages, Communication and Business and Management Sciences majoring in Business Development, Business Economic, and Information Technology business. Another major responsibility of this faculty is providing foundation courses in general education such as in the fields of Humanities and Social Sciences, English and other foreign languages for all students at TSU.

With regard to the demographics of TSU, in the first semester of academic year 2008, the total population was 2,186: 75 staff, 120 faculty, and 1,991 students. The Faculty of Science and Industrial Technology consisted of two staff, 82 faculty, and 1,065 students (310 males, 755 females). As for the faculty of Liberal Arts and Management Sciences, there were three staff, 38 faculty, and 926 students (204 males and 722 females).

Most students at TSU are from the Lower and Upper South of Thailand, such as Patthani, Narathiwat, Songkla, Satun, Phthalungth, Nakonsrithamarat, Suratthani, Chumporn, Ranong, Krabi, Phang-Nga, and Phuket provinces (TSU Register Office, 2008). For their religion, the majority of the students are Buddhists and the minority is Islam. At this campus, all the first year students were required to live in the dormitory on the Campus, but most of the rest stayed outside the Campus. Based on this existing data of the student body, there is a little diversity of students' backgrounds in their hometown and religions.

With regard to the university's inputs, facilities and extra curricula activities based on the Office of Quality Assurance (2006), there are 27 lecture rooms, five of them can contain more than one hundred students and one lecture room is for more than 300 students. Each room is equipped with a white board, a computer, and an overhead projector. At Suratthani campus, there are five computer rooms making a total 206 computers and two language labs. In addition, there is one Information and Technology room and one distance learning room with equipment. As for the library, there are 43,874 books from various disciplines, and there is TSU WiFi system for students to access the internet. Relating to extra-curriculum activities, there are 50 activities organized by

students and 30 activities by students affairs division. Approximately 20% of the students are involved in extra-curricular activities (<http://www.tsu.ac.th>).

Concerning teaching and learning processes at TSU, to achieve the educational goal of producing the graduates who are able to apply their knowledge and systematic thinking skills in dealing with the situations and problems in their realities, problem-based learning, computer-assisted instruction, virtual classroom, cooperative and collaborative teaching approach were promoted in teaching.

As I have been a fulltime English lecturer at this institution for more than six years, it provides a convenient location making it suitable for me to conduct research (Merriam, 1998) to explore the Thai English teachers' use of questions and questioning techniques promote the students' responses and their critical thinking skills in the English classrooms at the Faculty of Liberal Arts and Management Sciences.

Participants

The participants of the study were two Thai English teachers at the faculty of Liberal Arts and Management Sciences and their two classes of first year students in Language, Communication and Business major. The teacher and student participants were selected based on purposive and convenient sampling method. Purposive sampling is a nonrandom sampling technique in which the researcher chooses persons with specific characteristics to participate in a study (Johnson & Christensen, 2000).

At the Faculty of Liberal Arts and Management Sciences, there were eight English teachers. Two of them are foreigners and six, which includes me as a researcher of the study, are Thai (four females and two males). Three females Thai English teachers took leave for studying their doctoral degree. Thus, three Thai English teachers (two

males and one female) met these criteria. The two teachers selected were one female and one male who were willing to participate in the study. These signed an informed consent document, and then their classes were observed, and they were interviewed.

In this study, the teacher participants were selected on the basis of four criteria. They both 1) obtained a Master's degree in English, Teaching English or Applied Linguistics, 2) had experience in teaching English as a foreign language for at least three years, 3) taught regular classes of English Listening-Speaking in the first semester of academic year 2008, and 4) were willing to participate in this study.

As for students, there were 52 participants. Twenty-five students were in the Teacher A class and 27 were in the Teacher B class. Most of the students were females (48) ranging in age from 17 to 19 and most were from the South of Thailand. As for their educational background, 15 % were from the Mathematics and Science program and 85 % were from Liberal Arts and Languages program in their secondary school. In this study, the students were required to do a questionnaire and focus group interview. This was a part of the class assignments required for full credits in the class. With this data, current pictures of questioning strategies promoting students' critical thinking in the language classrooms could be obtained.

Data Collection

Before collecting data, an Institutional Review Board Approval letter was sent to the Dean of the Faculty of Liberal Arts and Management Sciences (see Appendix A). After permission for collecting data was granted by the dean and faculty, I planned with the teacher and student participants about their schedules for collecting the necessary data for my study.

Piloting of research instruments

After planning, I piloted all research instruments (videotaping instruments, a questionnaire, individual and focus group interview questions) in the first week of the semester. From the piloted observation, the voices of the teachers and students were very soft and very difficult to hear when their interaction was transcribed. To solve this problem, I asked the technician to provide a small microphone for the teachers and set two video cameras in the classroom.

As for faculty individual and student focus group interview questions, they were clear and understandable for the students and faculty. However, when I piloted the questionnaire with a group of students who were not student participants of the study before use, I found one reason students did not respond to the teachers' questions provided in the second construct was their ambiguity, or difficulty to understand. The second construct was "You understood the teacher's questions and knew the answer, but you did not answer them" The ambiguous item of rationale for students' not responding to the teachers' questions in this construct was "You do not like to speak" To make this item be more understandable, it was changed to "You do not like to talk in class".

The processes of each data collection strategies employed in this study follow.

Classroom Observations

In this study, the classroom observations were accomplished through the researcher viewing the videotapes of the lessons to discover teachers' questions, questioning techniques, and students' critical thinking skills through their responses. Six lessons from three units, One to Three taught by the two teachers were videotaped. The recordings were during June 13 to 26, 2008, at the faculty of Liberal Arts and

Management Sciences, Thai Southern University (TSU). The teaching schedules of the Teacher A' classes were on the 13, 17, 19, 25, and 26 of June, 2008. As for Teacher B' classes, the videotaped observations took place on 13, 14, 17, 21, 23, 25 of June, 2008. The three units of the lessons were from a "Touchstone" textbook. Unit one is making friends. Unit two is Interests, and Unit three is Health. Before the recording, I made an appointment with the two teachers and the two classes of students to have them sign the consent document (see Appendix A) and inform them about the study including the purposes, their rights, roles and confidentiality in the study.

For videotape recordings, I worked with the technician to set up two video cameras 20 minutes before the classes started. One video camera was set at the front of the class to capture students' interaction and their classroom activities. Another camera was set up at the back of the class to cover teachers' interaction and their teaching process and activities. After the recordings, the videotapes from the two cameras were combined by the technicians for viewing both teachers and students' interactions for data related to teachers' questions, questioning techniques, and students' responses. Funding from Thai Southern University was provided for this research including the expense for technicians to combine the videos.

During each 50 minutes viewing classroom observation through videotaped lessons, I wrote detailed notes. Within one week after the observations, the videotaped lessons consisting teachers' questions, questioning strategies and students' responses were transcribed. All names of both teacher and students participants related to the data were changed to ensure anonymity and confidentiality. Each videotaped lesson of classroom observations was transcribed within one week. After the videotaped lessons

were transcribed, I then emailed the transcripts to the teacher participants for cross-checking and the teachers were asked to return the transcript within one week.

Following receipt of the reviewed transcripts of the final observation and videotaped lessons, questions and questioning strategies were categorized based on Bloom's (1956) taxonomy of cognitive levels of learning and Wu (1993)'s taxonomy of questioning techniques, respectively.

Before I started classifying questions and questioning techniques, I sent other copies of the reviewed transcripts from the teacher participants for cross-checking to the two raters who have been working as English teachers at the faculty of Liberal Arts and Management Sciences for more than six years. Rater A graduated with a Bachelor's and a Master's degree of Arts in English and now she is studying her doctoral degree in the university in Thailand. Rater B is an extra English teacher for Prince of Songkla University, Surathani Campus, graduated with Bachelor's degree in English and she has more than 10 years of English teaching experiences.

To enable the two raters to better understand the categories of questions and questioning techniques, I arranged a small session to introduce them to Bloom's (1956) taxonomy of questions and Wu's (1993) taxonomy of questioning techniques. I also gave them the condensed version of Bloom's (1956) taxonomy of questions and Wu's (1993) taxonomy of questioning techniques as a guideline for their rating.

After one month, the raters returned their classification of questions and questioning techniques. After checking their rating, I found most of teachers' questions (98%) and questioning techniques (99%) were categorized in the same ways. However, it was found that some questions and questioning techniques were classified differently

between the raters and me. Then, I arranged the time for the discussion with the raters on some different classification of teachers' questions and questioning techniques.

Questionnaire

After the observations and transcriptions of teachers' questions, questioning strategies and students' responses, the next method for collecting data was having students complete the questionnaire. The purpose of the questionnaire was to obtain the rationale for students' exercising or not exercising critical thinking skills in the classroom (see Appendix D). The questionnaire was administered for class A 23 September 2008 and class B 24 September 2008. In administering the questionnaire, I played the videotape of the lessons and paused it when there were no responses for teachers' questions and questioning strategies. This was to have students identify the reasons for not responding to teachers' questions and questioning strategies. It took about two hours and 25 minutes for each class to complete the questionnaire.

Individual Interviews

In this study, individual interviews were conducted with two teachers to obtain data concerning their concepts of critical thinking and to investigate the reasons why the teachers use various cognitive levels of questions and questioning techniques in the classroom. Another purpose of these interviews was to get in-depth information about teachers' knowledge and understanding of teaching critical thinking and factors affecting the development of students' critical thinking skills in the language classroom. The faculty individual interviews were organized at the faculty of Liberal Arts and Management Science. Teacher A's interview was conducted at 8.45 am 22 August 2008, at the meeting room of the faculty of Liberal Arts and Management Sciences. The

interview took about 50 minutes. As for teacher B, the interview was organized at 8.45 am 3 September 2008, at the meeting room of the faculty of Liberal Arts and Management Sciences. This interview was approximately 45-50 minutes. Once both of the interviews were completed, they were transcribed and sent to the teachers to review. After the review, one teacher added more responses about why critical thinking was hindered in the language classrooms.

Focus Group Interviews

The focus group interviews were conducted with two groups of students on 25 September 2008. Each group contained eight students. The students were selected based on their interactions in videotaped lessons. The first group of students was those who rarely responded to teachers' questions and questioning techniques. The second group of students always responded to teachers' questions and questioning strategies and they exercised their critical thinking which was gathered from their videotaped responses. The focus group interviews lasted approximately one hour for each group. Verbal interactions from interviews were audio recorded and transcribed. After transcribing, the transcripts were sent to each group of students to review. The transcripts were returned within one week. When I collected the revised transcripts, I found that the group of students who rarely responded to teachers' questions and questioning techniques provided more information relating to the rationales why they did not respond to their teachers in the classrooms than those students who frequently answered teachers' questions.

Document Analysis

In this study, I collected a text book, lesson plans, quizzes, and mid-term exam from the teachers. I also asked students to give the copies of their assignments to me. After these documents were collected, I analyzed them to determine the ways in which they promoted students' critical thinking skills in the language classrooms.

Data Analysis

The data in this study consisted of the information obtained from the lesson, student focus group interviews, teacher individual interviews transcriptions, and the questionnaire. These data were analyzed qualitatively and quantitatively. Qualitative analysis was employed to categorize questions and questioning techniques, teachers' responses to interview questions and students' responses to focus group interviews and their responses to teachers' questions and questioning techniques as well as their responses to the second part of the questionnaire. Quantitative analysis was used to summarize the number of questions and questioning techniques used by the teachers, the number of students' responses to the teachers' questions and questioning techniques as well as the number of students' responses to the first part of the questionnaire in frequency and percentages. Quantitative analysis also involved calculating the mean length of the students' responses to teachers' questions and questioning techniques.

Data analysis process was based on Creswell (2003): (1) preparing and organizing the data, (2) familiarizing all necessary data collected, (3) describing the case, (4) classifying the data, (5) interpreting the data, and (6) presenting the findings.

I organized the data into files and folders in my personal computer and started transcribing data from classroom observations, and teachers and students' responses to

individual and focus groups interviews. Then, the questionnaire data were tallied for frequency and then ranked for the students' reasons for exercising and not exercising their critical thinking skills. After that, I sorted and stored these data into my database.

To familiarize myself with the data collected, I read through all the data such as scripts several times, made margin notes and made sense of its overall meaning. After that, I described the case, its setting, participants, places and events in details.

Relating to classifying process, I relied on the theoretical proposition (Yin, 1994) and used themes as a part of specific analytical techniques. The theoretical lens used to categorize teachers' questions and questioning techniques were Bloom's (1956) taxonomy of cognitive levels of learning and Wu (1993)'s taxonomy of questioning techniques respectively. As for students' responses, they were analyzed by considering the level and quality of words in their responses.

Classification of teachers' questions. To classify teachers' questions, a question categorization sheet reflecting Bloom's (1956) taxonomy was used to illustrate the cognitive level of teachers' questions as a way to understand and report the observations. In his taxonomy, questions are classified into six types: knowledge, comprehension, application, analysis, synthesis, and evaluation. Low level questions or fact questions are those concerning knowledge of subject matter or the recall of facts and specifics. High level questions or thought questions are those requiring the students' application, analysis, synthesis or evaluation of subject matter. These questions require students' greater effort and time to construct the answers (see Table 1).

Table 1

Taxonomy of Questions Based on Bloom's (1956)

Cognitive level	Taxonomy classification	Purposes	Example
Low level	1. Knowledge	To require the students to	What does the word “dissertation” mean?
	1.1 Specific facts	recall, recognize facts	
	1.2 Ways and means of dealing with specific	definitions and or observation	
	1.3 Universal and abstractions in the field		
High level	2.Comprehension	To require the students to	What is the main idea of the second story?
	2.1 Translation	demonstrate an	
	2.2 Interpretation	understanding of subject	
	2.3 Extrapolation	matter	
	3. Application	To have the students solve the problems	Can you change this sentence, active voice to passive voice?
	4. Analysis	To look at something as a	Why should we make use of solar energy?
	4.1 Analysis of elements	whole and then break down into its component parts	
4.2 Analysis of Relationship			
	4.3 Analysis of organizational principles		

5. Synthesis	To develop or create	What would you do if you
5.1 Unique of communication	something original based on what the students know or have experienced	were the Prime minister of Thailand?
5.2 Plan or set of operations		
5.3 Derivation of a set of abstract relation		
6. Evaluation	To have the students make	What are the best and
6.1 In term of internal evidence	reasonable value judgments and then defend those	practical suggestions for you and why?
6.2 In term of external criteria	judgments with rational argument	

Based on Bloom's (1956) taxonomy of questions, a question categorization sheet was designed to classify teachers' questions in this study (see Appendix C). After teacher' questions were categorized into cognitive levels, they were tallied for frequency and summarized in percentages. The numbers represented in tallied data were used as baseline information for describing the teachers' teaching critical thinking skills in the language classroom and development of students' critical thinking skills.

Classification of teachers' questioning techniques. For classifying teachers' questioning techniques, a questioning technique categorization sheet reflecting Wu's (1993) taxonomy was used for analysis. In his classification, questioning techniques are classified into five types: repetition, rephrasing, simplification, decomposition and probing (See Table 2).

Table 2

Taxonomy of Questioning Techniques based on Wu's (1993)

Questioning techniques classification	Definition	Example
1. Rephrasing	This is reforming an original question in another way to make the form of the question easier for students	<i>T: Can anybody tell me the advantages of being a tour guide?</i> <i>Ss: [Silence]</i> <i>T: What are the benefits from being a tour guide?</i>
2. Simplification.	This is making the content focus of an initial question narrower	<i>T: How was your holiday?</i> <i>S: [Silence]</i> <i>T: Did anything exciting happen to you during the holiday?</i>
3. Repetition	This is asking an initial question again	<i>T: Have you been to the airport before?</i> <i>Ss: [Silence]</i> <i>T: Have you been to the airport before?</i>
4. Decomposition	This is breaking an initial question into smaller parts to encourage students to respond to the question.	<i>1 T: Can you tell me something about your family?</i> <i>2 S: [Silence]</i> <i>3 T: How many sisters and brothers do you have?</i> <i>4 S: I have one sister.</i> <i>5 T: What about brothers?</i> <i>6 S: None</i>
5. Probing	Its intent is to stimulate	<i>T: Do you think it's a good number?</i>

students to improve the quality of their answers. It requires students to expand on and develop a minimally adequate response by making it clearer, more accurate, or more original with a supporting rationale or factual information

S: Yes.

T: Yes? Why do you think it's good to have two brothers and one sister?

Based on Wu's (1993) taxonomy of questions, a questioning techniques categorization sheet was designed to classify teachers' questioning techniques in this study (see Appendix E). After classification, all data were reanalyzed to determine teachers' questions and questioning techniques that failed to elicit responses from the students.

Students' responses. The students' responses to the teachers' questions and questioning strategies were analyzed by counting the number of words in the responses. Contractions in responses were counted as in the full form, e.g., "isn't" was counted as two words. Repetition in responses was not counted because the students did not produce new information. After the number of words in the students' responses was counted, the mean length (in words) of the students' responses to each type of question and questioning strategy was calculated for comparison as to which type of question and questioning strategy elicited the greatest number of words per response.

To calculate the mean length in words of the students' responses to each type of questions and questioning strategy, this formula was used.

Mean length of students' responses to each type of questions is
= Total number of words in responses to all questions of the same type

Total number of questions of the same type

Mean length of students' responses to each type of questions is
= Total number of words in responses to all questions of the same type

Total number of questions of the same type

Then, the data were interpreted. The results from all documents were interpreted by pulling out, comparing and contrasting for emerging and recurring themes to find similarity in themes and differences in factors that affected the two teachers' classroom practice to see the way in which teachers' questions and questioning strategies helped promote students' responses and their critical thinking skills in the language classrooms.

Following the data interpretation, I presented an in-depth picture of this explanatory case study by using tables, figures, and narrative.

Research Criteria

Research criteria are crucial issues of the quality of qualitative research (Marshall & Rossman, 1999). Creswell (2003) posits that important to all qualitative research are the criteria that enhance the accuracy and trustworthiness of the findings. In qualitative research, by its notion, Fitzpatrick, Sanders, and Worthen (2004) and Patton (2002) assert that it is criticized for being too subjective. This is because the researcher takes the main responsibility of collecting data, analyzing, and interpreting the data. Therefore, to ensure trustworthiness, the researcher must find ways to control biases through the process of inquiry (Erlandson, et al, 1993).

Lincoln and Guba (1985) state many ways to establish the accuracy and trustworthiness of the findings. In this study, credibility, confirmability, triangulation, transferability, and dependability were employed.

Credibility

Credibility is one of the most important techniques that make the findings of qualitative research more credible. In this study, three strategies including triangulation, peer debriefing, and member checking proposed by Lincoln and Guba (1985) have been employed to assure credibility of the research data.

Confirmability

Confirmability is the process to assure that the results are the product of the inquiry, not the inquirer's personal biases (Lincoln & Guba, 1985). Thus, in qualitative research, the data can be tracked to their raw data sources (Erlandson et al., 1993). In this study, to establish confirmability, the audit trail was applied. All the videotaped classroom observations, transcripts of all interviews, and questionnaires are available and can be externally reviewed to ensure that the data, data analysis and interpretation were grounded in the events of inquiry rather than the researcher's personal constructions.

Triangulation

Triangulation is the use of multiple and different sources, methods, investigators, and theories to elicit the various and divergent constructions of reality that exist within the context of a study (Lincoln & Guba, 1985). It is an essential mode of improving the probability that findings and interpretation will be found credible. LeCampte and Preissle (1993) propose that triangulation will help prevent biases and enhance clarity of findings. It provides a great opportunity to the researcher to check data across different points of

views (Erlandson, Harris, Skipper, & Allen, 1993). In this study I collected data with five methods, including classroom observations, questionnaire, focus-group interviews, individual interviews and document analysis. This triangulation of data collection helped to ensure credibility.

Transferability

Transferability describes the process of applying the results of research in one situation to other similar situations or contexts (Lincoln & Guba, 1985). To do this effectively, readers need to know as much as possible about the original research situations to determine whether it is similar to their own. It is, therefore, researchers must supply a highly detailed description of their research situations and methods (Erlandson, Harris, Skipper, & Allen, 1993). The detailed nature of the results of qualitative research, however, makes them ideal for transferability. In addition to this, purposive sampling is another strategy to facilitate transferability. In the study, purposive sampling was employed to select both teacher and student participants.

Dependability

In this study, dependability was maintained by the process of reviewing research instruments by my advisor and I piloted them with people who were not the participants of the study. An individual interview was piloted with one faculty who taught English Listening-Speaking course. I also piloted focus group interview questions with a group of eight students. The questionnaire was also piloted with a 45 student English Listening-Speaking class.

Peer debriefing is a process of exploring aspects of the inquiry that might remain within the inquirer's mind. It provides researchers an initial and searching opportunity to

probe their biases, judgment, emotion, and feelings that may be emerged in the study (Erlandson et al, 1993, Lincoln & Guba, 1985). In this study, my advisor is considered to serve as a professional to analyze the study and provide feedback, and comments about the findings and conclusions.

Member checking gives the respondents an immediate opportunity to correct errors of information perceived, interpreted, and reported by the researchers (Lincoln & Guba, 1985). In this study, the transcripts of classroom observations, a summary of focus-group and individual interviews were reviewed by the teacher and student participants to assess their intentionality and correctness of the researcher' interpretation. Additionally, I discussed my interpretation with the two teacher-participants, as well as asked them to look over transcripts to ensure accuracy of the transcribed data and clarify interpretations. Equally important, this process helped to fill in some hidden findings that might have emerged as a result of these discussions.

Ethical consideration

In naturalistic inquiry, consideration of ethics is the essence and a major concern of the researcher (Merriam, 1998). Merriam insists that ethics contribute to the quality of qualitative research and make the findings more believable and trustworthy.

In this study, videotape and audiotape recordings were employed to collect the data such as classroom interaction and teachers' responses to the individual interviews, and students' responses to focus group interviews. To protect their basic rights, privacies, and confidentiality, I removed all direct identifiers, substituted codes for identifiers, maintained code lists and data files in separate secure locations, used accepted methods to protect against indirect identification, such as aggregate reporting or pseudonyms, used

and protected computer passwords, encrypt stored data, access and stored data on computers without Internet connections. Data that were gathered were stored in the researcher's personal computer and locked up with the researcher having the only access.

Summary

This chapter described the research methodology used in this study. A qualitative research design, explanatory case study was employed in this study. This research approach allowed me to observe teaching in the language classrooms, use questionnaire, conduct individual interviews, focus group interviews, and do document analysis to investigate questions and questioning techniques Thai English teachers used to promote students' responses and their critical thinking skills in the English language classrooms in the Thai context. The participants of the study were two Thai English teachers and their two classes of language major students. In this study, Bloom's (1956) taxonomy of cognitive levels of learning and Wu (1993)'s taxonomy of questioning techniques were used as the theoretical and analytical frameworks to categorize teachers' questions and questioning strategies. Data collected from classroom observations, questionnaires, interviews, and documentation were triangulated through a method of comparison for recurring themes. In addition, credibility, confirmability, transferability, and dependability were used as research criteria to assure the accuracy and trustworthiness of the findings. The findings of the study are presented in Chapter IV.

CHAPTER IV

PRESENTATION OF DATA

In this chapter, I present the data from classroom observations, questionnaires, faculty individual interviews, student focus group interviews, and document analysis. After descriptions of the setting and environment, I present the classroom happenings, focusing on what teachers did in the classroom, how they conducted their classes, their questioning, questioning techniques and students' responses.

Classroom Setting

During June, 2008, I observed two Thai English teachers, one man and one woman, in their English Listening-Speaking classes at the Faculty of Liberal Arts and Management Sciences, Thai Southern University (TSU), Thailand. I will first introduce the readers to the teachers and then describe the classroom environment.

Teachers

Teacher A is a 29 year old male, with a B.A. in Education, majoring in English in 2002 from a university in the South of Thailand. He has been teaching English for four years. In 2005, he completed his Master's Degree in education in Teaching English for Speakers of Other Language (TESOL) from a foreign country. He currently teaches various English courses such as English Listening-Speaking, English through media, and

English Reading-Writing.

In the first semester of 2008, he had 15-18 hours of teaching per week. In addition, he served on the committees of several other university projects and provided many short courses as academic services for community as well. He also participated in professional training in teaching English, but not on teaching thinking skills. Although Teacher A never attended training on teaching critical thinking, he had a positive perception on applying critical thinking in his class. He accepted that he sometimes applied it in class because he did not have time to do it in every class. Teacher A also gave more information that the success of promoting students' critical thinking skills sometimes depends on the students as well, especially their ability to respond to the activity the teachers provided. He said "Even though I teach language students majors I found their language proficiency was quite low, but they are eager to learn." Overall, Teacher A had a positive attitude to the students and his workplace. He said:

I'm very happy to work at TSU. The atmosphere of learning is good. The students here are eager to learn even their background knowledge and their proficiency are not good and even though I have to make up classes to teach them more.

Teacher B is a 33 year old female. At this moment she is the Head of the Language, Communication and Business program. She began her teaching career in 2000 when she graduated with a Bachelor's degree in English. In 2004, she obtained her Master's Degree in teaching English from a university in the South of Thailand. Teacher B also attended various training courses in teaching English, but she never had training in teaching critical thinking skills. In the first semester, 2008, she had 15 hours of teaching

a week for English Listening-Speaking, English for Business, and English Reading and Writing courses.

Apart of her teaching, she also organized English camps for primary school students in Suratthani province and she has been a speaker for short training courses organized by the university as an academic project for community, such as English for tourist guides. As she is the Head of the Language, Communication and Business program, she plays an important role as an administrator for the faculty as well. As for her perception on teaching critical thinking in class, she mentioned that

I think critical thinking is complicated for students. May be if the students have critical thinking, the students will be eager to learn and their language learning competence will be better as well. In class, if the students have critical thinking, the lesson plan will go smoothly. If the students do not have critical thinking, they cannot express their own ideas and make judgments.

Teacher B agreed that critical thinking is important for the students and she tries to ask questions and prepare activities that promote students' thinking skills. She used those activities to encourage students' thinking skills just sometimes and in some classes. This is because she had time constraint and still lack of experience in teaching critical thinking in the language classroom. From the interview, Teacher B also has a positive attitude with working at TSU. She said, "My impression of working at this campus is favorable; friendly climate at this workplace encourages me to work well and my colleagues are also friendly, collaborative and helpful. I enjoy teaching here."

Classes

The English course I observed was English Listening-Speaking, a three credit hour course that met three times a week for one hour for a total of three hours a week. The students had a lecture with their teachers for two hours and for another one hour they were required to attend the language laboratory. In this course, the students were also assigned one more extra hour to a self-study session working at the Self-Access Learning Center or studying extra English programs, such as program Ellis in the computer lab. This extra hour counted for 10% for their self-study scores of the course. Each of the students attended this English program and their progress was evaluated and recorded by the computers.

English Listening-Speaking was designed as one of English compulsory courses for students. This was to serve the requirement of Ministry of Education on the standard criteria for Bachelor's Degree in 2005. Based on the standard criteria for this degree, English compulsory courses are in general education and there are not specific criteria in teaching English in tertiary level since depends on each university's management.

At Thai Southern University (TSU), English Listening-Speaking is one of English compulsory courses for first year students in every program. Every English lecturer at the faculty of Liberal Arts and Management Sciences had to teach it and helped each other to design a course syllabus, quizzes, mid-term and final exams, and other supplementary exercises.

Based on document analysis, in the English Listening-Speaking course, the syllabus states that the main purposes of this course are to encourage students to be able to classify and understand English sounds and intonation, listen to English conversation

extracts, stories or messages and be able to take notes, be able to communicate in English in various situations, and to be autonomous learners. All skills are assessed by class participation (10%), course assignments (10%), quizzes (20%), self-study (10%), mid-term (25%) and final examinations (25%). For class participation, students are expected to answer questions, participate in class activities, and discuss and exchange ideas with friends and teacher in class. Each assignment is worth the percentage points indicated above. Final grades are assigned based on percent of points earned. Over 80% is an A; 75% and above is a B+; 70-74% is a B; 65% - 69% is a C+. 60-64% is a C. 55-59% is a D+. 45-54% is a D. Less than 45 is an E.

Although the English Listening-Speaking course is for the first year students in the first semester of the academic year, each semester there were some sophomores and seniors who failed in this course last semester attended this course again.

In the first semester of academic year 2008, 23 classes of students took English Listening-Speaking course, each class had about 45 students making up a total of 1,035 including the students in the Language, Communication and Business program (Register Office Bulletin, 2008). The total of 52 students from the Language, Communication and Business program were enrolled in the two classes. There were about 26 students in each class. Most of the students were females, from the South of Thailand, and Buddhist. Ninety-eight percents of the students finished a secondary school with a language major, and 2% with a Mathematics and Science program. These students were arranged into groups by mixing their English proficiency. Thus, in each class there were low and high English language ability students. The skills focus of the course I observed were listening, speaking, and discussion skills.

Both classes were offered in a language laboratory equipped with two air conditioners. This language lab had two doors, one at the front on the right hand side, and the other at the middle of the front connected to the language lab technician's office. Opposite the door at the front on the right hand side were several windows. This room is used for both language lab and lecture.

The classroom can contain 60 students in rows, and is suitable for language laboratory and studying language. There was enough light for students and teaching equipment such as a whiteboard, a computer, a microphone, two televisions and an overhead projector were provided. In addition, this room was quiet; it was not near a street, nor was there air or noise pollution. The classroom is large enough for the teachers to walk around the class to monitor students during class activities. Although this room is large, Teacher B said

It was quite difficult for me sometimes when I had students to work in groups because I could not rearrange the class, it is not flexible. Thus, I have students find the space in class to work in group. I think physical environment is important in facilitating meaningful interaction among students.

Teacher A added about this room. "This room is fine for me when I had the students do class activities, I just ask them to turn back to another row of their friends, so I think class arrangement is not an obstacle of teaching.

Classroom Happenings

There was not a real beginning to the classes, the teachers just started when they said "hello." The teachers had arrived at the classroom five to seven minutes before the class started and they had had conversations with the students who came early. Most

students sat in the middle and back rows; they left the first two rows free. Some students arrived late and found a seat at the back.

Most of the time, before the teachers started the lessons, they asked the students to move to sit in the first front row. In these two teachers' classes, the teachers knew all students well, and they often called the students' nickname and the students also called their teachers' nickname as well during the class activities.

During class activities, English was used for communication. Both Teachers A and B agreed that using English for instruction was appropriate and necessary for language major student classes because their language proficiency is better than the students in other programs. Teacher A said:

I set up a rule for students in my class that is speaking English all time through the period of the teaching is a requirement. If the students speak Thai, they will be fined one baht for one word, and when the semester finishes I will give them money back, or I will buy them some sweets.

In the focus group interview, I sought students' opinions about the rules of speaking English in class. Some students agreed with this rule. One of the students agreed that it is a good technique because if the teacher did not set this rule, they would not speak English in class. However, another student disagreed, stating "I don't think it worked for me and some of my friends because this rule made us learn language with pressure and sometimes it did not help create a positive classroom atmosphere in learning. I often borrowed my friends' money for the teacher when I speak Thai."

Teacher B also had some strategies to encourage students to speak English in class, she said:

To encourage my students to speak English with me I told them that if they speak English I will give them a bonus, 1 mark for one utterance and I will ignore their grammatical mistakes. I just want them to speak out. I found that most of the time it was successful because the students preferred to get their marks stored for their final grade.

One of the students in Teacher B's class said that she likes this strategy because she can save her scores in case she cannot well on the quizzes and exams.

The main events

The classroom activities included exchanging conversation following the topics mentioned in the textbook, listening to CD, and doing exercises. The objectives of the lessons were not formally presented, but the teachers told the students what skills they would be practicing.

In this study, it was observed that the two teachers divided their lessons into three phases of learning. The first phase is reviewing the previous lesson. The second phase is presenting new topics and contents and practicing the contents that had been presented, and the third phase is summarizing the lesson for students. The classroom patterns of each phase of teaching of the two teachers such as the activities before, during, and after the lessons were similar.

Before the lesson, the teachers reviewed with the students what they had learned from the last lesson. In reviewing the lessons, the teachers frequently used a Power Point presentation to summarize the contents of the previous lessons for the students.

Sometimes they reviewed the lessons by having the students do the quizzes, or asked the students' questions to test their knowledge and called the students by their nickname to

answer the questions one by one. This procedure kept the students alert and the instructors kept their attention.

Sometimes the teachers asked one student to choose his or her friend to talk and answer the questions and most students were not reluctant and felt comfortable to speak in class. Student O said, "I like this strategy because I like teasing my friend when I see him sleep in class. I just called him to answer the teacher questions." However, it was observed that in classes some students were not talkative and were always silent during the classroom activities.

After the review the teachers gave a lecture by introducing a new topic and presenting the unit contents which was mainly based on the textbook. The text book used for English Listening-Speaking course was Touchstone. It is written by McCarthy, McCarten, and Sandiford (2005) from Cambridge University Press. During June 2008, units one through three were completed.

Unit One is Making Friends. It focuses on asking questions to get to know new classmates, talking about the students themselves, their family and favorite things, stress and intonation in questions and answer. The learning objectives of unit one are to use the simple present and present of be, give responses with "too" and "either", talk about the students themselves, their family, and their favorite things, start a conversation with someone the students do not know, and use the word "actually" to give or correct information.

Unit Two emphasizes asking about people's interests and hobbies, and talking about interests, hobbies, and taste in music. The learning objectives of unit two are to use different verb forms, use object pronouns and the pronoun "everybody" and "nobody."

talk about hobbies, interests, and taste in music, say “no” in a friendly way, use “really” and “not really” to make statements stronger or softer.

Unit Three is Health. It is about how to stay healthy, describe common health problems, and talk about what the students do when they have a health problem. The learning objectives of unit three are to use the simple present and present continuous, use “if” and “when” in statements and questions, talk about health, remedies, sleep habits, and stress, encourage people to make comments and ask follow-up questions, use expressions like “Wow!” and “You’re kidding!” to show surprise.

The two teachers taught these three units during June 2008 for the students’ mid-term exam, which was on July, 2008. Through the observation, the lectures of the teachers for these three units followed the lesson plans provided in the teacher’s manual of the textbook. It was easy to follow because the teacher explained every point clearly and there were clear transitions between sections. Sometimes, the teacher asked the students to move to work in groups and discuss the given topics. During the class discussion and other class activities, students were also encouraged to use the dictionary. I found most of the students had a talking dictionary and some used their mobile phone to look up the vocabulary they did not know.

Each teacher gave about 15 minutes for the students to work in groups. Most of the time in the Teacher A’s classes, he had students make the group themselves, sometimes he used games to divide students in groups because he observed that the students work well in groups with friends they choose for their group. Teacher B is responsible for dividing students in groups by counting the numbers and had students work in groups according to the numbers they count. Teacher B said

I always put my students in groups by myself because it will take more time if I allowed the students to arrange the group by themselves. Additionally, I don't want to see them work in the same group every time. Most of the students would like to be with their closed friends all the time and never change to work with other students. I just want them to know other friends as well.

After 35 minutes into the lesson, the teachers gave the students about a 10 minutes break, some students went to the restroom and some took a nap on their desk.

During the lessons, the teachers had good eye contact with the students and because the teachers used a microphone, their voices were very clear and loud. Teacher A used the microphone in all his classes I observed, while Teacher B used it in some classes. Teacher B stated that she does not like using the microphone because it is not convenient for her to walk around and to hold other teaching materials.

Through the observation period, classroom interaction between teachers and students was two-ways communication some of the time, but most interactions were from the teachers to the students, one-way communication. The students communicated with their teachers in a positive manner. I observed that most of classroom interaction was the teachers' talk, especially explanations of the lessons and asking questions. The teachers always explained the language spots of the lessons for students and asked them questions later. Teacher A said he used a lot of questions in the classroom because he agreed that questioning had a great impact on students' learning and thinking skills because it could be used to check their comprehension and evaluate their thinking skills. Teacher B agreed, stating that asking students questions can help prepare her students to be effective thinkers. She commented, "I try to ask many questions in classes to encourage students to

think more even though I don't get many responses from the students." The following section presents the two teachers' use of questions, questioning techniques, and students' responses in the language classroom.

Teachers' Use of Questions in the Language Classroom

Based on the classroom observations, the two teachers asked a total of 507 questions. Their initial questions totaled 378, while the other 129 questions were the questioning techniques the teachers used to encourage students to answer their questions after their initial questions failed to elicit responses from students. During their teaching, it was observed that the teachers posted their questions most frequently at the first phase of learning to review the previous lesson for students and at the third phase of learning to summarize the lesson. Teacher A explained, "Questions were necessary at the beginning of the class. This was to call students' attention to be ready to start the lesson. More importantly, questions were used to review the last lesson for students." Teacher B added:

In my classes, I know that sometimes my students do not like questions, but I used them all the time because if I only explained students' grammatical structures, sometimes they did not listen to me and they are always silent. Then, I asked my students questions to encourage them to speak out, to display their knowledge, to share their experience and to express their opinions and feelings.

Teacher B further explained that she posted a great number of questions both in the first and third phases of learning. She agreed that these phases of learning are important for her teaching and students' learning purposes. She stated "Asking questions in the first

and third phases of learning could evaluate whether I achieve my teaching goal and students' language learning outcomes.

In the present study, the types of questions asked by the two teachers fall into multiple categories. This first example from Teacher B's class illustrates questions requiring students' knowledge of specific facts such as grammatical structure and tense.

T: *Can you tell me the time expressions for present continuous?*

SS: Now, right now, this month, this year, this week, and these days.

T: Now here the word these days so we use present continuous. So the sentence is I am using the Internet these days. Now the next one there is the word usually so, *what tense do you use with usually?*

SS: Present simple tense.

T: Good. Present simple, so the sentence is - Cindy usually goes jogging.

OK Usually is an adverb and we put it before the main verb. The next one there is the word "right now". *So, what tense do we use?*

SS: Present continuous tense.

T: Yes so the sentence is - Is he planting in the garden right now? And the last one is the verb form – love, like, hate, and prefer you have to use the verb. *What kind of verb here?*

SS: Verb with to and ing form. (Class A, lesson 3)

The questions in the example were asked to test if the students classify present simple tense and present continuous tense.

This next example tests students' knowledge of terminology:

T: We'll start unit 2 which is about leisure time. I usually surf the Internet

when I have leisure time. Leisure, *what does it mean?*

SS: Free time.

T: Good, *what is surfing the Internet?*

SS: Use the Internet. I sometimes chat with my friends on the Internet.

(Class A, lesson 2)

Here, Teacher A asked the students the first question to give the meaning of the word “leisure” and the second question to acquire an understanding of terminology or the vocabulary associated with the use of the Internet. The majority of questions focused on testing knowledge.

A number of questions required the students to demonstrate an understanding of subject matter and ability to interpret the reading texts and several other reading materials. Consider the following from Teacher B’s class:

T: Ok, look at the websites on the book about hobbies. We have cooking, craft – things you have done by your hands, fashion, music, outdoor.

Read it carefully and then answer my questions. (7 minutes later)

What is the main purpose of these websites?

SS: To present the hobby groups and to have us share the hobbies with people on the websites.

T: After you read about these websites, *what is the intention of the writer for you to do?*

SS: To invite us to share our hobbies and match our response with the hobby group in the texts above.

T: Good. OK. I will give you ten minutes to do it. (Class B, lesson 2)

In this example, the teacher asked students questions about the purpose of the texts they have read. These questions required the students' ability to grasp the thought of the texts to see if they were able to comprehend and interpret with increasing depth and clarity of the reading materials.

A small number of questions found in the study also required the students to express their opinions and share their own ideas relating to the topics presented in class.

Consider the following:

T: ...I think everyone has stress in daily life. *How can you tell if you are stressed?*

S: I think I can't sleep well.

T: What about you student P?

S: When I have stress, and feel extremely tired sometimes I cry.

T: *Next question, why can stress be serious?*

S: It can affect our memory and emotion.

T: *Which relaxation technique do you like to reduce your stress?*

S: You do something you enjoy, you can listen to music.

T: *Do you think the leaflet in the book suggesting the ways to relax such as meditate, exercise, talk, pamper yourself and breathe is helpful?"*

SS: Yes.

T: *Why do you think that it is helpful?*

S: Because it will guide and provide activities to help us reduce stress in life and learning. (Class A, lesson 2)

In the above example, the teacher' questions functioned to elicit students' opinions about stress. It was found that when the teacher posed these questions, most of

the time they were responded to by the students individually. During the interview, Teacher A stated that he would like to ask more questions requiring students' opinions, discussion and critical thinking skills to prepare his students to be effective thinkers.

I think questions required students to express their own ideas and opinions are good questions to ask to encourage students to think more, but I could not ask them a lot because it took time for getting responses and just some students participated in these questions. If I ask this type of questions more often, in 50 minutes class I couldn't do any thing else.

Teachers' Use of Questioning Techniques in the Language Classroom

In asking questions in the language classroom, most of the time Teacher A called the students one by one to answer his questions. He mentioned that:

I prefer to ask students to answer my questions one by one because I need to check each of them if he or she understands the lesson. I observe that when I asked the whole class questions, sometimes weak students never answered questions, only the good students did it. Before asking questions, I give information to students and then ask them the questions. The students may not answer the questions if I ask difficult questions. So, I try to divide the questions step by step. For example, when I have the students read and talk about Taiwan and Hong Kong, I will let them read first, I try to give more information and after that I ask questions step by step and the students will think along.

Another technique used by Teacher A in asking questions was having the students pick up the questions he prepared from a box one-by-one. He would then have them answer the questions a few minutes later. From the observation, I found some chaos

during this activity because after the students got the questions, some of them did not understand the questions and they walked around and asked their friends. Several students were talking. But I also observed that some students enjoyed this technique.

One of the students said:

I feel very excited when the teacher asked us to select the questions. I'm afraid of getting difficult questions, but I think it is fun, sometimes when I got difficult questions and I could not answer them I changed it with my friends.

As for Teacher B's questioning, she frequently asked the whole class questions and sometimes asked the students to answer her questions one-by-one. She agreed that asking students to answer in chorus could help encourage the weak students' self-confidence in answering questions. However, she stated that when she asked questions required the students' information or opinions, she asked the students to answer her questions individually.

What were the students' reactions when their teachers asked questions in the classroom? From the observations, I found that most of the time the students enjoyed class activities provided by the teachers, but often not teachers' questioning. When teachers asked questions, some students avoided having eye contact with the teachers, others pretended to look at their textbook to find some information and sometimes the classes were silent for a while.

However, in some classes, I found chaos and a noisy room when the teachers asked questions, especially after the first phase of learning, the warm up activity and the review of the previous lessons. When the teacher started the second phase of learning and presented a new topic, which was about 15-20 minutes went by, the students began to

walk in class, to go to the restroom, and some students were sleepy. At this time, most of the students did not listen to the teachers' questions and most of the questions the teachers asked in this phase of learning were not responded to by the students.

Teacher B mentioned:

In my class, I realized that the beginning of the second phase of learning was a bit chaos because the students had low attention to their class. I know that some students need a break earlier sometimes because some of them walked out the class to find something to eat or to smoke, so I less expected students' responses when 25 five minutes of the lesson passed.

Teacher B further stated, "I realized that the students' language ability was not good. So, it might not be easy for the students to answer her all questions."

In classes, when the teachers did not get any responses from the students, sometimes they answered the questions by themselves. However, most of the time the teachers tried to use various questioning techniques to encourage students to answer their questions. In the study, when teachers failed to get responses from the students from their initial questions, they asked the same questions again and paraphrased the initial questions. Sometimes they simplified the questions to make them more understandable and decomposed the first question into two or three questions. A total number of the questions the teachers used after their initial questions failed to elicit responses from the students were 129, it accounted for 24% of all the questions the teachers asked in the classroom. Teacher B stated:

I think that I repeated my questions most often at the beginning and at the end of the lessons because there was chaos at this time. When I asked my questions

again, I did it loudly to make sure that students could hear me. Apart from this technique, I sometimes simplified and decomposed my initial questions to my students, especially when I introduced new topics to my students, asked them questions and they could not answer my questions.

Teacher A added:

I also used various techniques to encourage students to answer my questions. Sometimes, I changed my questions, paraphrased them for my students, but I could not do this all the time because it required my time to think about new questions.

The following example is one of the questioning techniques used by the teacher to encourage students' responses after their initial questions failed to elicit students' responses.

T: Today we will discuss about activities we can do when we have leisure time. For me sometimes I like watching the news. *What is the news?*

SS: [Silent]

T: *What is the news?*

S: The events or things happen in our daily life.

T: Good. *Where can you see the news?*

SS: [Silent]

T: *Where can you see news?*

S: On television, Internet, newspapers. (Class B, Lesson 2)

In the above example, there was silence when the teacher asked the question the first time. After that, the teacher repeated the question and the student was able to answer

the teacher's questions. Teacher A realized the importance of questioning techniques in the classroom, he explained:

Questioning techniques are necessary for the teachers in class. Sometimes I asked the same question for several times in class to get students' responses, changed the questions, or if I don't get responses from the first students I will ask the questions to another student.

Teacher B agreed, stating "Questioning techniques are important tool for the teachers when we did not get responses from the students in a way that they will give the teachers and students' other chances of interaction." She continued by noting that

Verbal interaction in the classroom has an important role in second language acquisition. It provides students with opportunities to practice using the target language in the classroom. This helps develop students' language ability, thinking and interactive skills. When students interact, their thinking and skills to construct the target language in order to express their meanings as intended are enhanced.

Teacher B added, "In the classroom, when teachers use questioning techniques appropriately, they will be able to elicit responses from students. This will help develop students' language ability and thinking skills.

Students' Responses in the Language Classroom

In the present study, 177 (47%) of the 378 initial questions asked by the teachers in the classroom elicited a response. And 59 (46 %) of 129 questioning techniques the teachers used after their initial questions failed to elicit students' responses

succeeded in eliciting responses from the students. Most of these questions were responded to in chorus and some of them were answered individually. Student X said:

Usually, I don't want to speak in class because a lot of my friends already talk and answer the questions, but sometimes I could answer the questions, especially when the teacher asked the questions to the whole class. I can look at my friends and ask my friends and then we answered the questions in chorus.

Student Y agreed and added, "I don't want to answer the questions individually, I want to share the answers and think together with my friends because I'm not sure if my answer is correct. I feel safe when I work with my friends."

In the study, the questions which tested students' knowledge were responded to by the students more frequently than the questions that required the students to express their opinions and to share their own ideas in class. Student D inserted, "I like learning grammar, I just remember the grammatical rules. When the teachers asked the questions about the grammar I can answer them. I don't need to use a long time to think about the answer of these questions. Student F agreed, stating:

I think I can answer the questions that teachers asked to test our knowledge more than other types of questions that asked about new information or my opinion because answering knowledge questions I will not use much energy to think about vocabulary and grammatical knowledge in producing the answers. As for questions required my opinions and my own ideas, I find it difficult and sometimes I don't have any ideas about the questions and I'm afraid that my ideas were not good enough for the teacher.

Although teachers asked a lot of questions, it was found that students did not respond to all questions the teachers asked. In the present study, 201 (53%) of 378 the total of the teachers' initial questions were not responded to by the students and 70 (54%) of 129 questions that teachers used after their initial questions failed to elicit students' responses could not get responses from students. One student poignantly explained his lack of responses in the following:

I rarely answer the teachers' questions because I did not understand the questions and I see that if the students could not answer the questions, the teacher will give us the answers. So, in class I always waited for answers from the teachers and I don't answer the questions.

Teacher A explained:

Sometimes I feel bad when I did not get responses from the students and tried many times in asking questions, in some phases of learning, or about 35 minutes passed or near the end of the lessons, most of the students lost their attentions to the class, although I employed various different questioning techniques, they were not successful in eliciting students' responses or in drawing their attention back to the class. Thus, I think that it is important for me to examine the failure of using my questioning techniques and skills.

Teacher A added, "I realized more about the importance of teachers' use of questions in the classroom when I see the transcriptions of classroom observations of this research and found that most interaction in class was from the teachers." He said:

In the language classroom, absence of students' responses to teachers' questions is a phenomenon which frequently occurs and this might not help promote

students' language learning, their interactive and critical thinking skills.

Therefore, appropriate use of questions and questioning techniques is very important to encourage students' responses.

Critical Thinking Skills in the Language Classroom

According to the student focus group interviews and teacher individual interviews, critical thinking is important in the teaching and learning process. To students, critical thinking in the language classroom is expressing opinions, making judgments, and evaluating facts and opinions in English. However, in class, students accepted that they rarely exercise their critical thinking skills because they do not know how to think critically. Student H said, "I think I lack thinking ability because sometimes I do not know how to present my own ideas logically."

From the interviews, to encourage students' critical thinking skills in the language classroom, the students maintained that teaching activities play essential roles. Students A and G agreed that there are many effective teaching methods that can help promote students' thinking skills such as debates, group discussion, role-play, watching movies and discussing about it, and asking question to students one-by-one. Student A further stated:

Teachers' questions in the classroom help us learn language and encourage us to think critically. Both easy and difficult questions promote learning because when we are asked questions we need to understand the questions and try to formulate the answers for the questions.

However, Students B and C agreed that some questions do not help them to think because these questions were not found in their daily life. To develop students' thinking skills,

these students suggested that the questions in the classroom should encourage students to think outside the box and these questions can be applied and used in their real life situations as well.

Based on teacher individual interviews, critical thinking skills in the language classroom are students' ability to use language to express their own ideas, opinions, and to make their own judgments. Teachers A and B agreed that critical thinking affects students' language learning in the way that it helps students to make sound decision to solve problems in their real life situations. Teacher A stated:

I try many ways in class to develop students' critical thinking skills. First, I set the rule for students to speak English in class to have students to think in English.

Then, I have them to give their opinions in English in class.

Teacher B said, "I use a great number of questions in my class to make the students think, but sometimes it is difficult to make them think because they lack background knowledge relating to the topics discussed in class." Teacher A agreed.

Questioning is another essential strategy that can help students think critically in the classroom. I observe that when I ask the questions about the interesting topics, they can answer the questions and participate more in classroom interaction.

According to the interviews, Teachers A and B agreed that teachers' use of questions and students' responses are important for students' leaning success and for promoting the students to be critical thinkers. However, sometimes it is difficult to encourage students to think critically. Teachers A and B stated that critical thinking is

hindered in the language classroom because of two main factors: students' lack of general knowledge of topics being discussed in class and their limited language ability.

However, Teachers A and B admitted that for their language teaching, sometimes, time constraints, over work load and their limited experience in asking effective questions in the language classroom were their obstacles for using questions to promote students' responses and encourage their critical thinking skills. They agreed that if we would like to focus on promoting the students' critical thinking, the teaching and other work load of the teachers should be reduced and the learning arrangement and management such as a learning period, one hour class, should be changed to one and a half hour class as well. Another point that the two teachers reported is that the policy of teaching of the faculty on encouraging students' critical thinking skills that should be also officially implemented, so that promoting the students' critical thinking skills will be more successful.

Overall, according to the interviews, the two teachers realize the importance of teachers' questioning and think that they need training on how to use questions and questioning techniques effectively in their language classroom.

Summary

In this chapter, the data collected from the study were presented. The findings include a description of the setting and environment of classroom observation, the teachers, the classroom practice, the teachers' questioning and students' responses. A total of 507 questions were employed in the language classroom. A total of 378 were the teachers' initial questions and 219 were the questions the teachers used to encourage the students' responses after their initial questions failed to get responses from the students.

The teachers' initial questions which elicited students' responses accounted for 47%, while 53% of them failed to elicit responses from the students. A total of 59 (46 %) of the questioning techniques were successful in eliciting responses from the students, while 70 (54%) questions were not responded to by the students. Data analysis and discussion of the findings are presented in Chapter V.

CHAPTER V

ANALYSIS OF DATA

As the researcher of the study, my primary mission was to explore meaning within the data I collected through classroom observations, questionnaires, student focus group interviews, teacher individual interviews, and document analysis. I wanted to investigate questions and questioning techniques Thai English teachers use to promote students' responses and encourage their critical thinking skills in the language classroom in the Thai context. In this chapter, I present my analysis of teachers' questions, questioning techniques and students' responses in the language classroom at the Faculty of Liberal Arts and Management Sciences at Thai Southern University (TSU), Thailand.

In the present study, questions refer to utterances addressed by teachers in interrogative, imperative or declarative form to elicit verbal responses from students. Teachers' questions were analyzed according to Bloom's (1956) taxonomy of six developmental cognitive levels of questions consisting knowledge, comprehension, application, analysis, synthesis, and evaluation. Questioning techniques are statements which follow initial questions and which teachers use to elicit verbal responses from students after those initial questions fail to elicit students' responses. Teachers' questioning techniques were classified based on Wu's (1993) taxonomy of questioning

techniques comprising of repetition, rephrasing, simplification, decomposition, and probing. As for the students' responses to the teachers' questions and questioning techniques, they were analyzed by considering the level and quality of words in their responses.

In analyzing the data of this study, I also examined and looked for emerging and recurring themes, similarities, patterns, and comparisons within and across the data to construct the meaning of lived experience of teachers in their classroom practice and students' responses and their critical thinking skills in the language classroom. After data analysis, the summary of the chapter is presented.

Teachers' Use of Questions in the Language Classroom

In the present study, the teachers asked 378 questions during their teaching.

Table 3 presents the types and number of questions asked by the teachers during their teaching.

Table 3

Categories of Questions the Teachers Used in the Language Classroom

Categories of Questions	Number	Percentage
1. Knowledge	219	58
2. Comprehension	82	22
3. Application	34	9
4. Analysis	19	5
5. Synthesis	13	3
6. Evaluation	11	3
Total	378	100%

Based on the analysis according to Bloom's (1956) taxonomy of questions, 216 (58%) of the total questions asked were knowledge questions, which are at the lowest level of cognition, 159 questions (42%) were at a high cognitive level. Under high cognitive questions, the teachers asked 82 comprehension (22%), 34 application (9%), 19 analysis (5%), 13 synthesis (3%) and 11 evaluation questions (3%). The findings of the study indicated that knowledge questions, which are at the lowest level of cognition predominated.

Dominance of Knowledge Questions in the Study

When knowledge questions were plotted by phase of learning, this study revealed that knowledge questions were more dominant in the first phase of learning, when the teachers reviewed with students what they studied from the previous lesson and at the end of the lessons, when the teachers summarized the lessons and tested the students' knowledge of what they have learned in the class. Table 4 presents this information.

Table 4

Knowledge Questions in Each Phase of Learning in the Language Classroom

Phases of Teaching and Learning	Knowledge Questions Asked in Classes	
	Number	Percentage
Phase 1. Reviewing previous lesson	113	52
Phase 2. Presenting new topic/content	35	16
Phase 3. Summarizing the lesson	71	32
Total	219	100

Of the total knowledge questions asked in classes, 113 (52%) were used in the first phase of learning. In the second phase of learning, 35 (16%) were employed, especially after the teachers presented a new topic and content of the lesson, they had students practice using language spots and grammatical structures. And 71 (32%) of knowledge questions were posed at the end of the classes when the teachers summarized the lessons for the students. Teacher A admitted that he used knowledge questions most frequently in the beginning of the lessons. He stated:

The first activity I did in class was reviewing students the previous lesson, the first questions I asked “What did you learn from your last period? If the students study about tenses or other grammatical structures, I will test them what they have learned. I think if I do not give the students the review session, they never remember anything. Most students remembered what they have learned at hand just in class, when next class comes they forget. Most of the time, they also forgot their textbook, sometimes their assignments. So I think the review session is necessary for students.

Teacher B agreed, stating “I asked a lot of knowledge questions at the beginning of the class and at the end of the class to ensure the students’ learning past experience and learning outcomes they have learned at hand” She added:

Before the lessons begin, I asked the students for their assignments and we talked about the assignments. The assignments were their grammatical practice. I had the class share the answers and then I gave them the answer keys, so most of the questions I asked were to test the students’ grammatical knowledge. At the end of the class, sometimes there was chaos because the students were looking for

moving to another class, when I summarized the lessons some students did not pay attention to the last phase of learning. Thus, I asked them questions to ensure if they understood the lesson and I gave them 1 mark when they could answer my questions.

Functions of Knowledge Questions in the Language Classroom

The majority of knowledge questions found in the lessons have two main essential roles. The first role is to elicit students' knowledge of specific facts, especially of grammatical structures and general knowledge. The second is to have the students identify the terminology, and vocabulary related to the topics the teachers presented in the classroom. Overall, knowledge questions were used to test and have the students practice grammatical structures, to introduce a new topic in the lesson and to help students recall their learning experiences. The following example is Teacher B's knowledge questions heard during presenting the new topic of the lesson, which was in the second phase of her teaching.

T: Ok, today we are going to start the lesson by talking about a new topic today "How to stay healthy." To stay healthy, according to medical facts, *how many hours do you need to sleep a night?*

SS: 7-8 hours.

T: *Do you know how much water does your body need a day?*

SS: Two liters a day.

T: Ok, I will present you the facts about the time you need to rest, water your body needs, and the food and calories the body need per days to make you stay healthy in the following section. (Class B, lesson 3)

In the above example, Teacher B asked the questions in the second phase of teaching to elicit students' factual knowledge related to medical field. After her questions, she presented knowledge of these facts to the class.

Another function of knowledge questions found in the study is to recall students' learning experience. Consider the following,

T: Good morning class.

SS: Good morning teacher.

T: We are going to open the course Russian. Do you want to learn?

SS: No

T: We have one lecturer from Russia. Do you remember him?

SS: Yes. His name is Sergey.

T: OK. I will make a survey about your need in learning Russian again.

OK. Class, what did you study yesterday?

SS: Grammar.

T: *What is that grammar?*

SS: [Students looked at their textbook] Positive sentences: a subject plus verb and negative sentences, subject and helping verb. (Class A, lesson 3)

Teacher A started the class asking students about their needs to learn Russian course and he posed the questions to have students recall their previous learning experience.

In this study, based on the observation, the faculty individual interviews, and document analysis, there are two main reasons why the teachers posed a great number of knowledge questions during their teaching.

First, the teaching focus and objectives of the lessons contributed to a great number of knowledge questions. The focus and objectives of the lessons by the teachers were mainly on teaching grammatical structures. The classroom activities were mainly on reviewing, presenting, practicing, and testing students' grammatical structures. Consequently, most of the questions the teachers asked were knowledge questions.

To support the explanation of why knowledge questions were used most frequently, Teacher A stated that

We just focus on the lessons. As I told you we have to have the students achieve the goal, which is students should pass the exam. I think that we have to achieve the lesson plans as well. We focus much on the grammatical structure to make students understand the language contents of the unit, not much on critical thinking.

Teacher B mentioned that in some units the content of the lessons allowed the great opportunity to practice the language spots such as grammatical structure and in her point of view she agreed that it is necessary for students to know the grammar for their use of language for communication.

Apart from the teaching focusing on the lesson's objectives, it is possible that the teaching or classroom context affected the teachers' frequent use of knowledge questions in this study. Teacher B agreed that in the classroom setting, it is inevitable to ask questions to have students display their knowledge to test if they understand the lessons. She stated

As teachers we have to ensure that the students understand what they have learned before we move to other parts of the lesson, this might be different from the use

of the language in daily life which is not focus on the assessment of learning, but on communication.

As the two teachers agreed that what they do in class is to teach and assess the students' learning, it was observed that the class assignments, quizzes and a midterm exam paper also emphasized testing students' grammatical knowledge. For instance, in the quiz and midterm exam the teachers had students to complete the conversations with the correct verb forms and with the simple present or the present continuous. Thus, it is clearly seen that the teaching materials focused class assignments, and questions upcoming unit quizzes, and a midterm exam, thus encouraging teachers to employ knowledge questions targeting test material more frequently than high cognitive level questions in their language classroom.

The dominance of knowledge questions and other related knowledge activities found in this study is consistent with the results of a number of studies which investigated teachers' use of questions in English as a Second Language (ESL) and English as a Foreign Language (EFL) classrooms and affirmed that knowledge questions were the most frequently used (Alcon, 1993; Chinkumtornwong, 1985; David, 2007; Ekasingh, 1991; Hussin, 2006; Long & Sato, 1983; Pica & Long, 1986; Suasongsilp, 1990; Tan, 2007; Thamaraksa, 1997; Wu, 1993). The findings of these study revealed that most of the questions asked by teachers were to test the students' knowledge related to the contents of the lesson and checks of comprehension.

Knowledge Questions and Critical Thinking Skills

Although asking a great number of knowledge questions has pedagogical value in encouraging students to learn and practice the grammatical structures, it does not enhance

their interactive and critical thinking skills (Limbach & Waugh, 2005). In fact, the dominance of knowledge questions may deprive the students' opportunities to practice using the target language to create and express their own opinions spontaneously and appropriately in the language classroom. As a result, the students may not be able to produce their own ideas and opinions, to deal with the expressions that have not been presented in the classroom, and to think critically outside the classroom.

Limbach and Waugh (2005) further insert that "The level of student thinking is directly proportional to the level of questions asked." (p.47) and "Critical thinking takes place when students perform in the analysis through evaluation levels" (p.48). Therefore, in the language classroom, teachers should not be restricted to asking questions at low levels of cognition, but they should increase the number of high cognitive level questions such as application, analysis, synthesis, and evaluation questions in order to provide the students with more opportunities to look for and critique evidence, practice expressing their own opinions spontaneously in the target language, and to make their own arguments. High cognitive level questions can better enhance students' language ability and interactive skills, and prepare students to be critical thinkers. When students think critically, they were able to communicate appropriately in the target language both in and outside the classroom.

Teachers' Use of Questioning Techniques in the Language Classroom

The total number of questioning techniques the teachers employed in this study was 129. Table 5 presents these data.

Table 5

Categories of Questioning Techniques the Teachers Used in the Language Classroom

Categories of Questioning Techniques	Questioning Techniques	
	Number	Percentage
1. Repetition	98	76
2. Simplification	15	12
3. Rephrasing	10	8
4. Decomposition	6	5
Total	129	100%

Based on Wu's (1993) taxonomy of questioning techniques, the analysis revealed that the teachers employed 98 repetition (76%), 15 simplification (12%), 10 rephrasing (8%) and six decomposition (5%) in the language classroom. Repetition was used by the teachers most frequently. Decomposition was rarely found, while probing was not employed during the teaching.

Dominance of Repetition in the study

After repetition was plotted by phase of learning, this study shows that repetition was used most frequently by the teachers in the first and second phases of learning, when the teachers reviewed with students what they studied from the previous lesson and when the teachers summarized the lessons and tested the students' knowledge of what they have learned in the class. Table 6 presents these data.

Table 6

Repetition in Each Phase of Learning in the Language Classroom

Phases of Teaching and Learning	Repetition Used in Classes	
	Number	Percentage
Phase 1. Reviewing previous lesson	49	50
Phase 2. Presenting new topic/content	17	17
Phase 3. Summarizing the lesson	32	33
Total	98	100

Of the total repetition found in classes, 49 (50%) were used in the first phase of learning. In the second phase of learning, 17 (17%) were employed, especially after the teachers presented a new topic and content of the lesson, they had students do grammatical exercises and practice using grammatical structures. And 32 (33%) of repetition was posed at the end of the classes when the teachers tested the students' grammatical knowledge and concluded the lessons for the students. Teacher B accepted that she used repetition at the first and third phases of learning, but most frequently in the beginning of the lesson. She explained:

In the first phase of learning, repetition was used most often for my teaching. I found that there was chaos at the beginning of the class. I started the lesson by the review session, but seven to ten minutes after the start, some students came late and distracted their friends' attention from the lesson and classroom activities, most students did not listen to my questions. To enable students answer my questions, I always repeated the questions for them.

Teacher A stated that “I repeated questions a lot at the end of the class. My purpose was to ensure that the students understood anything they have learned during 50 minutes.” He added:

For my class, I often found chaos at the end of the class when the students were looking for moving to another class, and that time I summarized the lessons.

Most students did not pay attention to my questions. Thus, I asked them the same questions to ensure if they kept up with my questions, processed and answered them.

In the present study, there seems to be three explanations for the teachers’ frequent use of repetition during their teaching.

First, repetition provided the students with the second chance to hear the same questions. This was done because it might help students process the questions better because repetition gave the students more processing time and a chance to hear the same content, vocabulary and structure of the questions. Teacher A said that he frequently employed repetition in the classroom because it gave the students a second chance to hear the questions. He added:

Sometimes the class is noisy with the students’ discussion and their talk with friends, repetition would help students to process the same questions again and when I used repetition I asked the questions more loudly than the first time and then I can get the students’ responses.

According to Chaudron (1988), Wesche and Ready (1985), and Morrow (1997), repetition can help decrease the students’ difficulties in understanding the initial questions because there is no new information such as vocabulary and grammatical

structures in the repeated questions. They further maintain that repetition is one of appropriate questioning techniques teachers can use during their teaching.

Second, repetition provided the students with a hint for figuring out the answer to the question. This is especially true when the teachers repeat the questions and stressed key words or phrases in the question. Consider the following:

T: Let start with exercise A, Number 3. Let's check the answer together. OK?

OK. Listen to this sentence “You eat a lot of fast food these days.” What is the time expression of “You eat a lot of fast food these days.”?

SS: [Silence].

T: OK. Listen to me again class. What is the time expression of “You eat a lot of fast food these days.”? {The teacher stressed “*these days*”.

SS: “*these days*”.

T: Good. So these days we use with present continuous or present simple

SS: Present continuous. (Class B, lesson 2)

In the above example, the teacher had the students do the exercise and then she asked the questions to test the students’ knowledge of time expressions used for the present continuous tense and it was not responded by the students. Thus, the teacher repeated the question and stressed part of the question, “these days,” in order to help the students recall if the word “these days” is the time expression for the present continuous tense. This provided some indication of the answer and enabled the students to answer the teacher's question.

Third, repetition is considered a simple and convenient strategy for the teachers in their classes. The teachers do not to put additional effort and time into reformulating the

previous questions. Teacher B stated that “repetition is a convenient technique and it can be used immediately after my first questions failed to elicit responses from the students.”

Teacher A agreed, stating:

In my teaching, 50 minutes period is limited for us to think about other complex questioning techniques. I just often used repetition because it is convenient and it was successful especially when the students did not listen to my questions, lost their attention to lessons especially during near the break time or at the end of the lessons.

This rationale of the frequent use of repetition is in accordance with the findings of the studies conducted by Ekasingh (1991), Morrow (1997), and Thongmark (2002) which revealed that teachers used most repetition most frequently in their language classroom because repetition is a convenient strategy for them.

Students' Responses in the Language Classroom

In this section, I analyzed students' responses to teachers' questions and their questioning techniques.

Students' Responses to Teachers' Questions

According to the focus group interviews, the students stated that if they did not have any personal problems that made them not want to participate in classroom activities, they usually answered the teachers' questions because these questions helped them learn language. One student said:

When the teacher asked questions it helps us learn because when we did not understand the questions, we had to search the vocabulary, made understanding with the questions. In addition, we could listen to the teachers' accent and we

will get new knowledge including general knowledge, this further helps open our own world. These questions can help us to do the exam because they made us understand the lessons better. See Table 7.

Table 7

Questions Which Elicited Students' Responses

Categories of Questions	Questions with Responses	
	Number	Percentage
1. Knowledge	117	66
2. Comprehension	33	19
3. Application	11	6
4. Analysis	7	4
5. Synthesis	5	3
6. Evaluation	4	2
Total	177	100

Table 7 revealed that of 177 questions successful in eliciting students' responses, 117 knowledge questions (66%) were responded to by the students. In the high cognitive level question category, 60 questions comprising 33 comprehension (19%), 11 application (6%), seven analysis (4%), five synthesis (3%), and four evaluation questions (2%) elicited responses from the students. The findings indicated that knowledge questions, which are at low cognitive level questions elicited more responses than high cognitive level questions and knowledge questions elicited a greater number of words per response than other types of questions.

To explain this phenomenon, there seems to be two main reasons why the students most often responded to knowledge questions.

First of all, according to the student focus group interviews, it was found that answering knowledge questions does not require much thinking process and effort from students. The students said when they answered the knowledge questions, they just recalled what they have learned which was mainly about grammatical structures and specific facts of general knowledge. Students W said:

- . I think I can answer the questions that teachers asked to test our knowledge more than other types of questions that asked about new information or my opinion because answering knowledge questions I will not use much energy to think about vocabulary and grammatical knowledge in producing the answers.

Another reason that made knowledge questions responded to by the students most frequently was because the answers to these questions were provided in the textbook and teaching materials. The students stated that most of the knowledge questions the teachers asked were in the textbook and they could answer them because they just picked up the answers in the book. Student Z said, “Usually, I don’t want to speak in class, but sometimes I could answer the questions, especially the questions which I can find the answers in the textbook.” The following example is an illustration of the students' responses to a knowledge question of which the answer was in the textbook.

T: Now I’d like to start with unit 3 lesson A. ...Look at the book on page 22 about 6 people, some of them try to have good health. Look at the activities they do. (5 minutes later) *What kind of activities they do to stay healthy?*

SS: The Parks exercise six days a week and Brian don't eat a lot of junk food.

T: Look at the sentences on the book. *What tense that is used?*

SS: Present simple and present continuous. (Class B, lesson 3)

Here, the teacher had the students look at the unit three on the textbook and had them read it for about five minutes. After that the teacher asked the students questions to test whether the students could find the answers and identify the tenses used in the sentence in the textbook. The students were able to answer the questions because they took the answer straight from the textbook.

Length of Students' Responses to Teachers' Questions

In the study, it was found that different types of questions elicited different quantity of words in responses. The following table presents these data.

Table 8

Average Number of Words per Response to Each Question Type

Categories of Questions	Questions with Responses		Number of Words in Responses	Average Number of Words per Response
	Number	Percentage %		
1. Knowledge	117	66	608	5
2. Comprehension	33	19	145	4
3. Application	11	6	34	3
4. Analysis	7	4	19	3
5. Synthesis	5	3	11	2
6. Evaluation	4	2	15	4

2. Comprehension	33	19	145	4
Total	177	100	832	5

As shown in Table 8, 177 knowledge questions elicited 608 words of responses (5 words per response), 33 comprehension questions, 145 words (4 words per response), 11 application questions, 34 words (3 words per response), seven analysis questions, 19 words (3 words per response), five synthesis, 11 words (2 words per response), four evaluation questions, 15 words (4 words per response). The findings revealed that knowledge questions elicited a greater number of words per response than other question types.

In this study, there seems to be two reasons why knowledge questions elicited a greater number of words per response.

First, it is possible that the quantity of words in responses to knowledge questions provided in the textbook contributed to a greater number of words per response. This can be seen in the following example.

T: Look at Exercise A: Complete appropriate verb forms such as to+verb or verb+-ing in the sentences on page 13. Look at number 6, what verb form will you use to complete number 6; “Are you interested in _____(join) a meditation class?”

Ss: *Are you interested in joining a meditation class?*

T: ...OK. What is the verb form for number 7?

Ss: *Do you prefer to exercise/exercising alone or with friends?*

T: Good...OK. Question number 8, Would you like _____(learn) a martial art?

So, what is the most appropriate verb form?

Ss: Would you like to learn a martial art? (Class A, lesson 2)

In the above example, the teacher read students questions in the textbook and asked them to complete the questions with appropriate verb forms they have learned. The students were able to produce a great number of words per response because they took responses from the textbook and these responses contained a great number of words.

Second, the students produced a greater number of words per response to knowledge questions because most knowledge questions in this study required the students' currently learnt grammatical knowledge which was restricted to drill activities, particularly at the practice stage, required the students to complete responses. So, the students' familiarity with the grammatical structure and drill practice enabled the students to produce complete responses to the questions. This, in turn, contributed to a greater number of words per response to knowledge questions in this study. An example is given below:

T: Complete these sentences with a simple present or present continuous verb.

No. 1 "I usually ____ (go) to the gym twice a week." What is the correct tense?

Ss: I usually go to the gym twice a week

T: No.2 "This month, I ____ (eat) a lot of snacks. What is the correct tense?"

Ss: This month, I'm eating a lot of snacks.

T: Yes. Next, "I'm ____ (do) karate right now."

Ss: I'm doing karate right now. (Class B, lesson 3)

After the teacher presented to the students the explanations of the use of simple present or present continuous tenses and had them practice putting the verbs in the sentences in the textbook. The above example shows that the students were able to complete answers to the questions. This might have been caused by their familiarity with the grammatical structures.

Students' Responses to Teachers' Questioning Techniques

A number of questioning techniques used by the teachers in the study which elicited students' responses are presented in Table 9 below.

Table 9

Questioning Techniques Which Elicited Students' Responses

Questioning Techniques Type	Questioning Techniques Which Elicited Students' Responses	
	Number	Percentage
1. Repetition	45	76
2. Simplification	5	8
3. Rephrasing	5	8
4. Decomposition	4	7
Total	59	100

Of the total of 129 questioning techniques the teachers used in the classroom, 59 (46%) elicited responses from the students. Repetition (76%) elicited 45 responses, simplification (8%) five responses, rephrasing (8%) five responses, and decomposition (7%) four responses respectively. Of all the questioning techniques successful in eliciting responses from the students, repetition elicited the greatest number of responses.

Based on the focus group interviews, there are two main reasons why repetition was responded by the students most frequently in the language classroom.

First, repetition gave the students the second chance to process the questions. Hearing the same questions again might have helped the students to process the question better and thus enabled them to respond to the question. One of the students in Teacher A’s class stated:

Sometimes in class, there was very noisy, so I couldn’t hear the questions the teacher asked, then I think when the teacher repeated the questions it made students able to answer the questions. Sometimes, I saw my friends asked the teacher to ask the questions again. So I think that we can answer some questions because of the teacher’s repetition.

Second, repetition provided the students with a hint for figuring out the answer to the question, especially when the teachers stressed key words or phrases in the question. Stressing part of the question provided some indications of the answer and enabled the students to answer the teacher's question.

Length of Students’ Responses to Teachers’ Questioning Techniques

The following section illustrates the length of students’ responses to teachers’ questioning techniques, and the data are presented in Table 10.

Table 10

Average Number of Words per Response to Each Questioning Technique

Questioning Techniques Type	Questioning Techniques with Responses		Number of Words in Responses	Average Number of Words per Response
	Number	Percentage		

1. Repetition	45	76	123	3
2. Simplification	5	8	34	7
3. Rephrasing	5	8	28	6
4. Decomposition	4	7	19	5
Total	59	100	204	3

In Table 10, 45 repetition elicited 123 words of responses (3 words per response), five simplification, 34 words (7 words per response), five rephrasing, 28 words (6 words per response), and four decomposition, 19 words (5 words per response). The findings revealed that simplification elicited a greater number of words per response than other types of questioning techniques the teachers used in the classroom.

It can be argued that, this maybe because in this study, all simplification which elicited responses followed evaluation questions. Evaluation questions are by nature open-ended and accept a wide range of possible answers. When the teachers simplified evaluation questions, these questions made the questions simpler, clearer and narrower. This could help the students understand simplified referential questions better and provide appropriate answers which contained a greater number of words due to the nature of evaluation questions. The following is an example:

T: There are many activities to do to stay healthy such as “Not eating fast food everyday.”, Exercise three days a week.” Do you think that are these activities helpful for you, why?

SS: [Silence].

T: How does it help you to stay healthy if you don't eat fast food?

S: We will not be sick and have overweight.

T: Good, you will be healthy. (Class B, lesson 3)

Teacher B asked the students if they think that not eating fast food everyday and exercise three days a week were helpful for them, the students were silent. It is possible that the students remained silent because the scope of the answer to the question was broad. They were not sure of the answer the teacher was expecting. After the teacher simplified her initial evaluation question by asking how not eating fast food everyday helps them to stay healthy, the students were able to produce a complete response to the question. This could be because the simplified question led the students to think specifically about the answer of how not eating fast food everyday helps them to stay healthy.

The Absence of Students' Response in the Language Classroom

In the present study, teachers employed a great number of questions and questioning techniques to promote students' responses and to encourage their critical thinking skills. However, not all of these questions and questioning techniques elicited students' responses. One of the students stated that "I sometimes did not respond to teachers' questions because I don't prepare the lesson before class and I forgot what I learned from the last period, so it is better to be silent after the teachers' questions."

Teacher B stated that

In my class, I observed that there was a group of the students, especially weak students were always silent after my questions, sometimes I can't help with the absence of students' responses to my questions, then, I punished them by asking them to prepare some questions to ask me in the beginning of the next class.

For me, I don't like the absence of students' responses in class because I think when there are no responses, the students will not learn.

The questions and questioning techniques which were not responded by students are presented in Tables 11 and 12. Table 11 illustrates a number of questions which failed to elicit students' responses.

Table 11

Questions Which Failed to Elicit Students' Responses

Categories of Questions	Questions which Failed to Elicit Responses	
	Number	Percentage
1. Knowledge	102	51
2. Comprehension	49	24
3. Application	23	11
4. Analysis	12	6
5. Synthesis	8	4
6. Evaluation	7	3
Total	201	100

Of all 378 questions the teachers asked, 201 questions (53%) were not successful in eliciting students' responses. The students did not respond to 102 knowledge questions (51%), 49 comprehension questions (24%), 23 application questions (11%), 12 analysis questions (6%), eight synthesis questions (4%), and seven evaluation questions (3%) were not successful in eliciting students' responses in the classrooms.

Table 12 shows a number of questioning techniques which were not successful in eliciting responses from students.

Table 12

Questioning Techniques Which Failed to Elicit Students' Responses

Questioning Strategy Type	Questioning Strategies Which Failed to Elicit Responses	
	Number	Percentage
1. Repetition	53	76
2. Simplification	10	14
3. Rephrasing	5	7
4. Decomposition	2	3
Total	70	100

As for questioning techniques, 53 repetitions (76%) were not successful in eliciting responses from the students. This is followed by 10 simplifications (14%), five rephrasing (7%), and two decompositions (3%) respectively.

Rationales for Lack of Responses

In this study, students' rationales for their absence of responses were collected from questionnaires and student focus group interviews. Based on the questionnaires, students' silence after their teachers' questions occurs in three situations: the students understood the teachers' questions, but they could not answer them, the students understood the teachers' questions and knew the answers, but they didn't answer them, and the students didn't understand the teachers' questions and they could not answer them. In completing questionnaires, the students were allowed to select one situation to

give their reasons for their absence of responses, but they were able to choose more than one underlying causes under each situation.

A summary of the frequency of the students' responses to the first part of the questionnaires about reasons as to why they were silent after the teachers' questions is presented in Tables. The students' comments in the second part of the questionnaire and in the focus group interviews about problems they had with the teachers' questioning and their responding to the teachers' questions were used to explain the phenomenon and support the discussion of the results obtained from the first part of the questionnaire.

In the present study, of three situations for students' silence after their teachers' questions, it was found that most of the time the students understood the teachers' questions and knew the answers, but they didn't answer them. These data are presented in the following table.

Table 13

Students' Responses to Questionnaire as to Why They Were Silent after Teachers' Questions

Construct under Which Students Were Silent after Teachers' Questions	Students' Responses to Questionnaire	
	Number	Percentage
1. The students understood the teachers' questions and knew the answers, but they didn't answer them.	862	43
2. The students understood the teachers' questions, but they could not answer them.	603	30

3 The students didn't understand the teachers' questions and they could not answer them.	531	27
Total	1,996	100%

Table 13 shows that most of the students' silence occurred because the students did not answer the teachers' questions even though they understood the questions and knew the answers (43%). This is followed by the students did not have the ability to answer the teachers' questions even though they understood the questions (30%), and the reasons that the students could not answer the questions because they did not understand the questions (27%). As shown in Table 10, it can be seen that the students understood the teachers' questions most of the time, knew the answers, but they did not respond to them. The students in this study identified several underlying causes of their silence after the teachers' questions under three situations. Table 14 further delineates the frequency of occurrence of the underlying causes of the students' silence after the teachers' questions under situation one.

Table 14

Causes of Students' Silence When They Understood Teachers' Questions and Knew the Answers, but They Did Not Answer Them

The students understood the teachers' questions and knew the answers, but they didn't answer them. This is because:	Students' Responses to Questionnaires	
	Number	Percentage
- The students were afraid of making mistakes.	318	37

- The students didn't like to speak in class.	166	19
- The students didn't want to answer the questions which required their opinion.	104	12
- The teachers' questions were too easy and not challenging.	99	11
- The teachers' questions were not interesting.	93	11
- The students were shy.	82	10
Total	862	100

On the basis of the frequencies of students' responses to the questionnaire, it was found that the students fear making mistakes (37%), they possess unfavorable attitude towards speaking in class (19%), they do not want to answer questions which required their opinion (12%), and the questions the teachers asked were easy and not challenging (11%), not interesting (11%), and being shy (10%).

According to the student focus group interviews, it is possible that the students' lack of self-confidence in speaking English in class, classroom atmosphere, and classroom community contributed to their fear of making mistakes and unfavorable attitude towards speaking in the classroom.

Student J said, "I don't have self-confidence in responding to teacher' questions because I was afraid of making mistakes, and I was worried if the teacher understand my answers. He further mentioned that "If I give the wrong answers, I'm afraid of destroying the classroom atmosphere in learning." Student K agreed, stating "I'm not

self-confident to answer the questions in class because I'm afraid that my friends think that I want to show off, so I avoid answering the teacher's questions."

The students argued that self confidence is very important for them in their language learning and in exercising their critical thinking skills. They said that if the students do not have self-confidence in speaking, the teachers will not know if we learn from their teaching, the more frequently the students talk, the more opportunity to students to express their critical thinking skills and their language learning.

Based on the focus group interviews, in addition to their lack of self-confidence, classroom atmosphere and community also influenced students' responding to teachers' questions. The students stated that a positive classroom atmosphere and community helps increase their involvement, and promote their interactions with their teachers and the flow of interaction among all class members. One of the students who rarely responded to teachers' questions asserted that:

Classroom atmosphere, which relating to the teachers and students' personality, and the relationship among friends in class affected our frequencies in responding to teachers' questions, for example, if the relationship between friends in class is close, when we answer the teachers' questions we will not be afraid of losing face when we give the wrong answers, and our friends will not laugh at our mistakes.

Student D agreed, "...if the teachers create a warm and positive learning atmosphere, that is, not give pressure to students, the students will be willing to participate to classroom activities and respond to their questions." Students N said "We don't want pressure in learning because we need time to adjust ourselves with learning English in university such as speaking English all the time in English class, this is not

happen when we studied in secondary school. Other students stated that the pressure from learning atmosphere and from the rules of speaking English all the time in class discouraged them to participate in teachers' questioning and the negative classroom community such as laughing from friends when they provided wrong answers and being afraid of showing off in class also made them not want to answer the teachers' questions.

Another rationale of the students' silence after the teachers' questions in the study was that the students did not have the ability to answer the teachers' questions even though they understood the questions. Table 15 further presents the frequency of occurrence of the underlying causes of the students' silence after teachers' questions under situation two.

Table 15

Causes of Students' Silence When They Understood Teachers' Questions, but They Could Not Answer Them

The students understood the teachers' questions, but they could not answer them. This is because:	Students' Responses to Questionnaires	
	Number	Percentage
- The students could not put ideas into words.	227	38
- The students didn't know the vocabulary.	113	19
- The students didn't know the grammar	104	17
- The teachers didn't give sufficient time to formulate the answers.	87	14
- The students didn't have the knowledge required by the questions.	65	11

- Others: The students were talking with friends or opening the textbook, and were translating the questions into Thai.	7	1
Total	603	100

In this study, the most frequent cause of the students' inability to respond to teachers' questions was that they were not able to put ideas into words (38%). This is followed by their limited vocabulary (19%), limited grammatical knowledge (17%), insufficient wait-time provided by the teachers (14%), limited background knowledge required by the questions (11%), and others, for examples, the students were talking with friends, opening the textbook and translating the questions into Thai (1%).

According to the interview, it was found that limited vocabulary and grammatical knowledge influenced the students' inability to put their ideas into words. The students stated "I don't mind in answering the teachers' questions in class, but sometimes I could not think of vocabulary to make sentences to express my responses especially when the teachers asked questions that required our own opinions." Student P agreed, adding "For me I think that my grammar knowledge is not good, sometimes I know vocabulary to use, but I cannot make it in sentences, I just say in words or phrases."

The last rationale of the students' absence of responses in class was that the students could not answer the questions because they did not understand the questions, which is about 25.91% of students' responses to the questionnaire. Table 16 revealed causes of the students' silence after teachers' questions under situation two.

Table 16

Causes of Students' Silence When They Did Not Understand the Teachers' Questions and Could Not Answer Them

The students didn't understand the teachers' questions and could not answer them. This is because:	Students' Responses to Questionnaire	
	Number	Percentage
- The students could not keep up with the pace of the teachers' questions.	190	35
- The students didn't listen to the teachers' questions.	101	19
- The teachers used vocabulary which was too difficult.	96	18
- The content was too difficult and complex.	67	12
- The teachers used grammar which was too difficult.	40	7
- The teachers asked the questions only once.	23	4
- The teachers asked the questions in a very soft voice.	14	3
- Other: Others: The students were talking with friends and opening the textbook.	7	1
Total	538	100

With regard to the underlying causes of this rationale, the frequency of the students' responses to the questionnaire shows that the students' inability to keep up with the pace of the teachers' questions (35%), not listening to the teachers' questions (19%), too difficult vocabulary (18%), too difficult and complex content (12%), difficult grammar (7%), asking questions only once (4%), asking questions with soft voice (3%),

and others such as students' talking with friends and opening the textbook (1%) caused the students' not understanding and their inability to respond to teachers' questions in the language classrooms.

Clearly, the students' lack of attention to the teachers' questions contributes to the students' not responding to teachers' questions. In this study, it is possible that students' are bored with the teaching methods and techniques and the questions the teachers used in class caused students' lack of attention to the teachers' questions.

According to focus group interviews, students agreed that appropriate teaching methods and techniques can encourage students to be eager to learn and lead to the students' happiness in their learning. When they are happy to learn, they will feel more comfortable to join classroom activities and participate in classroom interaction including answering teachers' questions and share their ideas in class.

The students further provided the example that asking questions to the students one by one, sometimes makes the students not want to answer the questions. A student in this group also said that:

Sometimes, the teacher came and taught, taught, and taught. We don't want this. We want the teacher to have us listening to English songs, playing games, vocabulary competition games, singing songs, and whatever, not only study grammar. I want other extra activities because these activities can make us learn English and remember vocabulary and then use the language.

Student F mentioned that "Sometimes the classroom activities are the same and repeated, for example, the teacher had us have a conversation with our friends, and find information from each other and we did it again and again. Student G added, "I need

rewards or reinforcement such as good!, very good! when I can answer the questions.”

She also said that these characteristics of the teachers can make the students enjoy the class and not be afraid to answer the teachers’ questions. She added, “If the teacher looks serious or feels serious about the teaching, it also makes me feel serious and then I don’t want to learn and answer the questions in class, but if the class is fun and interesting, I think we will not feel bored and pay more attention to the lessons and in answering the teachers’ questions.

According to Gall (1984), Tod (1999), Leow (1997), and Williams (1999), paying attention is an initial important step in answering a question. It provides the students an opportunity to keep up with the pace of the teachers’ questions. So, when the students’ attention wandered away from what the teacher was asking, for instance, they were talking with their friends or opening their textbook, or daydreaming from boredom, there was little chance of their processing and understanding the teachers’ questions. This further led to their inability to respond to the questions.

Students’ Responses and Critical Thinking Skills

In the language classroom, students’ responses are an output which is essential in the learning process (Swain, 1985). Producing outputs provides students with opportunities to put the language into contextualized and meaningful use and to indicate whether they understand the lessons or whether they are able to use the language correctly and appropriately. He further states that outputs, particularly when they occur in classroom interaction where students have to generate their own responses, push their linguistic ability, communicative competence and their critical thinking skills.

Richards and Lockhart (1994) and Swain et al. (1994) maintain that responding to teachers' questions provides students with opportunities to practice and apply knowledge and skills they have learned and to control and adjust their communication. The more adjustments students make in their attempts to communicate their meanings, the greater opportunities for second language acquisition (Johnson, 1995; Lynch, 1996; Nunan, 1990; Richards, 1985; Shehadeh, 1999; Swain, 1995).

Thus, in the language classroom, if there are a few responses from the students in the classroom, students will lack opportunities to practice using the target language and to develop their language ability and critical thinking skills. Based on Nunan (1989), Tarone and Yule (1991) and Van den Braden (1995), students' not responding to teachers' questions deprives the students themselves of opportunities to develop their language ability and thinking skills.

According to Scarcella and Oxford (1992) and Ulichny (1996), students' responses are a great stimulus for language acquisition because producing responses enhances the students to employ three necessary skills: thinking, recognizing and organizing. They further maintain that when students respond to questions, first of all, they have to think about the answers. To do this, they need to recognize or recall their linguistic knowledge and knowledge of the world to organize or formulate their responses. So, the more opportunities that are given to students to produce often and many responses, the more they can improve their language ability and critical thinking skills. Furthermore, students' ability to respond to their teachers' questions often in the classroom contributes to their ability to use the language appropriately outside the classroom. In contrast, it is very likely that students who rarely respond to the teachers'

questions or produce short or few responses are going to have frustrated experience when they try to use a language outside the classroom (Dillon, 1981a, 1981b; Ellis, 1994, 1995; Long, 1983; Long and Richards, 1987; Lynch, 1996; Nunan, 1989; Seliger, 1977; Seliger and Long, 1983).

In the classroom setting, teachers usually want students to produce as often and as many responses as possible. Therefore, to promote students' language learning and their critical thinking skills, it is essential that teachers provide students with more opportunities to respond to their teachers' questions and it is necessary for the teachers to know the rationale why the students did not respond to their questions.

Summary

In the present study, the teachers used six types of questions in the classrooms: knowledge, comprehension, application, analysis, synthesis, and evaluation questions. Knowledge questions were found to be predominant. The dominance of knowledge questions was caused by the focus, the objectives of the lesson and the classroom context. Of all the questions asked in the study, knowledge questions elicited the greatest number of responses from the students. The fact that the students responded to knowledge questions most often might be because responding to knowledge questions does not require much of the students' time, effort, vocabulary and grammatical knowledge in formulating their responses.

As for questioning techniques, repetition, simplification, rephrasing and decomposition were employed by the teachers. Repetition was used the most frequently. This is because repetition is a convenient strategy for the teachers, it helps the students process the questions better and it provides the students with a hint for figuring out the

answers to the questions. Of all questioning techniques employed in the study, repetition elicited the greatest number of responses from the students since it helps the students to process the questions better and it provides the students with a hint for figuring out the answers to the questions.

Students' not responding to their teachers' questions occurred in three situations. First, the students did not answer the questions even though they understood the questions and knew the answers. This was affected by their fear of making mistakes, unfavorable attitude towards speaking in class, and not wanting to answer the questions which required their opinion. Second, the students were unable to answer questions even though they understood them because of their inability to put ideas into words, their limited vocabulary, limited grammatical knowledge, and insufficient wait-time provided by the teachers. Third, the students did not understand questions and were unable to answer them. The students' not understanding and not being able to answer questions were induced by their inability to keep up with the pace of the teachers' questions, not listening to the teachers' questions, too difficult vocabulary and complex contents.

CHAPTER VI

SUMMARY, FINDINGS, CONCLUSIONS, FUTURE RESEARCH AND FINAL STATEMENT

In Thailand higher education, encouraging students to develop their critical thinking skills is a valuable aspect of teaching process and learning environment (National Educational Act, 2002). Based on the National Education Act of 2002, to accomplish this value of education, the teaching process must have been incorporated with activities that enable the students to think critically. Chanpakorn (2007) and Dantonio and Beisenherz (2001) suggested that to empower students' critical thinking skills, the teachers should shift attention from what students learn to how the students think and learn and it is necessary for teachers to know how to enhance their students' critical thinking skills in various and productive ways.

According to King (1995), one of the effective pedagogical approaches used to encourage students' critical thinking skills and their cognitive growth is asking challenging and higher cognitive level questions. Pascarella and Terenzini (2005) maintain that "Disposition to think critically involves, among other traits, such factors as the inclination to ask challenging questions, and follow the reason and evidence...encourage students' critical thinking skills and ability to solve problems" (p. 157). As teachers' questioning is important in encouraging students' responses, their

critical thinking skills and cognitive development, it is worth to examine teachers' use of questions and questioning techniques to foster students' responses, critical thinking skills and their cognitive development through their responding to questions of varying cognitive levels in the language classroom.

Summary of the Study

The purpose of the present study was to investigate cognitive levels of questions and questioning techniques that the two Thai English teachers employed in the language classrooms to promote language students' responses and encourage their critical thinking skills. The following research questions served as the driving force behind this study:

1. What questions and questioning techniques do Thai English teachers use in the English classrooms? And, why?
2. What responses to questions and questioning techniques are evidenced by their students? And, why do students report that they do or do not respond?
3. To what degree and in what ways does cognitive theory explain the relationship of cognitive levels of students' responses to cognitive levels of teachers' questions?
4. What other realities about teachers' questions and questioning techniques, and students' responses are revealed?
5. How helpful is cognitive learning theory for explaining the phenomenon under review?

Procedures

Data needed for this study were teachers' questions, questioning techniques, and students' responses to teachers' questions, and questioning techniques, and students'

rationale for exercising or not exercising their critical thinking skills and teachers' rationale for the use of various levels of cognitive questions and questioning techniques in the language classroom. Data sources or participants were two Thai English teachers and two classes of their first year students in Language, Communication, and Business program making up a total of 52 students.

The teachers graduated with a Master's degree in English, Teaching English or Applied Linguistics. They had at least three years experience of teaching English as a foreign language and they taught regular classes of English Listening-Speaking in the academic year 2008 at the Faculty of Liberal Arts and Management Sciences, Thai Southern University (TSU) at Suratthani. Other data sources of the study were a Touchstone textbook, teachers' lesson plans, students' assignments, handouts, worksheets, unit quizzes, and a mid-term examination paper.

Data Collection. The data collection process for this study employed a triangulation method through, classroom observation of videotaped lessons of English Listening-Speaking classes in the first semester of the academic year 2008 at the Faculty of Liberal Arts and Management Sciences, TSU at Suratthani, the student focus group interviews, faculty individual interviews, students' responses to a questionnaire, and document analysis. These components of data collecting process enabled me to gather the necessary data to conduct a full, rich qualitative analysis and report.

Data Analysis. The data were analyzed qualitatively. Bloom's (1956) taxonomy of questions and Wu's (1993) taxonomy of questioning techniques were key component of the data analysis process. I employed Bloom's (1956) cognitive developmental of taxonomy of questions as a lens to explore cognitive levels of questions the teachers

asked in the classroom and I used Wu's (1993) taxonomy of questioning techniques to classify teachers' questioning techniques. The qualitative analysis of the cognitive and quality of responses was conducted to investigate the students' responses in the classroom. To establish the accuracy and trustworthiness of the findings in this study, credibility, confirmability, triangulation, transferability, and dependability were employed.

Findings

On the basis of the design of the study, along with Bloom's (1956) taxonomy of questions and Wu's (1993) taxonomy of questioning techniques, I explored the meaning of lived experience of teachers' classroom practice on their use of questions, questioning techniques, students' responses and their in the critical thinking skills. Findings of this study are presented here in summary form as answer to the study's five primary research questions.

Research question one: What questions and questioning techniques do Thai English teachers use in the English classrooms? And why?

In this study, six types of questions were used by the two teachers in their teaching: knowledge, comprehension, application, analysis, synthesis, and evaluation questions (Bloom, 1956). Of all the question types found in this study, knowledge questions, low level of cognition questions were found to be predominant. This is followed respectively by comprehension questions, application questions, analysis, synthesis and evaluation questions. The dominance of knowledge questions was caused by the objectives of the lessons and the classroom context. It was also found that knowledge questions elicited the greatest number of words per response due to two reasons. First, the

students' responses to knowledge questions in this study were taken from the textbook and the textbook-provided responses contained a great number of words, so this contributed to the greatest number of words per response to knowledge questions. Second, most knowledge questions in this study required the students' currently learned grammatical knowledge which made it easy for the students to produce complete responses to knowledge questions.

As for questioning techniques, four types of questioning techniques were employed by the teachers in the classrooms: repetition, simplification rephrasing and decomposition. Of all the questioning techniques employed, repetition was the most frequently used. There are three explanations for this phenomenon. First, repetition is a convenient strategy for the teachers. Second, it helps the students process the teachers' questions better. Third, it provides the students with a hint for figuring out answers to questions and enables them to think about the grammatical structure and the content focus at hand.

Research question two: What responses to questions and questioning techniques are evidenced by their students? And, why do students report that they do or do not respond?

In this study, of all the questions asked in the study, knowledge questions elicited the greatest number of responses from the students. There seems to be two main reasons to explain why the students responded to knowledge questions most often. First it was the most frequent type of question asked. Second, responding to knowledge questions does not require much of the students' time, effort, vocabulary and grammatical knowledge in formulating their responses. Third, the students' responses to knowledge questions in this study were taken from the textbook and the textbook-provided responses contained a

great number of words, so this contributed to the greatest number of words per response to display questions. Most knowledge questions in this study required the students' past and currently learned grammatical knowledge which made it easy for the students to produce complete responses to knowledge questions.

Of all questioning strategies employed in the study, repetition elicited the greatest number of responses from the students. There are two main explanations why repetition elicited the greatest number of responses. First, it helps the students process the questions better. Second, it provides the students with a hint for figuring out the answers to the questions. As for the length of the students' responses, simplification elicited the greatest number of words per response. This might be because simplified questions are clearer, easier and more specific than the initial questions and thus enabled the students to answer questions more easily.

In this study, the students' silence after the teachers' questions in the classrooms occurred in three situations. First, the students did not answer the teachers' questions even though they understood the questions and knew the answers. This was affected by three main factors: their fear of making mistakes, unfavorable attitude towards speaking in class, and not wanting to answer the questions which required their opinions. Second, the students were unable to answer the questions even though they understood the questions. The students' inability to answer questions was caused by four main factors: their inability to put ideas into words, their limited vocabulary, limited grammatical knowledge, and insufficient wait-time provided by the teachers. Third, the students did not understand questions and were unable to answer them. The students' not understanding and not being able to answer questions was affected by three main factors:

their inability to keep up with the pace of the teachers' questions, not listening to the teachers' questions, too difficult vocabulary and complex contents.

Research question three: To what degree and in what ways does cognitive theory explain the relationship of cognitive levels of students' responses to cognitive levels of teachers' questions?

In this study, Bloom's (1956) taxonomy of questions was used to identify and classify the cognitive levels of questions asked by the teachers during class sessions, and it was found that most of the questions the teachers asked were at the knowledge level of cognition. Knowledge questions are the lowest level of cognition according to Bloom's taxonomy. As for the students' responses, there was a relationship between the cognitive level of the students' responses and the cognitive level of teachers' questions. According to the classroom observations, the students responded to knowledge questions most frequently in the classroom. From the interviews, the students stated that responding to knowledge questions, low cognitive level questions, does not require complex thinking process, much of their time, effort, vocabulary and grammatical knowledge in formulating their answers.

According to Bloom (1956), questions at the knowledge level cannot be used to encourage students to think critically. Lower cognitive level questions frequently require students to recall information and what they have learned in the past. In contrast, higher cognitive level questions require students to think critically, to process and potentially evaluate the subject matter. Bloom (1956) implies that teachers' use of various cognitive levels of questions in the classroom will help encourage students to practice a wide range of thinking processes. Thus, we as teachers should realize that the use of multiple types

of questions in the classroom is crucial for promoting students' critical thinking skills. In teaching, it is necessary for the teachers to plan questions for students learning, as well as for promoting students' higher level of thinking process. In the field of language teaching, the students also need to be required to think critically about the subject matter by creating their own responses to evaluate and express their feelings and opinion appropriately in their real world (Bachman & Palmer, 2000; Brown, 2004; Kabilan, 2000).

Research question four: What other realities about teachers' questions and questioning techniques, and students' responses are revealed?

Two other realities were revealed that I believe are important to acknowledge. The first reality worth mentioning is the absence of students' asking teachers' questions in the classroom. According to McGrew (2005), by not asking questions, the teachers and fellow students will assume that the students who were not asking questions are not interested in the class or the subjects and that they are not willing to share their perspectives in their learning process. Roberts (2006) maintains that not sharing perspective may indicate that students do not believe they are worth sharing their points of view. Roberts (2006) further posits that each person's point of view is valuable, the teachers expect students to analyze and compare information in order to evaluate and apply it to their life. Therefore, in the classroom even though students are not expected to respond to all teachers' questions, they are expected to be able to explore possibilities to ask their teachers' questions (David, 1994; McGrew, 2005, Roberts, 2006).

Based on Roberts (2006), the English language classroom should be designed and implemented so that students can ask questions, which will in turn allow for the

achievement of significant learning outcomes. Without having the language tools or skills needed to ask questions, students are left with only response and repetition during their ESL lessons. Thus, Roberts (2006) suggests that teachers can help ESL students learn to ask questions clearly and appropriately with strategies that help students feel comfortable and confident asking questions both inside and outside the classroom.

According to Lopez (2005), in the critical classroom environment, authority and responsibilities are shared between teacher and students, empowering all class members to become active, responsible participants of the learning process are the value of teaching perspective. Sharing authority sets the ground for a positive learning process in which students and teacher negotiate the class procedures, structures, contents, grading criteria as well as their own roles in relation to each other.

Students are encouraged to think critically is a value of education. Thus, encouraging students to think about a topic in an in-depth manner and to consider the outcome of assumptions or theories and to ask teachers the questions is essential and necessary in the classroom environment (Davis, 1994; McGrew, 2005; Roberts, 2006).

Second, it was discovered that the majority of students who participated in the study are females, from the South of Thailand, and most of them are Buddhist. Based on this data, the little diversity of students backgrounds and religions may affect the students in terms of their learning, cognitive skills and intellectual growth (Pascarella & Terenzini, 2005).

Pascarella and Terenzini (2005) maintain that the lack of diversity of students' backgrounds may result in limited diversity experiences inside the institution, which further leads to the slow rate of students' cognitive and intellectual growth. They further

state that the more students get involved in diversity experiences, the more opportunities the students acquire new knowledge, practice their communicative strategies, and learn to live with other people. This is consistent with Astin and Antonio (2000) who asserts that “socializing with someone from a different racial-ethnic group, attending a racial-cultural awareness can have a positive influence on students’ academic skills development and knowledge acquiring during college” (p.194).

However, Astin (1991) states that diversity experiences from students’ can be one factor that effect the power of involvement in learning, academic and non-academic activities, and this might have the greater impact on students’ academic development and intellectual growth. So, it is important to have the students do a variety of classroom activities including a various cognitive level questions that help encourage more students’ critical thinking skills in the classroom.

Research question five: How helpful is cognitive learning theory for explaining the phenomenon under review?

I found Bloom’s (1956) cognitive learning theory useful for explaining the phenomenon of teaching and developing students’ critical thinking skills in the language classroom in two main ways. First of all, in considering the relative strengths of using Bloom's (1956) Taxonomy of questions to identify and classify cognitive levels of questions asked by the teachers in the language classroom, it was found that all six cognitive level are useful in developing students' critical thinking abilities and skills, but in different levels of thinking processes. Thus, for Bloom's Taxonomy, when modified to suit the needs of the particular context, it can be particularly useful as a tool for planning to use questions to encourage students’ thinking skills in the field of language teaching.

This will provide teachers with insight into various functions of questions as well as how to ask questions which are appropriate for the content and the focus of the lesson and for students' level of language ability. When teachers employ questions appropriately, they will be able to elicit responses from students. This will help develop students' language ability, communicative and critical thinking skills.

Another usefulness of cognitive learning theory is that it provides a framework for structuring learning goals, planning appropriate cognitive levels of questions in the classroom, activities and assessment and as a tool to ensure appropriate coverage of a variety of types of cognitive demands for students. In developing critical thinkers, a full variety of questions is required since higher cognitive level questions are founded on more basic concepts, namely, assumption, and fact (Bloom, 1956; Paul, 1993). However, to encourage students to engage in higher order processes, Paul (1993) points out that students must have acquired the pre-requisite knowledge, comprehension, application. According to Paul (1993), it implies that it is not necessary to highlight analysis, synthesis and evaluation types of questions but teachers should use all types of questions.

Conclusions

Conclusions drawn from this study can be found in three main areas. The first area is related to the usefulness of qualitative research design in the field of language teaching to understand the meaning of lived experience of teachers' classroom practice on questioning and students' responses and their critical thinking skills. The second area relates to the application of Bloom's (1956) six cognitive learning levels and Wu's (1993) taxonomy of questioning techniques. And the third area relates to the overall

impact of teachers' use of questions and questioning techniques on students' responses and their critical thinking skills.

A Qualitative Research Design in the Field of Language Teaching

I can now conclude that the qualitative research method designed for this study was extremely helpful in the field of language teaching for better understanding the classroom practice of teachers' use of questions varying cognitive levels encourage students' critical thinking skills in the language classroom.

By design, a qualitative study consists of rich, descriptive details of situations, events, people, interactions, observations, and direct quotations about individual experiences, attitudes, beliefs, and thoughts (Yin, 2003). Designing my study as a qualitative research enabled me to understand more about what is happening within the language classroom context.

Additionally, I designed this study as an explanatory case study. Case study research in TESOL and Second Language Acquisition (SLA) has an important role on the development of L2 syntax, morphology, phonology, and so on (Hatch, 1978). More recently, TESOL case studies have adopted the more subjective and interpretive stance typical of case studies in education and other many different fields with more emphasis on issues such as learners' and teachers' skill development and its consequences for learners, teachers' professional and development experiences, which require sufficient details and contextualization (Gall, Borg, & Gall, 1996; Johnson, 1992; Stake, 1994, 1995).

I do believe that by designing my study as a case study allowed me to use various data collection strategies such as classroom observation, focus group interviews,

individual interviews, questionnaire, and document analysis. These strategies enabled me to obtain adequate relevant and valuable data about case participants, sites and setting. In addition, multiple data collection procedures brought together multiple perspectives, depth, and multiple insights to an analysis and could enhance the validity, credibility and accuracy of my findings. Through the combination of data collection procedures, I was able to portray and delve further into the phenomenon of classroom practice, which other research methods may not have permitted. Most importantly, I do believe that this qualitative research also helps bridge the gap in the literature because of the lack of research on this particular field in the Thai context.

Bloom's (1956) six cognitive learning levels and Wu's (1993) taxonomy of questioning techniques

Bloom's (1956) six cognitive learning levels and Wu's (1993) taxonomy of questioning techniques are helpful in depicting a clear picture of cognitive levels of teachers' questions and cognitive levels of students' responses in the language classroom.

Bloom (1956)'s taxonomy and Wu's (1993) taxonomy of questioning techniques represent a tool for planning of utilizing questions and questioning techniques to encourage students' critical thinking in the language classroom. They give teachers a precise language for articulating the intended outcomes of their instruction expressed in terms of promoting students' critical thinking skills, the development of cognitive growth and their learning success. As a result, the focus of classroom instruction can be the acquisition of student critical thinking skills and their language competencies rather than the instructor's academic knowledge or content coverage.

In addition, Bloom (1956)'s taxonomy and Wu's (1993) taxonomy of questioning techniques provided teachers a way to state the course's learning outcomes precisely. For instance, to design a university-level course to encourage students' critical thinking skills, behavioral and cognitive objectives of the course will allow teachers to mark out for students a path to the achievement and to formulate a set of goals for the course. Consequently, teaching becomes an intentional activity in which teachers guide students and isolate learning difficulties along the way before those difficulties hinder the mastery of students' language achievement and their development of critical thinking skills.

Thus, using the taxonomy during the instructional planning stage, teachers can establish the ability to construct knowledge as a meaningful student learning outcome and embed its practice explicitly into the essential components of their courses such as classroom instruction, evaluation, and the development of their cognitive growth.

Moreover, using Bloom (1956)'s taxonomy and Wu's (1993) taxonomy, instructors can create a detailed blueprint of teaching and learning environment that fosters students' critical thinking and the process of knowledge construction. Bloom's (1956) taxonomy of question and Wu's (1993) taxonomy of questioning techniques lend rigor to the teaching of critical thinking skills, and guide purposeful learning in contemporary teaching environments.

I do believe that using Bloom's (1956) taxonomy of question and Wu's (1993) taxonomy of questioning techniques is beneficial for other researchers by clarifying the usefulness and applications of employing Bloom's (1956) taxonomy of questions and Wu's (1993) taxonomy of questioning techniques in analyzing the teacher's questioning in the language classroom discourse. The use of the taxonomies of Bloom (1956) and Wu

(1993) in a study of students' critical thinking skills in the language classroom in tertiary levels and in different contexts can be helpful for other language researchers to adapt and employ these taxonomies in their own context more effectively.

To sum up, it is essential that an instructor be able to classify each type of questions and questioning techniques at a specific level, the Taxonomy of Educational Objectives by Bloom (1956) and the taxonomy of questioning techniques by Wu (1993) are introduced as a tool which is helpful for defining the kinds of thinking skills instructors expect from students and for helping to establish congruence between the instructor's goals and the questions they ask during their instructions.

Overall Impact of Teachers' Use of Questions and Questioning Techniques on Students' Responses and Their Critical Thinking Skills

I can conclude that the findings of the study are helpful in depicting classroom interaction in terms of the levels of cognitive questions and questioning techniques the teacher employed to enhance students' critical thinking skills, the degree to which each type of them promotes students' thinking, and factors prohibit students' ability to think critically.

Overall, in this study, both questions and questioning techniques frequently used in the classroom were at lower cognitive levels. As a result, students' responses were at a low level of cognition and this might not help encourage students' critical thinking skills (Cotton, 1998; Dashwood, 2005; Newmann, 1990; Wilen, 1991).

Based on Cotton (1998) and Wilen (1991), low cognitive level questions concentrate on factual information that can be memorized. It is widely believed that this type of question can limit students by not helping them to acquire a deep, elaborate

understanding of the subject matter and to think critically in the classroom. Newmann (1990) maintains that lower cognitive level questions demands only routine or mechanical application of previously memorized and acquired knowledge and information, thus this might not challenge students to interpret, analyze, or generate their own responses. Thus, teachers should be ensured that they have a clear purpose for their questions rather than just testing what knowledge is learned.

According to Dashwood (2005), questions which require students' knowledge are typical of teacher-fronted lesson for the purpose of their transmission of knowledge to students. They may reduce the wide ranges of students' answers, and they are not conducive to discussion, especially when students are expected to express their own ideas and elaborate them. This is in line with Gaeis (1983) and Mohani, Mohtar and Yusoff (1998) that the questions teachers use can affect the performance of the students. Knowledge questions, which are intended to elicit information already known deprive students of the opportunity to express their opinions and to contribute further to the discourse. Ernst (1994) notes that in her study knowledge questions asked by the teacher reduced the students' opportunity to speak.

Tan (2007) also asserts that high proportions of lower cognitive level questions focusing on texts reflects the assumptions of the centrality of texts and textual knowledge. The students are not encouraged or guided to formulate their own judgment by analysis, synthesis, or evaluation when the teachers used questions at lower level of cognition.

In contrast, high-level-cognitive questions require students to use higher order thinking or reasoning skills (King, 1995). By asking these questions, students do not

remember only factual knowledge. Instead, they use their knowledge to problem solve, to analyze, and to evaluate and students need to have a deep understanding of the topic in order to answer this type of question (Cotton, 2004). This type of question planning results in designing questions that can expand student's knowledge and encourage them to think critically and creatively.

Brualdi (1998) and Sanders (1966) state that good questions recognize the wide possibilities of thought and are built around varying forms of thinking direct toward learning and evaluative thinking rather than determining what has been learned in a narrow sense. Effective questioning involves planning and practice and effective questions should stimulate interest in new subjects, ideas, and challenges, it encourage students to be reflective about their own beliefs, assumptions and comprehension of new topic (Cotton, 2004). Based on the above discussion, it is widely accepted that students' cognitive growth was discouraged when it is tied to lower cognitive level questions.

On the other hand, students' cognitive development occurs when they are exposed to high cognitive questions and when their mind makes connections between what it already knows and new unknown information and that knowledge is constructed by the use of thinking processes learning (Bloom, 1956; Gleitman, 1995). As a consequence, there has been a steady growth of interest in the use of questioning as a method of encouraging cognitive processing by learners (Nunan 1989; Skehan 1998). Thus, nowadays incorporating such activities as a way of stimulating active and critical thinking by learners, both in order to increase their knowledge of the language system and their ability to use it in communication is very necessary in language teaching.

According to the overall impact of knowledge questions on development of students' critical thinking skills discussed above, three implications can be drawn from the discussion. First, the finding of the study that knowledge questions were used most frequently by the teachers indicates that the teachers asked the questions to test the students' knowledge more frequently than to elicit their own ideas and opinions. As a result, the students may not be equipped with or encouraged to engage critical thinking skills in the classroom. Therefore, if the content and focus of the lesson allows for asking different cognitive levels of questions, teachers should not be restricted to asking knowledge questions and they should increase the number of higher cognitive level questions such as application, analysis, synthesis, and evaluation questions in the classroom in order to enhance students' critical thinking skills. This can better practice students to think critically and communicate spontaneously and appropriately in the target language both in and outside the classroom and this will further prepare them to be critical thinkers for Thai society.

Second, as questions play important roles in eliciting students' responses and they are crucial for enhancing their critical thinking skills and cognitive growth, teacher training on asking effective questions in the classroom should be conducted. This will provide teachers with insight into the use of various cognitive levels of questions which are appropriate for the contents and the focuses of the lesson and for students' level of language ability. When teachers use questions appropriately and effectively, they will be able to promote students' responses. This will further help encourage language students' to think critically both inside the classroom and in their real life situations.

Third, this study revealed that several factors hindered the students' ability to think critically in the language classroom. These factors were the students' limited language ability and background knowledge required by the questions, insufficient wait-time provided by the teachers, their not wanting to answer the questions, their fear of making mistakes, their unfavorable attitude toward speaking English in the class, their inability to keep up with the pace of the teachers' questions, their not paying attention to the teacher' questions and too difficult and complex content.

Keeping the above-mentioned factors in mind, teachers can promote students' responses and their critical thinking skills by following these suggestions. Teachers should ask real questions even though they may seem off-hand, simple, or imprecise. Ask less difficult questions to students with low language ability, anticipate words in their questions that students may have difficulties understanding, and plan to use a variety of strategies. In addition, teachers should prepare a series of questions that begin with less complicated content that eventually leads to more complex content (Eble, 1988; Meyers & Jones, 1993). They should provide students with background knowledge relating to the topic of the lesson before discussion, and present questions with enough information to encourage students to think critically and formulate a meaningful answer.

Eble (1988) and Meyers and Jones (1993) suggest teachers prepare a series of questions as follows. Begin the class with a key question. Hook students with a question based on their background knowledge or what they know. Provide content in such a way that students can see how it can be used in their course contents to their real life situations. Meyers and Jones (1993) suggest that questions should "fit into prospective classroom activities, model theories and approaches used in academic disciplines and

professional careers, extend meaning to materials read or discussed previously, promote a critical analysis of the materials, and make the students think about how the text applies to their personal experiences” (p. 128).

Lastly, when students do not pay attention to the lesson, teachers should draw their attention before asking questions. This can be done by telling them to listen to their questions, asking questions with attractive tone of voice, or using different teaching methods and creating various classroom activities that interest students.

In summary, Waters (2006) maintains that the importance of critical thinking for language learning has been recognized as a value aspect of language teaching and encourage language students’ cognitive development have become increasingly common. However, there is evidence that the use of classroom activities has still not become successful in a number of English language teaching situations. One reason for this may be lack of awareness about how levels of thinking can be conceptualized in the language classroom.

By conducting this study, I do believe that it could raise teachers’ awareness of their role of questions and questioning techniques in fostering students’ critical thinking skills, as well as provided the teachers with useful implications for the use of higher-cognitive-level questions and questioning techniques to help develop students’ critical thinking skills. This will further help teachers understand their students and know how to develop their critical thinking skills in various and productive ways.

Future Research

This study can be a catalyst for future researchers to conduct studies to advance our understanding of how various cognitive of questions the teachers used affect the

cognitive levels of the students' responses and on the development of their critical thinking skills. Some recommendations for further research are proposed as follows:

First, as the student participants of the study were in the Language, Communication, and Business program which was first operated in the year 2007, the results of the study can be important baseline descriptive data of classroom activities and the development of students' critical thinking skills. So, it is worth for conducting a reduplicative study with these groups of students when they are in the second, third, or fourth year to investigate the continuum of their critical thinking skills and their cognitive growth in their language classroom.

Second, since this study was conducted at one university in the South of Thailand, and with certain groups of students at the university level, the findings may not be generalized to the entire country. Thus, replications of the present study should be done with teachers and students who are in different educational levels in Thailand. The results of such study will provide teachers with better understanding of relationship between cognitive levels of their questions and the cognitive levels of the students' responses. This will help them better encourage students' cognitive growth and their critical thinking skills. A similar replication of the study should be conducted with teachers and students in other subject areas such as Thai language class, Science, Social sciences, and so on. It would be interesting to examine and compare the differences and similarity in the cognitive levels of questions the teachers use in different subject areas.

Third, with reference to the contents and objectives of the lessons, teaching methods, classroom activities and teaching materials are important tools in teaching process, Bloom's (1956) taxonomy of questions can be used as instrument to examine

whether the cognitive levels of questions of the contents and objectives of the lessons, teaching methods, classroom activities and teaching materials such as a textbook, teachers' lesson plans, students' assignments, handouts, worksheets, unit quizzes, and mid-term and final exam papers help stimulate students' thinking skills in a variety of cognitive levels.

Fourth, in the present study, the student participants were arranged into groups by mixing their English proficiency. In each class there were low and high English language ability students. Thus, it would be interesting to explore types of questions and questioning strategies teachers employ to elicit responses from a group of students with low language ability and another group of students with high language ability. The results of such study will raise teachers' awareness of using questions and questioning strategies with students with different language ability and provide teachers with suggestions and implications for appropriate use of questions and questioning strategies to elicit responses from their students and encourage their critical thinking skills. Once teachers appropriately use questions and questioning strategies in the classroom, the absence of students' responses will be minimized and their critical thinking skills in the classroom will be promoted and maximized.

Final Statement

The purpose of this study was to explore the meaning of classroom practice on the teachers' use of questioning and students responses through the lens of Bloom's (1956) six cognitive learning levels of question taxonomy and Wu's (1993) taxonomy of questioning techniques. Using Bloom's (1956) taxonomy of questions and Wu's (1993) taxonomy of questioning techniques, I attempted to discover if teachers use various

cognitive levels of questions and questioning strategies in the language classroom would elicit students' responses and encourage their critical thinking skills. I do believe that the findings of this study validate Bloom (1956) and Wu (1993)'s assumptions that the quantity and quality of students' responses and their critical thinking skills are tied to the cognitive levels of the questions teachers asked and the questioning techniques the teachers employed in the classroom. I also believe that the findings of this study will enable teachers to understand how their questioning affect students' responses and development of their critical thinking skills, and will hopefully assist teachers in preparing their effective questions and applying more applicable questioning techniques to encourage students to produce more responses and to think critically both inside and outside the classroom.

As I come to the end of this stage of my research, I find myself wanting to make some kind of profound statement or acknowledgement towards teachers and of being a teacher. Being a teacher is hard work and often emotionally draining, but it's well worth the effort. As a teacher is a key person and plays a significant role in students' learning success and in preparing them to be critical thinkers, being concerned with this crucial role of questioning and questioning techniques in encouraging students' critical thinking skills, I decided to continue my research with the aim of gaining more knowledge that will help me improve my teaching and ultimately accomplish my own mission. In addition, my professional development will be beneficial for my teaching, career goals, and my students' learning success and their development of critical thinking skills.

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APPENDICES

Appendix A

Institutional Review Board Approval

Oklahoma State University Institutional Review Board

Date: Tuesday, June 10, 2008
IRB Application No ED0888
Proposal Title: Teachers' Questioning Techniques and Students' Critical Thinking Skills:
English Language Classroom in the Thai Context

Reviewed and Processed as: Expedited

Status Recommended by Reviewer(s): Approved Protocol Expires: 6/9/2009

Principal Investigator(s):

Natthanan Dumteeb	Adrienne Hyle
92 S. Univ. Place Apt. 11	325D Willard
Stillwater, OK 74078	Stillwater, OK 74078

The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

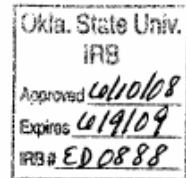
1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval.
2. Submit a request for continuation if the study extends beyond the approval period of one calendar year. This continuation must receive IRB review and approval before the research can continue.
3. Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of this research; and
4. Notify the IRB office in writing when your research project is complete.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact Beth McTernan in 219 Cordell North (phone: 405-744-5700, beth.mcternan@okstate.edu).

Sincerely,



Sheila Kennison, Chair
Institutional Review Board



STUDENT CONSENT FORM

Project Title: Teachers' Questioning Techniques and Students' Critical Thinking Skills:
English Language Classroom in the Thai Context

Investigator: Natthanan Dumteeb (Graduate student at Oklahoma State University)

Purpose: You are invited to participate in a research study being conducted at Prince of Songkla University, Suratthani Campus, Suratthani, Thailand. This study is regarded to teachers' questioning techniques and students' critical thinking skills in the English language classroom. The information sought will be your thoughts, feelings, and experiences about language learning and encouraging language students to think critically in the classroom.

Procedures: As language major students, to participate in this study, the following procedures will be required:

1. Your learning experience in six classroom lessons will be videotape recorded and observed. An understanding of faculty-student interactions is the focus of the observation/video taping.
2. Related to the observation will be the collection of completed but ungraded work for the entire class. It is likely that your work will be included. The purpose of this collection of information is to see links between classroom activities and coursework.
3. A questionnaire will be administered to you during class time and after the observation. The questionnaire focuses on your reasons for responding or not responding to your teachers' questions in the classroom.
4. Participation in a focus group interview taking around 30-45 minutes will also be sought. The interview will be held in a small meeting room at the Faculty of Arts and Sciences. The interview will be audio taped and the questions are centered on classroom student and faculty interactions.

Should you chose not to participate in any of these activities, you may study the same material or work on other coursework in the library. Independent consultations with your teacher will be arranged as needed to cover questions about the assignments or coursework.

Risks of Participation: There are no known risks associated with this study which are greater than those ordinarily encountered in daily life. You may possibly feel emotional discomfort when answering questions about your personal thoughts and feelings.

Benefits: The primary benefit to be expected is helping develop language students' critical thinking skills. Otherwise, it is hoped that your participation will help researchers learn more about how to use questioning techniques to encourage students to think critically to equip them to be critical thinkers in the complex world of change today.

Confidentiality: Any information that is obtained in connection with this study and that can be identified with you will remain confidential. The data will be stored in the researcher's personal storage flash drive which will be locked up where the researcher only has access. The data will be kept for one year following completion of the study. In written results, participants will be given a different identity to protect them from any personal information being disclosed.

Compensation: There will be no compensation for participation in this study.

Contacts: If you have any questions later, you may contact Natthanan Dumteeb, 92 South University Place, Apt# 11, Oklahoma State University, Stillwater, OK 74078, 405-744-9893 or natthanan.dumteeb@okstate.edu or Dr. Adrienne E. Hyle, Advisor, 325D Willard Hall, OSU, Stillwater, OK 74078, 405-744-9893 or Adrienne.hyle@okstate.edu. If you have questions about your rights as a research volunteer, you may contact Dr. Shelia Kennison, IRB Chair, 219 Cordell North, Stillwater, OK 74078, 405-744-1676 or irb@okstate.edu.

Participant Rights: Participation is totally voluntary. Your decision whether or not to participate will not prejudice your future relation with Prince of Songkla University, Suratthani Campus. Also, if you decide to participate, you are free to discontinue participation at any time without any reprisal, penalties, or consequences of any kind.

I have read and fully understand the consent form. I sign it freely and voluntarily. A copy of this form has been given to me.

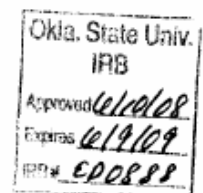
Signature of Participant

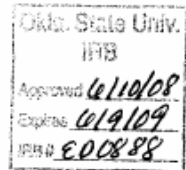
Date

I certify that I have personally explained this document before requesting that the participant sign it.

Signature of Researcher

Date





เอกสารการยินยอมของนักศึกษา

ชื่อโครงการ :

เทคนิคการถามคำถามของครูและทักษะในการคิดเชิงวิเคราะห์ของนักศึกษา: ชั้นเรียน

ภาษาอังกฤษในบริบทของไทย

ผู้วิจัย : ญันนันท์ ต่ำตืบ (นักศึกษาระดับปริญญาเอก ณ มหาวิทยาลัยแห่งรัฐโอคลาโฮมา)

วัตถุประสงค์: ขอเชิญชวนให้นักศึกษาเข้าร่วมในงานวิจัยที่ทำขึ้น ณ มหาวิทยาลัยสงขลานครินทร์ วิทยาเขต สุราษฎร์ธานี จังหวัดสุราษฎร์ธานี ประเทศไทย

งานวิจัยครั้งนี้เกี่ยวกับเทคนิคการถามคำถามของครูและทักษะในการคิดเชิงวิเคราะห์ของนักศึกษาในชั้นเรียนวิชาภาษาอังกฤษ

ข้อมูลที่ต้องการค้นหาก็คือ ความคิด

ความรู้สึกและประสบการณ์เกี่ยวกับการเรียนภาษาที่ส่งเสริมให้นักศึกษาที่เรียนภาษามีความคิดเชิงวิเคราะห์ในชั้นเรียน

การดำเนินการ : กระบวนการต่อไปนี้จะใช้สำหรับนักศึกษาที่เรียนวิชาเอกทางด้านภาษาที่เข้าร่วมในงานวิจัยนี้

1. จะมีการบันทึกวีดิโอเทปและสังเกตประสบการณ์ในการเรียน 6 บทเรียน ในชั้นเรียน โดยมี

เป้าหมายเพื่อให้เข้าใจถึงการปฏิสัมพันธ์ระหว่างอาจารย์ผู้สอนและนักศึกษา

2. ในส่วนที่เกี่ยวข้องกับการสังเกตการณ์ ก็จะเป็นการรวบรวมงานที่นักศึกษาทำเสร็จแล้ว แต่ยังไม่ได้อ่านให้คะแนน ซึ่งจะรวมไปถึงงานของท่านด้วย จุดมุ่งหมายในการรวบรวมงานเหล่านี้ก็เพื่อจะดูถึงความเชื่อมโยงกันระหว่างกิจกรรมในชั้นเรียนและงานที่ให้นักศึกษาทำในระหว่างการเรียน

3. นักศึกษาจะได้รับแบบสอบถามเพื่อให้กรอกในชั้นเรียนภายหลังจาก



กการสังเกตการณ์

โดยแบบสอบถามจะเน้นเกี่ยวกับเหตุผลของนักศึกษาในการตอบหรือไม่ตอบคำถามของครูในชั้นเรียน

4. ทำการสัมภาษณ์และพูดคุยกับนักศึกษากลุ่มเป้าหมาย ประมาณ

30 – 45 นาที

ที่ห้องประชุมเล็กของคณะศิลปศาสตร์และวิทยาศาสตร์

โดยจะมีการบันทึกเสียงในระหว่างการสัมภาษณ์

และจะเน้นคำถามที่เกี่ยวกับการปฏิสัมพันธ์ระหว่างนักศึกษาและอาจารย์ผู้สอนในชั้นเรียน

หากนักศึกษาท่านใดไม่ต้องการเข้าร่วมในกิจกรรมเหล่านี้

นักศึกษาท่านนั้นก็สามารถที่จะไปศึกษาหรือทำงานที่อาจารย์มอบหมายให้ทำในห้องสมุด

และจะมีการจัดให้นักศึกษาได้ปรึกษากับอาจารย์ได้อย่างอิสระตามต้องการ เพื่อถามคำถามเกี่ยวกับงานที่ได้รับมอบหมายให้ทำ

ความเสี่ยงในการเข้าร่วมการวิจัย : ไม่มีความเสี่ยงใดๆ

สำหรับการเข้าร่วมงานวิจัยนี้ ไปกว่าความเสี่ยงธรรมดาทั้งหลายที่เกิดขึ้นในชีวิตประจำวัน

แต่อาจจะเป็นไปได้ที่นักศึกษาจะรู้สึกอึดอัดเมื่อต้องตอบคำถามที่เกี่ยวกับความคิดและความรู้สึกส่วนตัว

ผลประโยชน์ :

ผลประโยชน์ที่คาดไว้ในอันดับแรกก็คือการช่วยพัฒนาทักษะในการคิดเชิงวิเคราะห์ของนักศึกษาที่เรียนภาษา

นอกจากนั้นก็หวังว่าการมีส่วนร่วมของนักศึกษาจะช่วยให้ผู้วิจัยได้เรียนรู้เพิ่มเติมเกี่ยวกับเทคนิคในการถาม

ที่จะส่งเสริมให้นักศึกษาได้คิดเชิงวิเคราะห์

และเตรียมตนเองให้เป็นคนที่มีความคิดเชิงวิเคราะห์

ในโลกของการเปลี่ยนแปลงอันซับซ้อนในปัจจุบัน

การปกปิดข้อมูล : ข้อมูลที่ได้มาจากการศึกษาวิจัยในครั้งนี้

ซึ่งเป็นข้อมูลที่แสดงตัวตนของนักศึกษาจะได้รับ

การปกปิดเป็นความลับ และจะถูกเก็บไว้ใน flash drive ส่วนตัวของผู้วิจัย และล๊อคไว้โดยจะมีเพียงผู้วิจัยเท่านั้นที่จะเข้าไปดูข้อมูลนี้ได้ ข้อมูลนี้จะถูกเก็บไว้หนึ่งปีหลังจากการวิจัยได้เสร็จสิ้นลง ในการเขียนผลที่ได้จากการวิจัย

จะไม่มีหลักฐานจริงของผู้เข้าร่วมทั้งนี้ก็เพื่อป้องกันไม่ให้ข้อมูลส่วนตัวของนักศึกษาที่เข้าร่วมโครงการต้องถูกเปิดเผย

การตอบแทน : ไม่มีค่าตอบแทนใด ๆ ต่อผู้เข้าร่วมในงานวิจัยนี้

การติดต่อ : หากนักศึกษามีปัญหาในภายหลัง ก็สามารถติดต่อ

อาจารย์ณัฐนันท์ ต่ำตียบ , 92 South University Place, Apt# 11,

Oklahoma State University, Stillwater OK 74078 โทร. 405-744-

989 หรือ natthan.dumteeb@okstate.edu หรือ Dr. Adrienne E.

Hyle, 325D Willard Hall, OSU, Stillwater, OK 74078 โทร. 405-

744-9893 หรือ Adrienne.hyle@okstate.edu

และถ้าหากนักศึกษามีคำถามที่เกี่ยวกับสิทธิของนักศึกษาเองในฐานะของอ

าสาสมัครในงานวิจัย สามารถติดต่อ Dr. Shelia Kennison, IRB Chair,

219 Cordell, North, Stillwater, OK 74078 โทร. 405-744-1676

สิทธิของผู้เข้าร่วมงานวิจัย :

การเข้าร่วมงานวิจัยครั้งนี้เป็นไปโดยความสมัครใจ

การตัดสินใจที่จะเข้าร่วมหรือไม่เข้าร่วมจะไม่เป็นผลเสียต่อความสัมพันธ์

ในอนาคตของนักศึกษากับมหาวิทยาลัยสงขลานครินทร์

วิทยาเขตสุราษฎร์ธานี และถ้าหากนักศึกษาตัดสินใจที่จะเข้าร่วมแล้ว

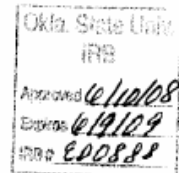
นักศึกษาสามารถถอนตัวในการเข้าร่วมงานวิจัยนี้ได้ตลอดเวลาโดยไม่มีก

ารโทษหรือผลต่อเนื่องในรูปแบบใด ๆ ทั้งสิ้น

ข้าพเจ้าได้อ่านเอกสารการยินยอมนี้และเข้าใจในข้อความดังกล่าวอย่างถึ

ถ้วน ข้าพเจ้าได้เซ็นชื่อโดยไม่มีผู้ใดบังคับและเป็นไปโดยสมัครใจ

และข้าพเจ้าได้รับสำเนาของเอกสารการยินยอมนี้หนึ่งฉบับ



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ลายเซ็นต์ของผู้เข้าร่วมงานวิจัย

วันที่

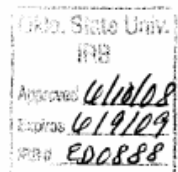
ข้าพเจ้าขอรับรองว่าข้าพเจ้าได้อธิบายเอกสารฉบับนี้ด้วยตนเองก่อนที่จะขอให้ผู้เข้าร่วมงานวิจัยเซ็นชื่อ

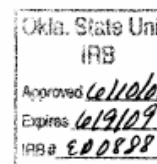
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วันที่





FACULTY CONSENT FORM

Project Title: Teachers' Questioning Techniques and Students' Critical Thinking Skills:
English Language Classroom in the Thai Context

Investigator: Natthanan Dumteeb (Graduate student at Oklahoma State University)

Purpose: You are invited to participate in a research study being conducted at Prince of Songkla University, Suratthani Campus, Suratthani, Thailand. This study is regarded to teachers' questioning techniques and students' critical thinking skills in the English language classroom. The information sought will be your thoughts, feelings, and experiences about language learning and encouraging language students to think critically in the classroom.

Procedures: As an English teacher, to participate in this study, the following procedures will be required:

1. Teaching of six lessons will be videotape recorded and observed. Information about student-faculty interactions are sought.
2. The individual interview with the participant. It will last around 30-45 minutes as it contains questions regarding teaching and developing students' critical thinking skills in the language classroom. This is an in-person interview. The interview will be in a location agreeable to both the researcher and participant. It is hoped that this interview will be organized in the small meeting room of the faculty of Arts and Sciences.
3. If needed, a follow-up interview will be requested to clarify any responses.

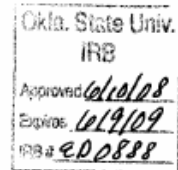
Risks of Participation: There are no known risks associated with this study which are greater than those ordinarily encountered in daily life. You may possibly feel emotional discomfort when answering questions about your personal thoughts and feelings. However, if you begin to experience discomfort or stress in this study, you may end your participation at any time.

Benefits: The primary benefit to be expected is helping develop language students' critical thinking skills. Otherwise, it is hoped that your participation will help researchers learn more about how to use questioning techniques to encourage students to think critically to equip them to be critical thinkers in the complex world of change today.

Confidentiality: Any information that is obtained in connection with this study and that can be identified with you will remain confidential and kept in the researcher's personal storage flash drive which will be locked up where the researcher only has access. The data will be kept for one year following completion of the study and then destroyed. Prior to presentation, all data will be encoded and pseudonym will be used in data presentation. In written results, participants will be given a different identity to protect them from any personal information being disclosed.

Compensation: There will be no compensation for participation in this study.

Contacts: If you have any questions later, you may contact Natthanan Dumteeb, 92 South University Place, Apt# 11, Oklahoma State University, Stillwater, OK 74078, 405-744-9893 or natthanan.dumteeb@okstate.edu or Dr. Adrienne E. Hyle, Advisor, 325D Willard Hall, OSU, Stillwater, OK 74078, 405-744-9893 or Adrienne.hyle@okstate.edu. If you have questions about your rights as a research volunteer, you may contact Dr. Shelia Kennison, IRB Chair, 219



Cordell North, Stillwater, OK 74078, 405-744-1676 or irb@okstate.edu.

Participant Rights: Participation is totally voluntary. Your decision whether or not to participate will not prejudice your future relation with Prince of Songkla University, Suratthani Campus. Also, if you decide to participate, you are free to discontinue participation at any time without any reprisal, penalties, or consequences of any kind.

I have read and fully understand the consent form. I sign it freely and voluntarily. A copy of this form has been given to me.

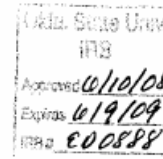
Signature of Participant

Date

I certify that I have personally explained this document before requesting that the participant sign it.

Signature of Researcher

Date



เอกสารการยินยอมของอาจารย์ผู้สอน

ชื่อโครงการ :

เทคนิคการถามคำถามของครูและทักษะในการคิดเชิงวิเคราะห์ของนักศึกษา:
ชั้นเรียน

ภาษาอังกฤษในบริบทของไทย

ผู้วิจัย : ณัฐนันท์ คำต๊ิบ (นักศึกษาปริญญาเอก ณ

มหาวิทยาลัยแห่งรัฐโอคลาโฮมา)

วัตถุประสงค์: ขอเชิญชวนให้อาจารย์เข้าร่วมในงานวิจัยที่ทำขึ้น ณ

มหาวิทยาลัยสงขลานครินทร์ วิทยาเขตสุราษฎร์ธานี จังหวัดสุราษฎร์ธานี

ประเทศไทย

งานวิจัยครั้งนี้เกี่ยวกับเทคนิคการถามของครูและทักษะในการคิดเชิงวิเคราะห์ของ นักศึกษาในชั้นเรียนวิชาภาษาอังกฤษ ข้อมูลที่ต้องการค้นหาก็คือ ความคิด ความรู้สึกและประสบการณ์เกี่ยวกับการเรียนภาษา

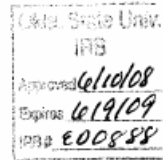
ที่ส่งเสริมให้นักศึกษาที่เรียนภาษาให้คิดเชิงวิเคราะห์ในชั้นเรียน

การดำเนินการ : สำหรับอาจารย์สอนภาษาอังกฤษ ในการร่วมในงานวิจัยนี้

กระบวนการที่ต้องการมี

ดังต่อไปนี้

1. จะมีการบันทึกด้วยวิดีโอเทป และสังเกตการสอน 6 บทเรียน เพื่อศึกษาการปฏิสัมพันธ์ระหว่างนักศึกษาและอาจารย์ผู้สอน
2. มีการสัมภาษณ์ผู้เข้าร่วมวิจัยเป็นรายบุคคล ซึ่งจะใช้เวลาประมาณ 30 – 45 นาที คำถามในการสัมภาษณ์จะประกอบด้วย คำถามเกี่ยวกับการสอนและการพัฒนาทักษะความคิดเชิงวิเคราะห์ของ นักศึกษาในชั้นเรียนภาษา การสัมภาษณ์จะเป็นลักษณะตัวต่อตัว และจะทำกันในสถานที่ ที่ทั้งฝ่ายผู้วิจัยและผู้เข้าร่วมได้ตกลงและยอมรับ ซึ่งผู้วิจัยคาดหวังที่จะจัดการสัมภาษณ์ที่ห้องประชุมเล็กของคณะศิลปศาสตร์และวิทยาศาสตร์
3. ถ้ามีความจำเป็น ก็อาจจะมีการการสัมภาษณ์อีกครั้งในภายหลังเพื่อต้องการให้ขยายความ คำตอบที่ไม่ชัดเจน



ความเสี่ยงในการเข้าร่วมการวิจัย : ไม่มีความเสี่ยงใดๆ
สำหรับการเข้าร่วมงานวิจัยนี้ ไปกว่าความเสี่ยงธรรมดาทั้งหลายที่เกิดขึ้นในชีวิตประจำวัน

แต่อาจจะเป็นไปได้ที่ท่านจะรู้สึกอึดอัดเมื่อต้องตอบคำถามที่เกี่ยวกับความคิดและความรู้สึกส่วนตัว ถ้าท่านรู้สึกเช่นนั้น

ท่านสามารถถอนตัวจากการเข้าร่วมงานวิจัยนี้ได้ตลอดเวลา

ผลประโยชน์ :

ผลประโยชน์ที่คาดไว้อันดับแรกก็คือการช่วยพัฒนาทักษะในการคิดเชิงวิเคราะห์ของนักศึกษาวิชาเอกทางด้านภาษา

นอกจากนั้นก็หวังว่าการเข้าร่วมงานวิจัยของท่านจะช่วยให้ผู้วิจัยได้เรียนรู้เพิ่มเติมเกี่ยวกับการใช้เทคนิคในการถามคำถามเพื่อที่จะช่วยส่งเสริมให้นักศึกษาได้คิดเชิงวิเคราะห์

และฝึกพวกเขาให้เป็นคนที่มีความคิดเชิงวิเคราะห์สำหรับโลกของการเปลี่ยนแปลงอันซับซ้อนในปัจจุบัน

การปกปิดข้อมูล : ข้อมูลที่ได้มาจากการศึกษาวิจัยในครั้งนี้
ที่เป็นข้อมูลที่แสดงตัวตนของคุณจะได้รับการปกปิดเป็นความลับ

และจะถูกเก็บไว้ใน flash drive ส่วนตัวของผู้วิจัย

และล็อคไว้โดยจะมีเพียงผู้วิจัยเท่านั้นที่จะเข้าไปดูข้อมูลนี้ได้

ข้อมูลนี้จะถูกเก็บไว้หนึ่งปีหลังจากการวิจัยได้เสร็จสิ้นลง

ในการเขียนผลที่ได้จากการวิจัยจะไม่มีหลักฐานจริงของผู้เข้าร่วมวิจัย

ทั้งนี้ก็เพื่อป้องกันไม่ให้ข้อมูลส่วนตัวของผู้ที่เข้าร่วมโครงการวิจัยนี้ต้องถูกเปิดเผย

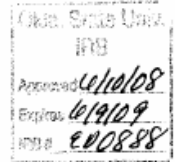
การตอบแทน : ไม่มีค่าตอบแทนใด ๆ ต่อผู้เข้าร่วมในงานวิจัยนี้

การติดต่อ : หากนักศึกษามีปัญหาในภายหลัง ก็สามารถติดต่อ

อาจารย์ณัฐนันท์ คำตึบ , 92 South University Place, Apt# 11, Oklahoma State University, Stillwater OK 74078 โทร. 405-744-989 หรือ

natthanan.dumteeb@okstate.edu หรือ Dr. Adrienne E. Hyle, 325D

Willard Hall, OSU, Stillwater, OK 74078 โทร. 405-744-9893 หรือ



Adrienne.hyle@okstate.edu

และถ้าหากนักศึกษามีคำถามที่เกี่ยวกับสิทธิของท่านในฐานะของอาสาสมัครในงานวิจัย สามารถติดต่อ Dr. Shelia Kennison, IRB Chair, 219 Cordell, North, Stillwater, OK 74078 โทร. 405-744-1676

สิทธิของผู้เข้าร่วมงานวิจัย : การเข้าร่วมงานวิจัยครั้งนี้เป็นไปโดยความสมัครใจ การตัดสินใจที่จะเข้าร่วมหรือไม่เข้าร่วมของท่านจะไม่เป็นผลเสียต่อความสัมพันธ์ในอนาคตกับมหาวิทยาลัยสงขลานครินทร์ วิทยาเขตสุราษฎร์ธานี และถ้าหากท่านตัดสินใจที่จะเข้าร่วมแล้ว ท่านสามารถถอนตัวในการเข้าร่วมงานวิจัยนี้ได้ตลอดเวลา โดยไม่มีการโทษหรือผลต่อเนื่องในรูปแบบใด ๆ ทั้งสิ้น

ข้าพเจ้าได้อ่านเอกสารการยินยอมนี้และเข้าใจในข้อความดังกล่าวอย่างถ่องแท้ ข้าพเจ้าได้เซ็นชื่อโดยไม่มีผู้ใดบังคับและเป็นไปโดยสมัครใจ และข้าพเจ้าได้รับสำเนาของเอกสารการยินยอมนี้หนึ่งฉบับ

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ลายเซ็นของผู้เข้าร่วมงานวิจัย

วันที่

ข้าพเจ้าขอรับรองว่าข้าพเจ้าได้อธิบายเอกสารฉบับนี้ด้วยตนเองก่อนที่จะขอให้ผู้เข้าร่วมงานวิจัยเซ็นชื่อ

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ลายเซ็นของผู้วิจัย

วันที่

Appendix B

Materials and teaching procedures

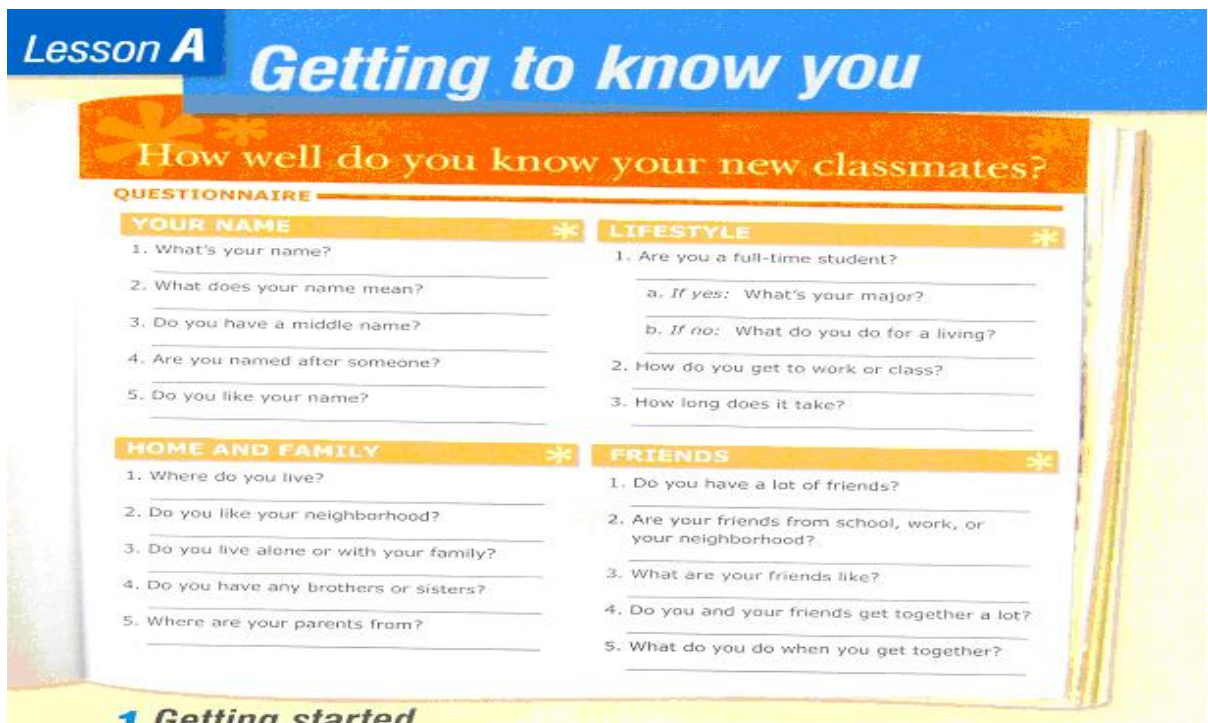
Unit 1: Making friends

Lesson A: Getting to know you

Unit 1: objectives: After this lesson, students will be able to

1. use the simple present and present of *be*.
2. start a conversation with someone they don't know.

Lesson A: Teaching material:



Lesson A *Getting to know you*

How well do you know your new classmates?

QUESTIONNAIRE

YOUR NAME	LIFESTYLE
1. What's your name? _____	1. Are you a full-time student? _____
2. What does your name mean? _____	a. <i>If yes:</i> What's your major? _____
3. Do you have a middle name? _____	b. <i>If no:</i> What do you do for a living? _____
4. Are you named after someone? _____	2. How do you get to work or class? _____
5. Do you like your name? _____	3. How long does it take? _____

HOME AND FAMILY	FRIENDS
1. Where do you live? _____	1. Do you have a lot of friends? _____
2. Do you like your neighborhood? _____	2. Are your friends from school, work, or your neighborhood? _____
3. Do you live alone or with your family? _____	3. What are your friends like? _____
4. Do you have any brothers or sisters? _____	4. Do you and your friends get together a lot? _____
5. Where are your parents from? _____	5. What do you do when you get together? _____

1 Getting started

About you

Pair work Use the questionnaire to interview each other. Write your partner's answers. Then tell the class one interesting thing about your partner.

"Marcella has seven brothers and sisters."

2 Speaking naturally Stress and intonation

Do you have a **nickname**?

Yes. People call me **Jimmy**.

Are you from a big **family**?

Yes. I have four **sisters**.

What do you do for **fun**?

I go to the **movies**.

A Listen and repeat the questions and answers above. Notice the stress on the important content word. Notice how the voice rises, or rises and then falls, on the stressed word.

About you

B Pair work Ask and answer the questions. Give your own answers.

3 Grammar *Simple present and present of be (review)*

Unit 1 Making friends

<p>Are you from a big family? Yes, I am. I'm one of six children. No, I'm not. There are only two of us.</p> <p>Are you and your friends full-time students? Yes, we are. We're English majors. No, we're not. We're part-time students.</p> <p>Do you have any brothers and sisters? Yes, I do. I have a brother. No, I don't. I'm an only child.</p> <p>Do you and your friends get together a lot? Yes, we do. We go out all the time. No, we don't. We don't have time.</p>	<p>What's your name? Is it Leo? Yes, it is. My name's Leo Green. No, it's not. My name isn't Leo. It's Joe.</p> <p>Where are your parents from? Are they from Peru? Yes, they are. They're from Lima. No, they're not. My parents aren't from Peru.</p> <p>What does your brother do? Does he go to college? Yes, he does. He goes to the same college as me. No, he doesn't. He works at a bank.</p> <p>Where do your parents live? Do they live nearby? Yes, they do. They live near here. No, they don't. They don't live around here.</p>
---	--

A Think of a possible question for each answer. Compare with a partner.

- | | |
|---|---|
| 1. A <u>What's your favorite color?</u>
B Red. | 5. A _____ ?
B We usually go out to dinner or see a movie. |
| 2. A _____ ?
B No, I'm not. I have one sister. | 6. A _____ ?
B No, they don't. They don't have time. |
| 3. A _____ ?
B No, I don't. I don't drive. | 7. A _____ ?
B No, I hate mornings. I'm not a morning person. |
| 4. A _____ ?
B He works in a store. | 8. A _____ ?
B Well, I have a part-time job. I work Saturdays. |

About you

B Pair work Ask and answer the questions. Give your own answers.

4 Listening and speaking *What's the question?*

A Listen to Tom's answers to these questions. Number the questions 1 to 6.

- | | | |
|--|---|---|
| <input type="checkbox"/> "Do you have any pets?" | <input checked="" type="checkbox"/> 1 "What's your favorite name?" | <input type="checkbox"/> "Who's your favorite actor?" |
| <input type="checkbox"/> "What do you do on weeknights?" | <input type="checkbox"/> "When do you spend time with your family?" | <input type="checkbox"/> "Do you go out a lot on weekends?" |

About you

B Group work Choose one of the questions, and tell the group your answer. Then answer a follow-up question from each person in your group.

- "My favorite name is Jennifer." ➔ "How do you spell that?"
"Why do you like that name?"
"Do you have a favorite boy's name?"

Source: McCarthy, M., McCaten, J., & Sandiford, H. 2005. *Touchstone*. Cambridge: Cambridge University Press.

Teaching procedures of Lesson 1 A:

Teaching procedures of Lesson 1 A:

Unit 1 Making friends

Lesson A Getting to know you

1 Getting started

- **Set the scene** Books closed. Ask, "Do you think you know a lot about your classmates? Raise your hand if the answer is *yes*. Now raise your hand if the answer is *no*. What are some things you want to know about your classmates?" Get ideas from Ss, and write them on the board (e.g., *name, where they live, their free-time activities*). Books open. Read the title of the questionnaire aloud. Ask, "What are the four topics in the questionnaire?" [your name, home and family, lifestyle, friends]
- **Preview the task** Say, "Read the questionnaire, and underline any words you don't know." Ask Ss to call out their underlined words. Write them on the board. Get as many definitions as possible from Ss. Explain any remaining words.
- Have Ss work in pairs. Say, "Use the questionnaire to interview your partner. Write your partner's answers."
- **Do the task** Have S1 ask S2 the complete questionnaire and then change roles. Alternatively, have Ss change roles after each of the four topics.
- When Ss finish, say, "Now tell the class something interesting about your partner." Read the example aloud. Have several Ss report a fact to the class.

Possible answers

Your Name

1. My name is _____.
2. My name means "light."
3. Yes, my middle name is _____.

4. Yes, I'm named after my grandmother.
5. Yes, it's OK. It's a pretty common name.

Lifestyle

1. a. Yes, I am. My major is history.
b. No, I'm not. I work in a supermarket.
2. I get to class by subway.
3. It takes about 45 minutes.

Home and Family

1. I live on _____ Street.
2. No, I don't. My neighborhood is really boring.
3. I live with my family.
4. I have two brothers and one sister.
5. My parents are from _____.

Friends

1. Yes, I do. I have a lot of friends.
2. My friends are from school.
3. They're a lot of fun.
4. Yes. We get together every weekend.
5. We usually go to the movies or something.

Extra activity – pairs

Pairs work together to write two new questions about each of the topics: *home and family*, *lifestyle*, and *friends*. Ss find a different partner and ask and answer the new questions. Ss then return to their original partner and report the information.

2 Speaking naturally

A (CD 1, Track 2)

- **Preview the task** Tell Ss to look at the three sets of questions and answers. Say, "People say the most important content word in a statement or question louder and more clearly. This is called *stress*. Examples of content words are *nouns, verbs, and adjectives*. Look at the three questions. What are the stressed words?" [nickname, family, fun]
- Tell Ss to look at the questions. Say, "Look at the arrows. They all start to go up on the stressed word. But two of them then go up and one of them goes down. What's different about these questions?" [Two are *yes-no* questions; one is an information question.] Say, "The voice rises on the stressed word in *yes-no* questions and it stays up. In information questions, the voice rises on the stressed word and then falls. This rising and falling of the voice is called intonation."
- Tell Ss to look at the three answers. Ask, "What are the stressed words in the answers?" [Jimmy, sisters, movies]

Say, "In answers to questions, the information that answers the question is the important word, so it is stressed. This is where the intonation changes." Ask, "What happens to the intonation on the stressed words?" [It falls.] (For more information, see Language Notes at the beginning of this unit.)

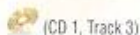
- Read the instructions aloud.
- **Play the recording** Ss listen. Tell them to listen carefully for the stressed words and how the voice rises and falls.
- **Play the recording again** Ss listen and repeat.

B

Preview and do the task Read the instructions aloud. Tell pairs to take turns asking and answering the questions, this time giving their own information. (Note: You may want to model some *no* answers [e.g., *No, I don't. No, I'm from a small family.*].)

Unit 1 • Making friends • T-2

3 Grammar



(CD 1, Track 3)

- **Present the grammar chart** Play the recording. Ss listen and repeat.
- **Understand the grammar** Tell Ss to look at the chart. Explain that it reviews the simple present of verbs, including *be*, affirmative and negative statements, *yes-no* questions, short answers, and information questions. Give Ss two minutes to review the chart.
- **Books closed.** Review the various grammar patterns. Write sentences from the chart on the board with blanks in place of the words in bold. Call on a few Ss to fill in the blanks.
- Review the forms as needed.
- **Books open.** Tell Ss to ask and answer questions from the chart in pairs, taking turns playing each role.

A

- **Preview the task** Write on the board: *Answer: Red.* Ask a S to read the example question for number 1 aloud. Ask Ss to think of other questions for this answer. Write their suggestions on the board (e.g., *What color is your car? What color do you wear a lot? What's your favorite color?*).
- **Do the task** Have Ss complete the task by writing a possible question for each answer. Have Ss compare their questions in pairs.

- Check answers with the class: for each item, have a few Ss read their questions aloud, and ask other Ss with the same question to raise their hands.

Possible answers

1. What's your favorite color?
2. Are you an only child?
3. Do you have a car?
4. What does your brother do?
5. What do you and your friends do on the weekend?
6. Do your parents go out a lot?
7. Do you like mornings?
8. Do you work?

- **Follow-up** Ss take turns asking their questions with a partner, who reads the answer.

B

About you: **Preview and do the task** Read the instructions aloud. Have Ss ask their partners their questions. Make sure Ss answer with their own information.

- **Follow-up** Ss repeat the task in groups.

4 Listening and speaking



(CD 1, Track 4)

- **Preview the task** Read the instructions aloud. Say, "Read each of the six questions carefully. Listen for the stressed words to get the main ideas in Tom's answers."
- **Play the recording** *Audio script p. T-234* Ss listen and choose the best question for each answer. Pause after each exchange to give Ss time to write the number in the box.
- **Play the recording again** Ss review their answers. Check answers with the class.

Answers

1. What's your favorite name?
2. Who's your favorite actor?
3. What do you do on weeknights?
4. Do you have any pets?
5. When do you spend time with your family?
6. Do you go out a lot on weekends?

Extra activity – pairs

Ss write three questions and their answers on six separate pieces of paper. Pairs exchange "answer" papers and try to write the matching questions. Ss then compare questions and see how many are the same.

B

About you: **Preview and do the task** Read the instructions aloud. Explain that follow-up questions are questions that you ask to get more information. Have four Ss model the example conversation. S1 chooses a question and answers it. Ss 2, 3, and 4 take turns asking a follow-up question.

Assign Workbook pp. 2 and 3. (The answer key begins on p. T-248.)

Unit 1: Making friends

Lesson D: Making conversation

Objective: After this lesson, the students will learn and improve conversation skills.

Teaching material Lesson 1 D:

Lesson D Making conversation

1 Reading

A Which of these are good suggestions for social conversations? Check (✓) the boxes. Then tell the class.

- | | |
|---|--|
| <input type="checkbox"/> Don't look at the other person. | <input type="checkbox"/> Have some good topics to discuss. |
| <input type="checkbox"/> Keep quiet when the other person is talking. | <input type="checkbox"/> Talk about yourself a lot. |
| <input type="checkbox"/> Ask questions that start with <i>what</i> , <i>where</i> , <i>how</i> , or <i>when</i> . | |

B Read the magazine article. What does it say about the suggestions above? Do you agree with all of the ideas in the article?

How to improve your conversation skills

Do you like to meet new people? Do you like to talk, or are you shy? Whatever your answers, this guide can help you improve your conversation skills.

1 Have some topics ready to start a conversation.

Say something about the weather or the place you're in. Talk about the weekend – we all have something to say about weekends!

2 Make the conversation interesting. Know about events in the news. Read restaurant and movie reviews. Find out about the current music scene or what's new in fashion or sports.

3 Be a good listener. Keep eye contact and say, "Yes," "Hmm," "Uh-huh," "Right," and "I know." And say, "Really? That's interesting." It encourages people to talk.



4 Don't be boring. Don't just say, "Yes" or "No" when you answer a question. Give some interesting information, too.

5 Don't talk all the time. Ask, "How about you?" and show you are interested in the other person, too. People love to talk about themselves!



6 Ask information questions. Ask questions like "What do you do in your free time?" or "What kind of food do you like?" Use follow-up questions to keep the conversation going. But don't ask too many questions – it's not an interrogation!

7 Be positive. Negative comments can sound rude. And if you don't want to answer a personal question, simply say, "Oh, I'm not sure I can answer that," or "I'd rather not say."

8 Smile! Everyone loves a smile. Just be relaxed, smile, and be yourself.



C Look at the article again. Find these things. Then compare with a partner.

1. an interesting topic of conversation
2. an example of an information question
3. a suggestion you would like to try
4. a question to show you're interested in the other person
5. something you can say to show you're listening
6. something to say if someone asks you a difficult question

2 Speaking and writing *How to improve your . . .*

A Pair work Brainstorm ideas for each topic, and make notes.

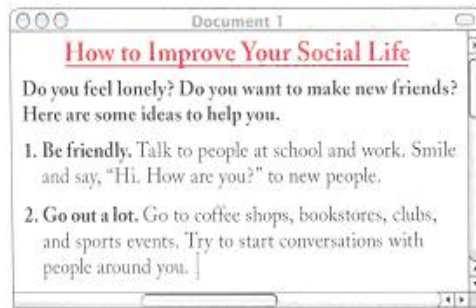
How to improve your social life

Go out. Be friendly.
Take up a sport or hobby.

How to improve your English

How to improve your study skills

B Choose one of the topics above, and use your ideas to write a short magazine article like the example below.



Help note

Punctuation

- Use a CAPITAL letter to start a sentence.
- Use a comma (,) before quotation marks (“ ”) and in lists.
- Use a period (.) at the end of a statement and a question mark (?) at the end of a question.

3 Talk about it *Friendly conversation*

Group work Discuss the questions. Find out about your classmates' conversation styles.

- ▶ Do you ever start conversations with strangers?
- ▶ Do you think it's odd when a stranger talks to you?
- ▶ Are you a talkative person?
- ▶ Do you think you talk too much?
- ▶ Are you a good listener?
- ▶ Are you usually the "talker" or the "listener" in a conversation?
- ▶ What do you like to talk about?
- ▶ What topics do you try to avoid?



Lesson D Making conversation

1 Reading

- **Set the scene** Read the title of the lesson aloud. Ask, "What does *making conversation* mean?" Get ideas from Ss (e.g., *start a conversation, keep a conversation going, talk to new people*).
- Write on the board: *Do you like to meet new people? Do you like to talk, or are you shy?* Ask a few Ss the two questions. Encourage them to say more than just yes or no. Tell Ss to take turns asking and answering the questions in pairs. Then have a few pairs share their answers with the class.

A

Prereading

- **Preview the task** Read the instructions aloud. Ask different Ss to read the five statements aloud. Make sure Ss understand the meaning of each item.
- **Do the task** Have Ss check (✓) the statements they think are good suggestions.
- Read each sentence aloud. Have Ss raise their hands if they think it is a good suggestion, and ask, "Why do you think this a good suggestion?" Ask a few Ss who do not raise their hands, "Why do you think this isn't a good suggestion?"
- **Follow-up** Ss work in pairs and write three more suggestions for social conversations. Then have a few pairs share their sentences with the class. Write them on the board. Ss raise their hands if they agree with the suggestions. Leave the suggestions on the board.

Extra activity - class

Have Ss turn back to p. 7, Exercise 2, Part A. Read each conversation starter, and start a conversation with a S using one of the suggestions from the prereading task (e.g., *Don't look at the other person.*). Ask Ss if they can guess what suggestion in Part A you were demonstrating.

B

During reading

- **Preview the reading** Say, "Look at the pictures and the title. What's the article about?" (how to improve your conversation skills)

- Say, "Look at the article. Each paragraph has a heading. You can find out a lot about the information in an article from the headings. Read just the headings. Compare them to the ideas in Part A. Which are the same?"
- Tell Ss to quickly read the headings and compare them to the ideas on the board. Have Ss call out which ideas are the same, and circle them.
- Say, "Read all of the article. What does it say about the suggestions in Part A? Does it agree or disagree with each suggestion? Make a note of the information and the paragraph number in the article."
- **Do the reading** Have Ss read the article and make notes.
- After Ss finish reading, read each suggestion in Part A aloud again. For each, ask, "Does the article agree or disagree with the suggestion?" Call on Ss to answer and give the supporting information from the article.

Answers

Don't look at the other person: **The article disagrees.** (Paragraph 3: Be a good listener. Keep eye contact . . .)

Keep quiet when the other person is talking: **The article disagrees.** (Paragraph 3: . . . say, "Yes," "Hmm," "Uh-huh," "Right," and "I know." . . . It encourages people to talk.)

Ask questions that start with what, where, how, or when: **The article agrees.** (Paragraph 6: Ask information questions.)

Have some good topics to discuss: **The article agrees.** (Paragraph 1: Have some topics ready to start a conversation.)

Talk about yourself a lot: **The article disagrees.** (Paragraph 5: Don't talk all the time.)

- **Do the reading again** Say, "Read the article again. Do you agree with all of the ideas in the article? Circle any suggestions you disagree with."
- Have Ss read the article again and complete the task. Check answers with the class: have a few Ss read their answers and give their reasons (e.g., *I don't agree with suggestion number 8: Smile. Sometimes I don't want to smile.*).
- **Follow-up** Ss read the article and underline three words or expressions they think are useful to know. Ask Ss to call out those words or expressions. Explain the meanings as necessary.

C

Postreading

- **Preview the task** Read the instructions aloud. Ask different Ss to read each of the six sentences aloud. Make sure Ss understand what they are looking for. (For five items, Ss look for answers in the article. For one, Ss make a choice using their own ideas.)
- **Do the task** Tell Ss to find and write down the information from the article. Have Ss compare their answers in pairs. Check answers with the class.

Possible answers

1. *An interesting topic of conversation:* current music, fashion, sports
2. *An example of an information question:* "What kind of food do you like?"
3. *A suggestion you would like to try:* Ss choose their own suggestion.

4. *A question to show you're interested in the other person:* "How about you?"
5. *Something you can say to show you're listening:* "Yes," "Hmm," "Uh-huh," "Right," "I know," and "Really? That's interesting."
6. *Something to say if someone asks you a difficult question:* "I'd rather not say," "Oh, I'm not sure I can answer that."

- **Follow-up** A few Ss say which suggestion in the reading they would like to try and why.

Extra activity – pairs

Ss call out interesting conversation topics. Write them on the board. Pairs choose one of the topics to have a short conversation about (no more than thirty seconds). A few pairs act out their conversations for the class. The class tries to guess which suggestion the pair is using.

2 Speaking and writing

A

- **Preview the task** Say, "The article on page 8 is a 'how to' article. It gives suggestions about how to improve something. Here are some other 'how to' topics." Read the topic heads and the examples aloud. Tell Ss to brainstorm ideas for each of the three topics.
- **Do the task** Have pairs write down their ideas.
- Check answers with the class: write the three topics on the board. Call on three pairs to write one set of their ideas under each category. Have other pairs call out additional ideas to add to the lists.

B

- **Preview the task** Read the instructions aloud. Tell Ss to read the example article. Then ask Ss to think of one more sentence for each numbered heading. Have a few Ss share their ideas with the class.
- **Present Help Note** Read the information aloud. Have Ss find examples of each punctuation mark in the article. (For more information, see Language Notes at the beginning of this unit.)

- Books closed. Write several sentences from the example article or reading on the board with missing punctuation. For example:

keep eye contact and say yes hmm uh-huh right and I know

go to coffee shops bookstores clubs and sports events

ask questions like what do you do in your free time or what kind of food do you like

Have Ss copy the sentences and add the punctuation. Check answers with the class: have a few Ss write the corrected sentences on the board.


- **Do the task** Have Ss write their articles using one of the topics from Part A. Tell them to use at least three of their ideas in Part A and write at least two supporting sentences for each one. As they write, go around the class and help as needed.
- **Follow-up** Ss work in groups and read one another's articles. Each group decides who has written the best or most interesting advice. That S in each group reads his or her article to the class.

3 Talk about it

- **Preview the task** Read the instructions aloud. Have different Ss ask you the questions.
- **Do the task** Have Ss in groups take turns asking and answering the questions. Have Ss note the answers from their group. As they talk, go around the class and help as needed. Encourage Ss to use English only. When groups finish, tell Ss to look at their notes and find the most common answers.
- **Follow-up** Groups report their answers about each question to the class (e.g., *No one in the group starts a conversation with a stranger, but we all are talkative.*).

Extra activity – class

Ss work in the same groups. Give each group a number. Each group makes recommendations to the other groups based on the information they reported back to the class (e.g., *Group 1 said, "We never start a conversation with a stranger." We suggest they have some topics ready to start conversations.*).

 Assign Workbook pp. 8 and 9. (The answer key begins on p. T-248.)

Source:

McCarthy, M., McCaten, J., & Sandiford, H. (2005). *Touchstone*. Cambridge: Cambridge University Press.

Unit 2: Interests

Lesson A: Leisure time

Objectives: After completing this lesson, the students will be able to be able to discuss their interest and use different verb forms.

Teaching material lesson 2 A:

Lesson A Leisure time

College News

Meet our new reporter for the *College News*. . . .
The *College News* interviewed Eric Kane, our new reporter. Eric is a full-time student majoring in journalism. We asked him about his hobbies.

1 *College News:* What are your hobbies?

Eric Kane: Well, I enjoy writing. I like to do a bit of creative writing every day – in the evenings mostly. Someday I want to write a novel, but for now it's just a hobby.

2 *CN:*

EK: Let's see, what else? Well, I design cards. I'm good at drawing, and I'm really into computer graphics, so I sit and learn new programs, and I play around with them.

3 *CN:*

EK: Yeah, I play the saxophone, and I can play the piano a little, but not very well. I'd like to play in a jazz band or something. And I like to sing, but I really can't sing at all.

4 *CN:*

EK: Not really. I prefer to watch sports on TV. I like to play pool. Is that a sport? I guess I jog occasionally. But I hate going to the gym and working out.



5 *CN:*

EK: Yeah. I love to do new stuff all the time – learn new skills, you know. I'm really excited about writing for the *College News*.

1 Getting started

A 🎧 Listen to Eric's answers in the interview above. What are the questions? Number the questions, and add them to the interview.

- | | | |
|--|---|---|
| <input type="checkbox"/> Are you good at sports? | <input type="checkbox"/> Are you interested in learning new things? | <input type="checkbox"/> Can you play a musical instrument? |
| <input type="checkbox"/> What else do you enjoy doing in your free time? | 1 | <input type="checkbox"/> What are your hobbies? |

B 🎧 Listen to the complete interview. What does Eric like to do? What does he hate doing?

Figure it out →

C Can you complete these sentences with verbs? Which sentences are true for you? Tell a partner.

- | | |
|-------------------------------|---|
| 1. I can _____ the piano. | 3. I enjoy _____ to music. |
| 2. I like _____ sports on TV. | 4. I'm not good at _____ new computer programs. |

2 Grammar Verb forms

Unit 2 Interests

Verb

I can **play** the piano.
I can't **play** very well.
I can't **sing** at all.

to + verb

I love **to swim**.
I like **to play** pool.
I hate **to work** out.
I prefer **to watch** TV.
I'd like **to play** jazz.

Verb + -ing

I love **swimming**.
I like **playing** pool.
I hate **working** out.
I prefer **watching** TV.
I enjoy **reading**.

Preposition + verb + -ing

I'm good **at drawing** people.
I'm not interested **in skiing**.

In conversation ...

I like / love / hate to + verb
is more common than

I like / love / hate + verb + -ing.

I like to ...

I like ...ing

I love to ...

I love ...ing

I hate to ...

I hate ...ing

A Complete the questions and add two more.

1. Can you whistle (whistle)?
2. Do you enjoy _____ (cook)?
3. Are you good at _____ (skate)?
4. Do you like _____ (play) board games?
5. Can you _____ (swim)?
6. Are you interested in _____ (join) a meditation class?
7. Do you prefer _____ (exercise) alone or with friends?
8. Would you like _____ (learn) a martial art?
9. _____ ?
10. _____ ?

About you

B Pair work Ask and answer the questions. Give your own answers.

A Can you whistle?

B Not very well. What about you? Can you whistle?

3 Survey

A Class activity Ask your classmates about their interests and hobbies. Make notes.

What are your interests?

Find someone who ...

is a good dancer.

likes to read or write poetry.

enjoys driving.

hates doing exercise.

can ride a horse.

is good at learning languages.

would like to learn French.

takes guitar lessons.

Name

Marta

Notes

likes to dance the tango

"Marta, are you a good dancer?" "Yes, I am. I like to dance the tango."

B Tell the class about someone on your list.

"Marta is a good dancer. She likes to dance the tango."



Teaching procedures lesson 2 A:

Lesson A Leisure time

Unit 2 Interests

1 Getting started

- **Set the scene** Read the lesson title aloud. Ask, "What's another way to say *leisure time*?" [free time]
- Say, "Look at the newspaper. What's it called?" [College News] Read the introduction to the article aloud. Ask Ss to read the article and underline any vocabulary they are not sure of. Help with new vocabulary as needed.
- Tell Ss to cover the tasks below the newspaper article. Ask Ss to read paragraph 1 and the example question. Say, "What other questions do you think the interviewer asks Eric? Read each paragraph again and guess the question." Write Ss' ideas on the board.

A (CD 1, Track 10)

- **Preview the task** Read the instructions aloud. Tell Ss to read the five questions.
- **Play the recording** Ss listen and read along. Pause the recording after the first paragraph. Point out the example. Play the rest of the recording. Ss write the numbers in the boxes.
- Ss compare answers in pairs. Check answers with the class.

Answers

- | | |
|---|---|
| 4 | Are you good at sports? |
| 5 | Are you interested in learning new things? |
| 3 | Can you play a musical instrument? |
| 2 | What else do you enjoy doing in your free time? |
| 1 | What are your hobbies? |

- **Follow-up** Ss compare the questions in Part A with their predictions on the board to see how many are correct.

B (CD 1, Track 11)

- **Preview the task** Read the instructions aloud. Ask Ss to cover the newspaper article. Draw a two-column chart with the following headings on the board: *Eric likes . . . ; Eric hates . . .*. Have Ss copy the chart. Tell Ss to listen and complete the chart.
- **Play the recording** Ss listen and write.
- Have Ss compare their answers in pairs. Check answers with the class; have a few Ss each write one activity on the board under the correct column.

Answers

Eric likes creative writing and computer graphics. He likes to sing and to play the saxophone. He likes to watch sports on TV and play pool. He likes to learn new things. Eric hates going to the gym and working out.

C

Figure it out **Preview the task** Write in one column on the board: *can, hate, enjoy, good at*. Say, "Look at the article and find and underline these words. Circle the word that comes after each one. Write *like* on the board. Say, "Look at the article and find and underline *like*. Circle the two words that come after *like*."

- **Do the task** Have Ss complete the sentences. Remind Ss to use the words they underlined and circled to help them. Have Ss compare their answers in pairs, and then check answers with the class.

Answers

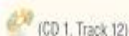
1. I can play the piano.
2. I like to watch / watching sports on TV.
3. I enjoy listening to music.
4. I'm not good at learning new computer programs.

- Have Ss tell a partner which of the sentences are true for him or her. Alternatively, Ss read each sentence to their partners, adding or removing negatives to make the sentence true for him or her.
- **Focus on the form** Say, "Look at the article and sentences in Part B. What verb form is used after *can* and *can't*?" [base form] "What about after *I like* and *I'd like*?" [*to* + verb (or infinitive)] "After *I hate*, you can use the *to* + verb, but what does Eric say?" [verb + *-ing*] "What form comes after *enjoy*?" [verb + *-ing*] "How about *good at*?" [verb + *-ing*]
- Say, "Verbs such as *can*, *like*, and *enjoy* follow regular patterns. The same kind of verb form always comes after them. The same is true for phrases like *good at*."

Extra activity – pairs

Ss use the five questions from Part A to interview their partners. Ss make brief notes of their partners' answers. A few Ss report one fact about their partner to the class.

2 Grammar



(CD 1, Track 12)

- **Present the grammar chart** Play the recording. Ss listen and repeat.
- **Understand the grammar** Tell Ss to look at the first column in the chart. Ask, "What's the pattern for verbs with *can* or *can't*?" [*can / can't* + verb]
- Say, "Look at the second column. What's the pattern for these verbs? [*love / like / hate / prefer / would like* + infinitive (*to* + verb)] Ask, "What's the pattern in the third column?" [*love / like / hate / prefer / enjoy* + verb + *-ing*] Ask, "What verbs are in both columns two and three? [*love / like / hate / prefer*] Explain, "The meanings of the sentences with those verbs are the same in both columns."
- **Present In Conversation** Books closed. Write on the board: *to* + verb and verb + *-ing*. Ask Ss to guess which is more common in conversation.
- Books open. Tell Ss to read the information to find the answer. Point out that the biggest difference in numbers of people who use the two forms is after *like*, and the smallest difference is after *love*.
- Ask Ss to look at the grammar chart again. Say, "Look at the column on the right. When a verb comes after a preposition – for example, *at*, *in*, *before*, *after* – it's always the *-ing* form." (For more information, see Language Notes at the beginning of this unit.)

A

- **Preview the task** Read the instructions and the example aloud. Ask, "Why is *whistle* the correct answer?" [It comes after *can*, and *can* is followed by the base form of the verb.]

- **Do the task** Have Ss complete sentences 2 to 8. Tell Ss for 9 and 10 to write two questions that they would like to ask a partner. Tell Ss that the questions should use the verbs from the chart.
- Have Ss compare their answers in pairs. Check answers with the class: ask a few Ss to read the two questions they added. Ask other Ss to write them on the board.

Answers

1. Can you whistle?
2. Do you enjoy cooking?
3. Are you good at skating?
4. Do you like to play / playing board games?
5. Can you swim?
6. Are you interested in joining a meditation class?
7. Do you prefer to exercise / exercising alone or with friends?
8. Would you like to learn a martial art?

B

About: **Preview the task** Read the instructions aloud. Ask a pair of Ss to read the example conversation aloud.

Recycle a conversation strategy Encourage Ss to use *actually* in their answers when they want to give new or surprising information (e.g., A: *Can you whistle?* B: *Yes, I can, actually. I sometimes whistle when I walk to class.*).

- **Do the task** Have pairs ask and answer the questions from Part A. As Ss do the task, go around the class and help as needed.

3 Survey

A

- **Preview the task** Read the instructions aloud. Ask Ss to read the survey. Point out the first line of the survey and the corresponding example question and answer below. Call on a few Ss to supply the correct question for each item on the survey before doing the task (e.g., *Are you a good dancer? Do you like to read or write poetry?*).
- **Do the task** Have Ss walk around the class, asking and answering the questions. Remind Ss to make notes like those in the example.

B

- **Preview and do the task** Read the instructions and the example aloud. Call on a few Ss to tell the class about a S on their list.
- **Follow-up** Ask, "Did you find someone who is a good dancer? Raise your hand." As hands are raised, Ss who were unable to find a *yes* answer add a name to their surveys. Continue asking about the rest of the items on the list.

Extra activity – class

Ss write three questions related to their own hobbies or interests to ask their classmates (e.g., *Are you interested in photography? Do you play on a sports team? Do you belong to a club?*). Ss walk around the room, asking and answering their questions. Encourage Ss to answer more than *yes* or *no* when answering. When finished, Ss tell the class the names of any classmates who have the same interest as they do, and what the interest is (e.g., *Yuji and I both can ride a horse.*).

Assign Workbook pp. 10 and 11. (The answer key begins on p. T-248.)

Unit 2: Interest

Lesson D: Hobby groups

Objectives: After this lesson, the students will be able to talk about their hobbies and interests.

Teaching Materials Lesson D:

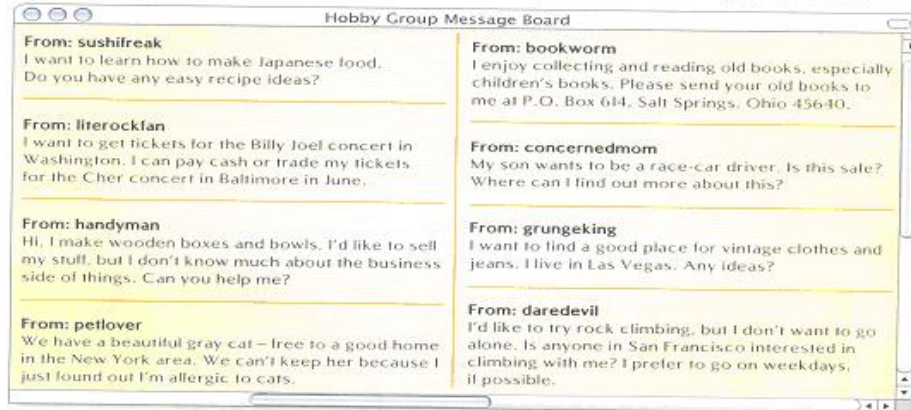
Lesson D Hobby groups

1 Reading

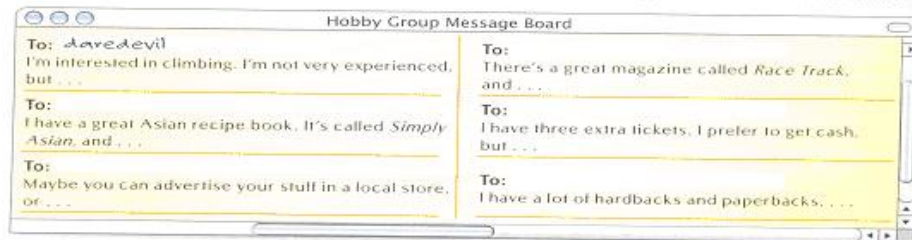
A Look at the hobby groups on this Web page. Which ones are you interested in? Tell the class.




B Now read these messages. Can you match each message to one of the hobby groups above?




C Look at the first line of these replies to the messages. Who are they for? Write the screen names.



2 Listening and speaking Favorite Web sites

A  Listen to Joe and Lisa talk about a Web site. What kind of Web site is it? Why does Joe like it?

B  Listen again. Choose the correct information to complete the sentences.

- 25,000 / 55,000 people visit the Web site each day.
- Joe likes to read the articles / messages on the site.
- Today's article is about hiking in the U.S. / different countries.
- Lisa prefers to sleep in a tent / stay home.
- Joe wants to enter the competition to win a bike / tent.

C Group work Ask and answer the questions.

- ▶ What's your favorite Web site?
- ▶ What's interesting about it?
- ▶ What other Web sites do you go to a lot?
- ▶ Do you ever use Web sites for shopping? banking? doing research?
- ▶ Do you have your own Web page or Web site?



3 Writing Messages

A Choose a hobby group from the Web page on page 18. Write a question to post on the message board.

Hobby Group Message Board

To: Music group
From: Coldplayfan

Hi. I'm a big fan of Coldplay, especially the lead singer. I really like him, and I want to know more about him. What are his interests?

I also like another band. . . .

Help note

Linking ideas

- Add an idea:
*I listen to music, **and** I like movies.*
*I **also** like books, **especially** children's books.*
*I don't like jazz **or** rock music.*
- Contrast two ideas:
*I like climbing, **but** my friends don't.*
- Give a reason:
*We can't keep her **because** I'm allergic to cats.*

B Read your classmates' messages. Choose one and reply to it. Then "send" your reply. Do you receive any helpful replies?

4 Free talk The game of likes and dislikes

See **Free talk 2** at the back of the book for more speaking practice.



Lesson D *Hobby groups*

1 Reading

- **Set the scene** Say, "Hobby Group is the name of an online message board. A *message board* is like a bulletin board on the Internet – usually about one topic or interest. You can put messages and questions on a message board. Other people read them and answer them. When you put a message on a message board, you *post* it." Write on the board: *post*.
- Ask, "Do you ever read or post on message boards?" Ss raise their hands if they do. Ask a few Ss who raise their hands, "Which ones do you read? What are they about? What do you write about?"
- Say, "Look at the guesses on the board. Which ones are correct?" Circle the names and hobby groups that Ss guessed correctly.
- **Do the reading again** Tell Ss to scan the Web page and underline any vocabulary words they are unsure of. Have Ss call out the words. Write them on the board. Ask Ss to explain the meaning of the words, or explain them yourself.

Extra activity – class

Call out information questions about the ads. Ss scan the ads for the information and raise their hands when they find the answer. Call on a different S for each question (e.g., *Where does grungeking live? – Las Vegas; What concert does literockfan want to go to? – the Billy Joel concert; What color is petlover's cat? – gray*).

A

Prereading

- **Preview and do the task** Say, "The Hobby Group Message Board is about different hobbies. Look at the hobby groups on this Web page. Which ones are you interested in? Circle two or three hobbies." Help with new vocabulary as needed.
- Write the eight hobby groups on the board. Read each one aloud. Have Ss raise their hands if they circled it and count the hands for each. Circle the three hobbies that are the most popular.

B

During reading

- **Preview the reading** Books closed. Write the screen names from the messages on the board. Say, "These are names of people from the Hobby Group Message Board. They are called *screen names*. What do you think the names mean? Which hobby do you think each person is interested in?" Read each name aloud. Write Ss' guesses on the board next to each name.
- **Do the reading** Books open. Say, "Read each of the messages quickly. First, find what each message is about. Make notes." Call on individual Ss to give answers. [*sushifreak*: Japanese food; *literockfan*: tickets for a concert; *handyman*: how to sell his wooden boxes and bowls; *petlover*: a free cat; *bookworm*: old books; *concernedmom*: her son, race-car driving; *grungeking*: (vintage) clothes; *daredevil*: rock climbing]
- Have Ss read the messages again and match each message to one of the hobby groups in Part A. Check answers with the class.

Answers

sushifreak – cooking	bookworm – collecting
literockfan – music	concernedmom – cars
handyman – crafts	grungeking – fashion
petlover – pets	daredevil – outdoors

C

Postreading

- **Preview the task** Read the instructions aloud. Tell Ss that these are replies to six of the messages on the Web page in Part B. Call on a S to read the first reply. Say, "Look at the message to daredevil. Which word tells you this message is for him?" (climbing)
- **Do the task** Have Ss read the other replies and write the screen name for each message.
- Check answers with the class: for each one, ask Ss which word(s) in each message helped them choose the hobby group.

Answers

To: daredevil – climbing
 To: sushifreak – Asian recipe book
 To: handyman – advertise your stuff
 To: concernedmom – *Race Track*
 To: literockfan – tickets, cash
 To: bookworm – hardback and paperbacks

Extra activity – groups

Ss write their own short reply to one of the messages from the Web page. Ss then read their replies, and the group decides the most helpful reply. Groups then present their most helpful reply to the class.

2 Listening and speaking

- **Set the scene** Ask, "Do you have a favorite Web site?" Ss raise their hands if they do. Ask a few Ss who raised their hands, "What kind of Web site is it? Why do you like it?"

A (CD 1, Track 20)

- **Preview the task** Read the instructions aloud. Write the two questions on the board: *What kind of Web site is it? Why does Joe like it?* Say, "In the conversation, Joe gives three reasons why he likes the Web site. Try to write down one."
- **Play the recording** *Audio script p. T-235* Ss listen and write their answers. Ask, "What kind of Web site is it?" [An outdoors Web site / It's about hiking and camping.] "Why does Joe like it?" [It has lots of good articles. There are some amazing photos. There are competitions.] Write the answers on the board.
- **Follow-up** If many Ss did not hear all of the answers, play the recording again. Ss raise their hands when they hear a reason. Pause the recording, and call on Ss to give the reasons.

B (CD 1, Track 21)

- **Preview the task** Read the instructions aloud. Have Ss read the five sentences.

- **Play the recording** *Audio script p. T-235* Ss listen and circle the correct answers.
- **Play the recording again** Ss listen and review their answers. Check answers with the class.

Answers

1. 25,000 people visit the Web site each day.
2. Joe likes to read the articles on the site.
3. Today's article is about hiking in different countries.
4. Lisa prefers to stay home.
5. Joe wants to enter the competition to win a bike.

C

- **Preview the task** Read the instructions aloud.
- **Do the task** Have Ss take turns asking and answering the questions. Tell Ss to make notes about one interesting thing they learn about each group member.
- **Follow-up** Different groups report some of the interesting things they learned.

3 Writing

A

- **Preview the task** Read the instructions aloud. Tell Ss to read the example message. Ask a few comprehension questions (e.g., *What hobby group is the message to? Who does the writer like? What does he want to know?*).
- **Present Help Note** Have Ss read the information. (For more information, see Language Notes at the beginning of this unit.)
- Write on the board: *but, and, or, because, and especially*. Say, "Look at the message board on p. 18. Find sentences with these words." Call on Ss to find and read the sentences. [*But*: I'd like to sell my stuff, *but* I don't know much . . . I'd like to try rock climbing, *but* I don't want to go alone. *And*: I make wooden boxes *and* bowls. I want to find a good place for vintage clothes *and* jeans. I enjoy collecting *and* reading old books . . . *Because*: We can't keep her *because* I just found out I'm allergic to cats. *Or*: I can pay cash *or* trade my tickets. *Especially*: I enjoy collecting and reading old books, *especially* children's books.]
- **Do the task** Write on the board: *To* and *From*. Say, "First choose the hobby or interest you want to write about.

Write the group name in the *To* line. Then think of an interesting screen name. Write it in the *From* line. Then write your message. First write about what you like. Then think of a question to ask about your hobby or interest."

- Have Ss write their messages.

Extra activity – groups


Ss in each group take turns reading the screen names from their messages to group members. Group members try to guess what hobby the S is interested in. Groups get one point for each correct guess. The group with the most points wins.

B

- **Preview and do the task** Read the instructions aloud. Have Ss put their messages on their desks or chairs with a blank piece of paper next to their message. Ss move around the room and read at least five other Ss' messages. Ss choose one, write a reply on the blank piece of paper, and leave it next to the message.
- Have a few Ss share their messages and any helpful replies with the class.

4 Free talk

- Tell Ss to turn to Free Talk 2 at the back of their Student's Books. Have Ss do the tasks. (See the teaching notes on p. T-20A.)

 Assign Workbook pp. 16 and 17. (The answer key begins on p. T-248.)

Unit 3: Health
Lesson A: Healthy living

Objective: After completing the lesson, students will be able to use the simple present and present continuous and to discuss their health and living styles.

Teaching material Lesson 3 A:

Lesson A *Healthy living*

Are you doing anything to stay healthy?



“Well, I generally don’t eat a lot of junk food, and I don’t eat red meat at all. And right now I’m doing karate. It’s getting me in shape quick.”
–Brian Jones



“Um . . . right now I’m trying to lose weight before my school reunion, so I’m drinking these diet drinks for dinner.”
–Carmen Sanchez



“Well, I walk everywhere I go because I don’t have a car, so I think I get enough exercise.”
–Mei-ling Yu



“Um . . . to be honest, I’m not doing anything right now. I’m studying for exams this month, so I’m eating a lot of snacks, and I’m not getting any exercise at all.”
–Michael Evans



“Not really. I kind of eat everything I want. I don’t do anything to stay in shape. I’m just lucky, I guess.”
–Lisa da Silva



“Yeah, we exercise six days a week. We go swimming every other day, and in between we go to the gym. And once in a while, we go hiking.”
–The Parks

1 Getting started

A  Listen to these on-the-street interviews. Who do you think has a healthy lifestyle? Why?

Figure it out

B Complete these sentences with a simple present or present continuous verb. Are the sentences true for you? Tell a partner.

1. I usually _____ to the gym twice a week.
2. This month, I _____ a lot of snacks.
3. I generally _____ healthy food.
4. I _____ karate right now.

2 Grammar Simple present and present continuous

Use the simple present to talk about "all the time" and routines.

How **do** you **stay** in shape?
I **walk** everywhere.

Do you **get** regular exercise?
Yes, I **do**. I **exercise** six days a week.
No, we **don't**. We **don't exercise** at all.

Use the present continuous to talk about "now" and temporary events.

What sports **are** you **playing** these days?
I'm **doing** karate. It's **getting** me in shape.

Is she **trying** to lose weight?
Yes, she **is**. She's **drinking** diet drinks.
No, she's **not**. She's **not trying** to lose weight.

A Complete the conversations with the simple present or present continuous. Then practice with a partner.

- 1 **A** How do you cope (cope) with stress?
B Well, I _____ (take) a course in aromatherapy right now, and I _____ (enjoy) it. But everybody in my family is pretty relaxed. We _____ (not get) stressed very often.
- 2 **A** What kind of exercise _____ you usually _____ (do)?
B I _____ (like) swimming. My wife and I usually _____ (go) to the pool every day in the summer. Right now it's cold, so I _____ (not swim) at all. But my wife _____ (go) every day, even when it's cold.
- 3 **A** _____ you _____ (eat) a lot of fast food these days?
B Well, I _____ (love) it, but right now I _____ (try) to eat a balanced diet. It's hard because my husband _____ (not like) fruit and vegetables.

In conversation . . .

The simple present is about 6 times more frequent than the present continuous, and even more frequent with **like, love, know, need, and want**.



About you

B Pair work Now ask and answer the questions. Give your own answers.

3 Listening and speaking Unhealthy habits

A These people are talking about their unhealthy habits. Try to guess what they're talking about. Then listen and write what they actually say.

- Ian: "I'm trying to cut down on _____ and _____."
- Kaylie: "I want to give up _____, but I can't. It's very hard."
- Martin: "I _____ everywhere. It's bad, I know. I never _____."
- Silvia: "I _____ a lot. I _____ late almost every night."

B Listen again to the last thing each person says. Do you agree? Why or why not? Tell the class.

"I agree with Ian. I think it's good for you." **or** "I don't agree with Ian because . . ."

Teaching procedures Lesson 3 A:

Lesson A Healthy living


1 Getting started

- **Set the scene** Read the lesson title aloud. Ask, "What are some things you do to stay healthy?" Ask a few Ss to answer (e.g., *I always eat a lot of fruit. I get a checkup once a year.*). Ask, "Who is doing something special, or different, to stay or get healthy right now?" Ask a few Ss to answer (e.g., *I'm taking an exercise class. I'm not eating any junk food.*).

A (CD 1, Track 22)

- **Preview the task** Read the instructions aloud.
- **Play the recording** Ss listen and read along.
- **Play the recording again** Books closed. Ss listen and write their answers.
- Have Ss compare their answers in pairs. Check answers with the class. [*Brian*: He doesn't eat a lot of junk food, he doesn't eat red meat, and he does karate. *Mei-ling*: She walks everywhere. *The Parks*: They exercise six days a week, they go swimming, they go to the gym, and they go hiking.]

B

-  **Preview the task** Say, "Read the interviews again. Look for time words and expressions. Write these column headings on the board: *Routines (All the Time)* and *Temporary Events (Now)*. Ask a few Ss to call out the time expressions for the first heading, and write them on the board. [generally, six days a week, every other day, once in a while] Ask, "What verb tense do you see in the sentences with these time expressions?" [simple present]
- Ask a few Ss to call out the time expressions for the second heading, and write them on the board. [right now, this month] Ask, "What verb tense do you see in the sentences with these time expressions?" [present continuous]
 - Read the instructions aloud.
 - **Do the task** Have Ss complete the sentences with a simple present or present continuous verb.
 - Have Ss compare their answers in pairs. Check answers with the class.

Answers

1. I usually go to the gym twice a week.
2. This month, I'm eating a lot of snacks.
3. I generally eat / have healthy food.
4. I'm doing karate right now.

- **Focus on the use** Say, "Underline the time words and expressions in Part B, and name the column they go in." Add them in the appropriate column as Ss call them out. [*Routines (All the Time)*: usually, twice a week, generally; *Temporary Events (Now)*: this month, right now]
- Say, "The simple present goes with the time words and expressions in the *Routines (All the Time)* column. It tells about repeated activities. The present continuous goes with the time words and expressions in the *Temporary Events (Now)* column. It tells about things that are happening around now or these days."
- Ask, "Can you add more time words to each column?" Call on Ss to answer (e.g., *Routines column*: often, sometimes, every week, every night, twice a week; *Temporary Events column*: these days, this semester, this year, this season).
- **Try it out** Say, "Look again at Part B. Make the sentences true for you and then tell them to your partner." Ss share answers (e.g., *I never go to the gym. OR I go to the gym on the weekends.*).

Extra activity – class / groups

Ss ask three different classmates, "Are you doing anything to stay healthy?" Ss make notes of the answers. When Ss finish, they form groups to discuss the answers. Groups report their information to the class.

Extra activity – individuals / pairs

Ss read the on-the-street interviews again and underline any sentences that are true for them (e.g., *I don't eat red meat at all.*). Ss compare sentences in pairs and ask questions for more information (e.g., *Why not? Are you vegetarian? Do you eat chicken?*).

Culture note

Health and fitness are high priorities for a lot of people. Gyms and fitness centers are becoming more and more popular. Some people hire personal trainers to create individual workout programs for them. Many people read the list of ingredients on packaged foods so they will know exactly what the foods contain (e.g., *calories, fats, sugar, salt, vitamins, and minerals*).

2 Grammar

 (CD 1, Track 23)

- **Present the grammar chart** Play the recording. Ss listen and repeat.
- **Understand the grammar** Say, "The grammar chart compares the simple present and the present continuous."
Explain that the simple present is used to talk about regular or repeated events or routines (e.g., *We play tennis five days a week.*) and situations that are true all the time (e.g., *I eat lots of fruit.*).
Explain that the present continuous is used for activities and events that are temporary, or going on around now (e.g., *I'm trying to get in shape.*). It is also used for activities that are going on at the time of speaking (e.g., *I'm running to class.*).
- Have Ss write two more information questions and two more *yes-no* questions for each verb form. The questions should use *you* (e.g., *Do you play a sport?*).
- Have Ss work in pairs to answer the four questions that their partner wrote. Tell Ss to answer the *yes-no* questions with short answers and to add extra information. Remind Ss to use frequency adverbs or time expressions in their answers.
- Call on several pairs to read one of their sets of questions and answers to the class.
- Review the forms as needed.
- **Present in Conversation** Read the information aloud. Have Ss make a sentence in the simple present for each of the verbs presented. (For more information, see Language Notes at the beginning of this unit.)

3 Listening and speaking

A  (CD 1, Track 24)

- **Preview the task** Say, "You will hear four people talking about their unhealthy habits. Read the incomplete statements and guess what each person says. Write your guesses."
- When Ss finish, ask a few Ss to call out their guesses for each statement. Say, "Now listen and write what they actually say."
- **Play the recording** *Audio script p. T-236* Ss listen and write the missing words. Check answers with the class.

Answers

1. I'm trying to cut down on chocolate and candy.
2. I want to give up coffee, but I can't. It's very hard.
3. I drive everywhere. It's bad, I know. I never walk.
4. I work a lot. I get home late almost every night.

- **Follow-up** Ss raise their hands if they predicted the correct words.

A

- **Preview the task** Have Ss look at the picture. Ask, "What is she doing?" [She's reading / relaxing.] Ask, "What is on the table?" [an aromatherapy burner] Read the instructions and the example aloud. Ask, "Why is the simple present the correct tense?" [It's asking how you cope with stress in general or all the time.]
- **Do the task** Have Ss complete the conversations. Have Ss compare their answers in pairs. Check answers with the class: ask three pairs of Ss to each read a conversation.

Answers

1. **A** How do you cope with stress?
B Well, I'm taking a course in aromatherapy right now, and I'm enjoying it. . . . We don't get stressed very often.
2. **A** What kind of exercise do you usually do?
B I like swimming. My wife and I usually go to the pool every day in the summer. Right now it's cold, so I'm not swimming at all. But my wife goes every day, even when it's cold.
3. **A** Are you eating a lot of fast food these days?
B Well, I love it, but right now I'm trying to eat a balanced diet. It's hard because my husband doesn't like fruit and vegetables.

- Tell Ss to practice the conversations in pairs, taking turns playing each role.

B

 **Preview the task** Read the instructions aloud.


- **Do the task** Have pairs take turns asking and answering the questions using their own information. Encourage them to give extra information.

B  (CD 1, Track 25)

- **Preview the task** Read the instructions and example sentences aloud.
- **Play the recording** *Audio script p. T-236* Pause after each speaker to ask, "Do you agree? Why or why not?" Ask several Ss for their opinions on what the speakers say. [*Ian*: I think chocolate can be good for you. *Kylie*: Maybe one cup of coffee is OK. *Martin*: Walking is probably very good exercise. *Silvia*: Working hard isn't bad for you.]

Extra activity – groups

Using the simple present, S1 tells the group something he or she does and something he or she does not do to stay healthy. S2 repeats and adds his or her own information. S3 repeats what S1 and S2 said and adds information. Continue this way until all group members have taken a turn. Groups repeat the task, but this time they use the present continuous.

 Assign Workbook pp. 18 and 19. (The answer key begins on p. T-248.)

Unit 3: Health

Lesson D: Ways to relax

Objective: In this lesson, the students will be able to read and understand the text and discuss the ways to relax.

Teaching material Lesson D:

Lesson D Ways to relax

1 Reading

A Do you ever get stressed? How do you feel when that happens? Check (✓) the boxes and add ideas. Then tell the class.

I get stressed when . . .

- I'm studying for an exam.
- I'm late for an appointment.
- I have no money.
- I have a deadline.
- _____ .
- _____ .


When I'm stressed, I . . .

- feel tired and irritable.
- get a headache.
- _____ .

B Read the leaflet. What do you learn about stress? Are any of your ideas mentioned?

COMMON QUESTIONS ABOUT STRESS

Am I stressed?
 If you can't sleep well or can't concentrate, . . .
 If you feel depressed or want to cry a lot, . . .
 If you have a headache or an upset stomach, . . .
 If you can't relax and you feel irritable, . . .
 If you are extremely tired, . . .
 . . . then it's possible you are stressed.





Is stress bad for me?
 Occasional stress is common and can be good for you. However, if you feel stressed for a long time, it can be serious. Stress can make you sick. It can also affect your memory or concentration, so work or study is difficult.

What can I do?
 Fortunately, there's a lot you can do. Try some of these relaxation techniques. If you still feel stressed, make an appointment to see your doctor.

RELAXATION TECHNIQUES

- 1 Breathe** Take a breath, hold it for four seconds, and then breathe out very slowly. Feel your body relax.
- 2 Exercise** Walk or exercise for just 30 minutes each day and feel better.
- 3 Talk** Call a friend. Talk about your problems.
- 4 Meditate** Close your eyes and focus on something calm. Feel relaxed.
- 5 Pamper yourself** Take a hot bath, or have a massage.
- 6 Do something you enjoy** Listen to music. Sing. Watch TV. Meet a friend.

Department of Health – "Take care of yourself."

C Read the leaflet again. Answer the questions. Then compare answers with a partner.

1. How can you tell if you are stressed?
2. Why can stress be serious?
3. What can you do if you feel stressed?
4. Which relaxation ideas in the leaflet do you like?
5. Do you think the leaflet is helpful? Why or why not?

2 Listening *Time to chill out*

A What do you and your friends do to relax? Do you do any of these things? Tell a partner.



B Listen to four people talk about relaxing. Number the pictures.

C Listen again. What else do they do to relax? Write the activity under each picture.

3 Writing *Advice on health*

A Do you have a question about your health? Write a health problem on a piece of paper. Use the ideas below to help you.

I'm feeling stressed about my exams. Help!

I can't sleep at night. What can I do?

I want to get in shape. What can I do?

I get colds all the time. Any suggestions?

B Group work Pass your papers around the group. Write a reply to each person.

I'm feeling stressed about my exams. Help! (Susana)

If you're feeling stressed about your exams, imagine that you are taking the exam and that you are relaxed. (Mi Young)

When you feel really stressed, go to the gym or swim. Exercise can help you! (Luis)

Help note

Commas after *if* and *when* clauses

- Use a comma here:
If you're feeling stressed, try these ideas.
When you feel stressed, go to the gym.
- Don't use a comma here:
Go to the gym when you feel stressed.

Lesson D Ways to relax

1 Reading

- **Set the scene** Read the title of the lesson aloud. Ask, "How do you relax? What do you do?" Get ideas from Ss (e.g., *go shopping, exercise, take a nap, watch TV*).

A

Prereading

- **Preview the task** Write the word *stressed* on the board. Ask, "What does *stressed* mean?" Get ideas from Ss (e.g., *worried, nervous, tired*).
- Ask, "Do you ever get stressed?" Have Ss raise their hands if they do. If there are Ss who *do not* raise their hands, call on a few of them. Say, "Most people get stressed sometimes. Why do you think you don't get stressed?" Have Ss explain (e.g., *I don't get stressed because I...*).
- **Do the task** Have Ss read the sentences in the two boxes. Say, "First, think about when you get stressed. Then think about how you feel when you get stressed. Check the boxes, and then add your own ideas."
- Read each sentence in the box on the left aloud. For each, have Ss raise their hands if the statement is true for them. Then ask Ss to call out two other situations when they feel stressed. For each new situation, have Ss raise their hands if the statement is true for them. Count the raised hands for each situation, and find out which situations make the most Ss feel stressed.
- Read each sentence in the box on the right aloud. For each, have Ss raise their hands if they feel the same way. Then ask Ss to call out other ideas. Write Ss' ideas on the board (e.g., *have a stomachache, feel sick*).

B

During reading

- **Preview the reading** Have Ss look at the reading. Say, "This is a leaflet. A leaflet is usually one piece of paper with helpful information."

Write these questions on the board.

1. *What are the two topics of the leaflet?*
 2. *Who made the leaflet?*
 3. *What's the name of the leaflet?*
- Have Ss scan the leaflet and answer the questions. Tell them to raise their hands when they find all the answers. Check answers with the class. [1. common questions about stress; relaxation techniques 2. the Department of Health 3. Take care of yourself.]
 - Read the instructions aloud. Tell Ss to circle two new or interesting things they learn as they read.
 - **Do the reading** Have Ss read the leaflet and circle the information.
 - When Ss finish, call on a few Ss to tell the class the information they circled.
 - Say, "Look at the ideas on the board about how you feel when you get stressed. Are any of these ideas mentioned in the leaflet?" Have Ss call out their answers, and circle those ideas on the board.
 - **Do the reading again** Tell Ss to read the leaflet again and underline any new vocabulary. Have Ss work in pairs to compare new words and help each other with the meanings. Help with new vocabulary as needed.

Extra activity – pairs

Pairs role-play a conversation about stress. S1 imagines he or she is stressed and tells S2 how he or she feels and why. S2 responds with comments and gives advice using the relaxation techniques. After Ss finish practicing their conversations, call on a few Ss to act them out for the class.

C

Postreading

- **Preview the task** Read the instructions aloud. Ask five Ss to each read a question aloud. Make sure Ss understand what information they are looking for. (For some questions, Ss look for answers in the article. For others, Ss answer using their own ideas.)
- **Do the task** Have Ss answer the questions and then compare their answers in pairs. Check answers with the class.

Possible answers

1. You can tell you are stressed: if you can't sleep well or can't concentrate / if you feel depressed or want to cry a lot / if you have a headache or an upset stomach / if you can't relax and you feel irritable / if you are extremely tired.

2. Stress can make you sick. It can also affect your memory or concentration.
3. If you feel stressed, you can take a deep breath / exercise / talk to a friend / meditate / take a bath or have a massage / do something you enjoy.
4. I like the idea about talking with a friend because it's an easy thing to do.
5. I think the leaflet is helpful because it gives some ideas about how to deal with stress.

Extra activity – pairs

Ss make a list of ways they relax and then share them with their partner. Each pair chooses two ideas – one from each list. They work together to write two short paragraphs like the ones under *Relaxation Techniques*. Then several pairs read their paragraphs to the class.

2 Listening

- **Set the scene** Tell Ss to look at the pictures. Ask, "Where are the people? What are they doing?" Get ideas from Ss.

A

- **Preview and do the task** Read the instructions aloud. Have Ss work in pairs and discuss the questions.
- Call on several Ss to tell the class what they do to relax.

B (CD 1, Track 33)

- **Preview the task** Read the instructions aloud.
- **Play the recording** *Audio script p. T-236* Play the first conversation, and then pause the recording. Ask, "Which picture does this conversation go with?" [the picture of the woman reading the book] Ask, "What words in the conversation help you choose this picture?" [book, reading] Ss write the number 1 in the correct box.
- Play the remaining conversations, and have Ss write their answers. Check answers with the class.

Answers

sit in a park – 2 take a bath – 3 fish – 4 read a book – 1

C (CD 1, Track 34)

- **Preview the task** Read the instructions aloud.
- **Play the recording** *Audio script p. T-236* Play the first conversation, and then pause the recording. Ask, "What else does she do to relax?" [She sometimes watches TV.] Ss write the answer under the picture they labeled 1.
- Play the remaining conversations. Ss listen and write the activities.
- **Play the recording again** Ss listen and review their answers. Check answers with the class: call Ss to the board to write the correct answers.

Answers

1. When she's tired, she sometimes watches TV.
2. He likes to sit and watch people at the mall.
3. She plays with her little girl.
4. He likes to swim – especially alone.

3 Writing


A

- **Preview the task** Ask some general questions about common health problems, such as *Does anyone have a cold today? Is anyone feeling stressed?* Have a few Ss call out their answers.
- Read the instructions aloud. Call on four Ss to each read an example.
- **Do the task** Have Ss write a common health problem on a piece of paper. Tell Ss to write their names next to their problems.

B

- **Preview the task** Read the instructions aloud. Call on different Ss to each read the example problem and the replies.

- **Present Help Note** Read the information aloud. (For more information, see Language Notes at the beginning of this unit.)
- Ask Ss to read some of the problems they wrote in Part A. Give suggestions using sentences with *if* or *when* clauses. Write the sentences on the board, but do not include the commas (e.g., *When you can't sleep at night drink some warm milk.*). Call Ss to the board to add the commas.
- **Do the task** Have Ss pass their papers around their group and write a reply to each person. Tell Ss to write their names under their replies.
- **Follow-up** A few Ss read their health problems and any helpful suggestions they received.

 Assign Workbook pp. 24 and 25. (The answer key begins on p. T-248.)

Appendix C

A Research questionnaire

Students' Rationales Why They Don't Respond to Teachers' Questions in the Classrooms

This questionnaire was written to explore the reasons as to why you don't respond to the teacher's questions in the classrooms. The results will be useful for improving the teaching and learning of English Speaking-Listening course for first year students at Thai Southern University at Suratthani. Please respond to all items truly. Your responses will not affect your grade.

Class _____ Teacher's name _____

Date _____ Time _____

Part I

The researcher will play the videotape of your lesson and pause it whenever there is no answer to a question. Please view it and identify the reasons for your not answering the teacher's questions. You can identify more than one reason for your silence in each pause.

1. If you understand the teacher's questions, but you *cannot answer* them, please look at the reasons for not answering the teacher's questions in Item 1 and tick (✓) the reason in the table which best describes your reason.

2. If you understand the teacher's questions and *know the answers*, but you do not answer them, please look at the reasons for not answering the teacher's questions in Item 2 and tick (✓) the reason in the table which best describes your reason.

3. If you *don't understand* the teacher's questions and *cannot answer* them, please look at the reasons for not answering the teacher's questions in Item 3 and tick (✓) the reason in the table which best describes your reason.

Reasons Why Students Do Not Respond to the Teacher's Questions	Questions without Students' Responses									
	1	2	3	4	5	6	7	8	9	10
1. You understand the teacher's questions , but you cannot answer them. This is because...										
- You cannot put ideas into words.										
- You don't know the vocabulary.										
- You don't know the grammar.										
- You don't have the knowledge required by the questions.										
- The teacher does not give sufficient time to formulate the answers.										
- Other (Please specify.)										
2. You understand the teacher's questions and know the answers , but you do not answer them. This is because...										
- You wait for answers from the teacher.										
- You are afraid of making mistakes.										
- You don't like to talk in class.										
- You don't like speaking English.										
- You don't want to answer the questions which require your opinions.										
- The teacher's questions are not interesting.										

- The teacher's questions are too easy and not challenging.										
- You are shy.										
- You are having difficulty concentrating in class or occupied with a personal problem.										
- Other (Please specify.)										
3. You don't understand the teacher's questions and cannot answer them. This is because...										
- You cannot keep up with the pace of the teacher's questions.										
- You did not hear the teacher's questions.										
- The content is too difficult and complex.										
- The teacher uses vocabulary that is too difficult.										
- The teacher uses grammar that is too difficult.										
- The teacher asks the questions only once.										
- The teacher asks the questions in a very soft voice.										
- Other (Please specify.)										

Part II Please identify other problems about the teacher's questioning and your response or non-responses to the teacher's questions.

.....
.....
.....
.....

Thank you for your cooperation.

Appendix D

A question categorization sheet

Class:

Lesson:

Time:Date:.....

Rater No.

Question Number	Bloom Taxonomy of categories					
	Knowledge	Comprehension	Application	Analysis	Synthesis	Evaluation
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

Appendix E

A questioning technique categorization sheet

Class:

Lesson:

Time:.....Date:.....

Rater No.

Questioning technique No.	Questioning techniques used by the teachers				
	Rephrasing	Simplification	Repetition	Decomposition	Probing
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					

VITA

Natthanan Dumteeb

Candidate for the Degree of

Doctor of Education

Dissertation: TEACHERS' QUESTIONING TECHNIQUES AND STUDENTS' CRITICAL THINKING SKILLS: ENGLISH LANGUAGE CLASSROOM IN THE THAI CONTEXT

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Personal Data: I was born in Chana, Songkhla, Thailand in 1973.

Education: Graduated a secondary school from Mahavachirawut school in 1992, Received a Bachelor's Degree of Arts in Education (English) from Srinakarinwirot University, Songkhla, Thailand in 1996, Obtained a Master's Degree of Arts (Applied Linguistics) from Prince of Songkla University, Songkhla, Thailand in 2001, Completed the requirements for the a Doctor of Education with teachers' questioning techniques and students' critical thinking skills at Oklahoma State University, Stillwater, Oklahoma in July 2009.

Experience: An English lecturer at Faculty of Liberal Arts and Management Sciences, Prince of Songkla University (PSU), Suratthani Campus 2001-2009; Associate Dean of Academic Affairs October 2008-May 2009; Assistant President for Research and International Relations June 2009; Faculty Committee member 2002-2006; A research committee member of the faculty 2002-2006; Head of the Department of Humanities and Social Sciences, PSU, Suratthani Campus, 2004-2006; Article titled "Questioning Tips in the Language Classroom" published in Thai TESOL Focus, November 2004, (17)2, 29-30.

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Institution: Oklahoma State University

Location: Stillwater, Oklahoma

Title of Study: TEACHERS' QUESTIONING TECHNIQUES AND STUDENTS'
CRITICAL THINKING SKILLS: ENGLISH LANGUAGE
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Pages in Study: 236

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Major Field: EdD/AEST/College Interdisciplinary

Scope and Method of Study: Using cognitive learning theory by Bloom (1956) and Wu's (1993) taxonomy of questioning techniques

Purpose of Study: The purpose of this case study was to investigate questions and questioning techniques Thai English teachers use to promote responses and encourage critical thinking skills from students in the language classroom.

Findings and Conclusions: Overall, in this study, both questions and questioning techniques frequently used in the classroom were at a lower cognitive level. As a result, students' responses were at a low level of cognition and this might not help promote students' responses and encourage their critical thinking skills.

Lower cognitive level questions demands only routine or mechanical application of previously memorized and acquired knowledge and information, and this might not challenge students to interpret, analyze, or manipulate their own responses and information.

Thus, in the language classroom, teachers should be ensured that they have a clear purpose for their questions to encourage students' responses and their critical thinking skills rather than just determining what knowledge is learned.

ADVISER'S APPROVAL: Dr. Adrienne E. Hyle