

THE EFFECTS OF TEACHER VS STUDENT CENTERED
INSTRUCTIONAL STRATEGIES ON THE VOCABULARY LEARNING
OF SIXTH GRADE THAI STUDENTS

By

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ABSTRACT

This study focused on three different techniques used for teaching vocabulary to English as Foreign Language (EFL) students in Thailand. The purpose of this study was to find the “best” possible match of instructional technique with selected cultural elements in Thai 6th grade classroom. The study, conducted with 10 EFL teachers and 599 EFL students in Thailand, took the form of pretest-posttest and questionnaire for students, and interview for both students and teachers. To determine the effectiveness of three instructional techniques, students were asked to complete a pretest and posttest on vocabulary. In between the pretest and posttest, teachers were asked to teach vocabulary lessons to their students following a prescribed plan according to the instructional technique assigned to each classroom. Students were asked to complete a questionnaire asking about their feedback toward the instructional techniques and cultural factors that effected learning environment. Teachers and students were asked about their perspectives and cultural factors that effect teaching and learning effectiveness during the interview session. Results indicated that in terms of learning effectiveness, students who received Teacher-centered instructional technique performed better in some parts of vocabulary test than those who received Learner-centered instructional technique. Within Learner-centered instructional technique, students who received Cooperative Integrated Reading and Composition (CIRC) instructional technique outperformed students who received Jigsaw instructional technique. In terms of cultural elements, the results indicated that CIRC and Jigsaw are better matched with Thai 6th grade classrooms than Teacher-centered. The study provides suggestions and recommendations for Thai classroom on the instructional technique that better match with Thai teachers and students in terms of both classroom culture and learning effectiveness.

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TABLE OF CONTENTS

ACCEPTANCE

CHAPTER I INTRODUCTION TO THE PROBLEM	1
Overview	1
Background in Understanding the Thailand Context	2
Thailand and English Language Education	2
Purpose of the Study	10
CHAPTER II REVIEW OF THE LITERATURE	13
Background: Asian Students' Style of Learning Vocabulary	13
Teacher-Centered Instruction	13
General Characteristics of the Teacher-Centered Method	14
Teachers' and Students' Roles in the Teacher-Centered Method	14
Asian Teacher-Centered Instruction	14
Learner-Centered Instruction	14
History of Cooperative Learning	15
Theoretical Basis of Cooperative Learning	16
Concepts of Cooperative Learning	21
Research on Specific Strategies and Activities in Vocabulary Learning	22
Outcome between Teacher and Learner-Centered Pair and Group Activities	26

General Definitions of Culture	28
Cultural Effects on Instruction	29
Culture in the Classroom	31
Cultural Context Influence	34
Slavin's Methods and Thai Culture	39
Summary	41
CHAPTER III METHODOLOGY	42
Participants	42
Procedures for Gathering Data	43
Procedures	43
Data Analyses	45
Student Surveys: Pretest, Posttest, and Questionnaire	46
Qualitative Study	47
Implications and Limitations	48
CHAPTER IV FINDINGS	49
RQ1: What is the Effect of Three Teaching Strategies (Jigsaw, CIRC, and Lecture) on Vocabulary Learning (Form, Meaning, Use) for Sixth-Grade Thai Students	49
Comparing the Three Instructions Methods	55
RQ2: How do students and teachers perceive the match of Thai cultural norms with the three different instruction techniques (teacher-centered (lecture), Cooperative Integrated Reading and	

Composition, and Jigsaw)?	59
Student Questionnaire Results	59
The Interviews: Background	61
Students Interviews	62
Teacher Interview	78
Summary	84
CHAPTER V SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS	86
Summary of Findings: Effect of the Teaching Strategies	87
Summary of Findings: Culture Concept	91
Match and Mismatch of Instruction Techniques according to Thai Culture	94
Conclusion	97
Implementation of the instruction Used in the Classroom	99
Future Research	100
REFERENCES	101
APPENDICES	116
Appendix A1: Students Pretest : Spelling	116
Appendix A2: Students Pretest : Meaning	117
Appendix A3: Students Pretest : Function/ Use of vocabulary	118
Appendix B: Students Posttest : Spelling	120
Appendix B2: Students Posttest : Meaning	121
Appendix B3: Students Posttest : : Function/ Use of vocabulary	122

Appendix C: Students Vocabulary List	124
Appendix D: Lesson Plan: Teacher-Centered (Lecture)	126
Appendix E: Lesson Plan: Students-Centered (CIRC)	127
Appendix F: Lesson Plan: Student-Centered (Jigsaw)	128
Appendix G: Student Questionnaire	129
Appendix H: Interview Question (Teacher)	131
Appendix I: Interview Question (Students)	133
Appendix J: Pilot Test: Factor Analysis Results for Questionnaire	135
Appendix K: Summary of Pretest and Posttest Reliability	
Analysis Results	136
Appendix L : Material used in classroom	137

TABLE OF FIGURES

Figure 1	Three Concentric Circles of Asian English	3
Figure 2	Jigsaw Diagram	9
Figure 3	A simple Path Model of Cooperative Learning Processes.	18
Figure 4	Mean Score by Type of Skill, Pretest, and Posttest in Jigsaw Classroom	50
Figure 5	Mean Score by Type of Skill, Pretest, and Posttest in CIRC Classroom	52
Figure 6	Mean Score by Type of Skill, Pretest, and Posttest in Teacher-Centered Classroom	54
Figure 7	Students' Progress Mean Score across Instruction and Skills	59
Figure 8	Students' Feedback toward Jigsaw Classroom Instruction	63
Figure 9	Students' Feedback toward CIRC Classroom Instruction	64
Figure 10	Students' Feedback toward Teacher-Centered Classroom Instruction Technique	65
Figure 11	Comparing Students' Feedback toward Jigsaw, CIRC, and Teacher-Centered	66

Figure 12	Comparing Negative Feeling between Volunteer and Called on	69
Figure 13	Reasons Students Decided to Ask Their Friends Rather Than Their Teacher	70
Figure 14	Reason students decided to ask teacher	71
Figure 15	Reason students decided to ask teacher	72
Figure 16	Reason Students Preferred Asking Questions of Teachers Privately	74
Figure 17	Reasons Students Do Not Express Their Opinion in Class	75
Figure 18	Reasons why students stay quiet when they disagree with their friends	76
Figure 18	Reasons Students Stay Quiet when They Disagree with the Teacher	77
Figure 20	Disagreement Reaction toward Teacher and Friends	78

LIST OF TABLE

Table 1	The Difference between Cooperative Learning Groups and Traditional Learning Groups	7
Table 2	Key Researchers Involved in Cooperative Learning	16
Table 3	Vocabulary Learning Strategies List	24
Table 4	Relative Effectiveness of Vocabulary Learning Methods	27
Table 5	Vocabulary and Technique Applied to Students in Each Group	44
Table 6	Mean Score by Type of Skill, Pretest, and Posttest in Jigsaw Classroom	50
Table 7	Mean Score of Students Progress by Gender in Jigsaw Classroom	51
Table 8	Mean Score by Type of Skill, Pretest, and Posttest in CIRC Classroom	51
Table 9	Mean Score of Students Progress by Gender in CIRC Classroom	52
Table 10	Mean Score by Type of Skill, Pretest, and Posttest in Teacher-Centered Classroom	53

Table 11	Mean Score of Students Progress by Gender in Teacher-Centered Classroom	54
Table 12	A Summary of Performance from Different Instruction Techniques	58
Table 13	Summary of Questionnaire Mean Difference Among Instructions Techniques	61

CHAPTER I

INTRODUCTION TO THE PROBLEM

Overview

With the increasing use of the English language in Asian countries, it is important, especially to educators, to understand English language instruction with an awareness of students' background cultures to be able to provide better introduction for students to improve their English ability. The general intent of this study was to compare and contrast the use of cooperative learning methods and traditional teaching approaches in teaching English vocabulary to Thai students. It has been shown that vocabulary is one of the most significant factors in improving English language skills for those who study English as a foreign language (EFL). However, in Thailand for example, students learn a great deal of vocabulary largely by memorizing vocabulary lists, but still face problems of actually "knowing a word," including its form, meaning, and use, which prevents them from advancing their overall English ability (Jenpattarakul, 2012).

Some educators (Jacobs & Farrell, 2001) have argued that a learner-centered teaching approach is a better way to advance language learning. Nation (2001) explained that cooperative learning methods help in getting learners to explore both a variety of word meanings and a variety of elements of meaning that a word contains. However, to apply a learner-centered approach in the traditional teacher-centered pedagogical environment has been a great challenge for decades in Southeast Asian countries. This resistance is due to social and cultural paradigms that undergird many Thai classrooms and, specifically, the important role that cultural norms exert in affecting teacher-student relationships and teaching-learning in classrooms.

Background in Understanding the Thailand Context

The teacher-centered approach has been the norm in Thai education for more than five decades. Students in Thailand attain a great deal of knowledge through repeating after teachers and through memorization of words. Park (2009) explained that the learning characteristics of Southeast Asian students have distinct and diverse cultural values, such as respect for authority, commitment to family tradition, and a strong social hierarchy. Their learning is more likely to be passive and of a nonverbal style. Nonkukhetkhong, Baldauf Jr., and Moni (2006), and Wiriyaichitra (2002) indicated that the traditional Thai education system, which is teacher-centered, focuses on passive strategies that require students to wait to receive knowledge from their teachers. Because of this, Thai students sometimes have difficulties in making choices about their own learning. For example, Thai students, faced with the problem of choosing their project's topic, take a long time to make the decision about their topic when teachers give students freedom to choose their own topic. This problem of Thai students having trouble making decisions was reported in ASTV Manager Online (2010).

Thailand and English Language Education

The national language in Thailand is Thai. According to government sources, almost 100% of the population speaks Thai (National Identity Board, 2000). Other languages, such as Chinese, Malay, Lao, and Khmer, are spoken by minority groups (Foley, 2005; National Identity Board, 2000). Even though Thai is the only official language and there is no official second language, English is, in fact, a second language used widely in the country. Moreover, English abilities are perceived as a fundamental skill for professional advancement. Kachru's (1998) circles of English placed Thailand in the

Expanding Circle of English users. This means English is not a native language of Thai students, but English is used in education, international communication, and business.

(See Figure 1 for the three concentric circles of Asian English).

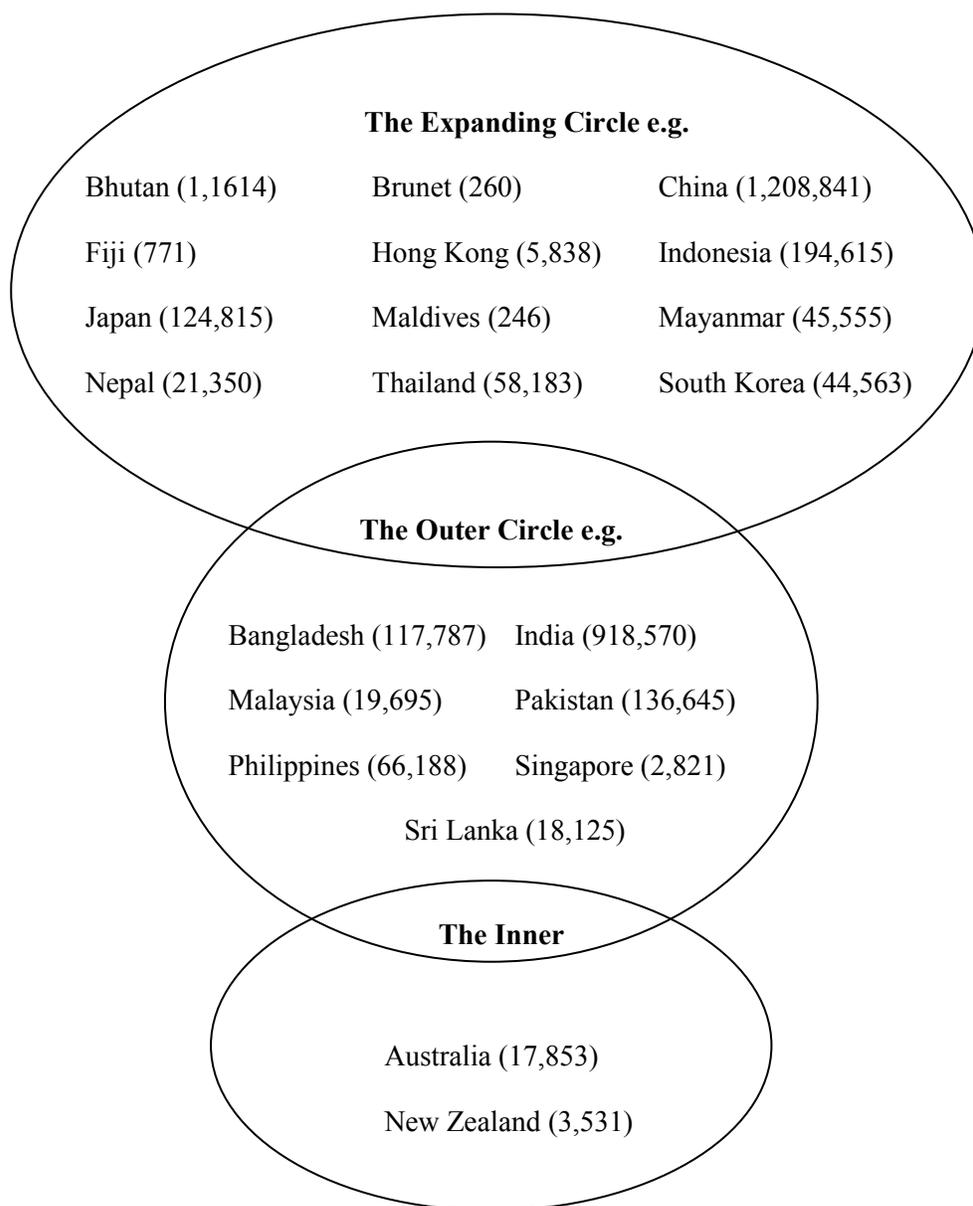


Figure 1 :Three Concentric Circles of Asian English (Populations are thousands).
Source: Kachru, 1988.

Under the Thai National Education Act (NEA) of B.E. 2542 (1999) (Office of National Education Commission, 1999), one of the foci is on the nature of the learning process occurring in all subject areas in which NEA is recommending a change to a more learner-centered pedagogy. To become “Learner-centered,” according to the NEA, requires teachers to modify their traditional role from being a “teller or source of knowledge” to being a “facilitator of knowledge.” However, teachers who teach English as a foreign language (EFL) in Thailand still predominantly use a teacher-centered approach, mainly relying on lecture, textbook and grammar translation, which are the approaches with which current teachers are familiar and which are consistent with dominant cultural norms (Maskhao, 2002; Thamraksa, 2003). Manchak and Manchak (2006) suggested that Thai education reform is needed to help students use English effectively. As shown in the national examination, students’ average score on university entrance examinations in English have not reached 50%. Similar results from the Office of the Education Council (ONEC) also revealed that the results of Thai youth’s English proficiency is below, and cannot compete with, other countries. To better reflect English proficiency in Thailand, countries surveyed for adult English proficiency results showed that Thailand ranked 42nd out of 44 countries. This means Thailand ranks below neighbor countries like Vietnam, Indonesia, and Malasia (*Bangkok Post*, 2012a). In addition, the *Bangkok Post* (2012b) reported that Thailand is ranked ninth out of 10 Association of Southeast Asian Nations (ASEAN) in English proficiency.

Policy under the Tenth National Economic and Social Development Plan (2007-2011); (National Economic and Social Development Board, Office the Prime Minister, 2007) stated that the Thai educational system would be investing in improving quality.

The Bureau of International Cooperation (2008) reported that this policy addressed the development of curricula, instructional media, and so forth. Transforming language learning is one of the specific teaching and learning reform plans in Thailand:

The Ministry of Education is leading the transformation of the education system with a strategy based upon enhancing moral and ethical values together with a core program for improving quality in education.... Transforming language learning: transforming and developing the teacher and learning of language, using authentic materials and learning situations; including the English Program (EP) aimed at providing full or partial Thai national curriculum subject in English. (p. 10)

The improvement of Thai education in foreign language learning, specifically English, is not only just for the purpose of using a language but also because it is a medium to bring Thailand to the international standard at the top of the ASEAN Economic Community (AEC) by 2015.

The AEC is a single regional common market of ASEAN countries scheduled to be in operation by 2015. Known as ASEAN, it is made up of 10 countries: (a) Brunei, (b) Cambodia, (c) Indonesia, (d) Laos, (e) Malaysia, (f) Myanmar, (g) the Philippines, (h) Singapore, (i) Thailand, and (j) Vietnam. The aim of the AEC is to create a competitive market for people in ASEAN countries, with a free flow of goods, services, investment capital, and skilled labor. AEC citizens will be able to work and move freely among these 10 countries (*Bangkok Post*, 2012b)

The Thai government, aware of the AEC campaign and created many policies to help prepare the Thai people to join the AEC in 2015. One thing the Thai government is aware of is the English proficiency among the Thai people. English is to be the language for commerce and communication in the AEC. Chongkittavorn (2012) reported that the Thai Ministry of Education brought up a “Let’s learn English” campaign to provide

English education to Thai people with skills and language ability who can communicate with other Asian countries.

Instruction type is one of the factors that could help improve teaching a language in the classroom. Three teaching models were involved in this research: (a) teacher-centered, (b) Jigsaw, and (c) Cooperative Integrated Reading and Composition (CIRC). Each of these three models has a unique process of approach in the classroom. In addition, each of these models has different characteristics that have high potentials to be good matches with the Thai socio-cultural background in Thai classrooms.

Teacher-centered instruction has been the norm in Thai education for more than five decades. Almost all students in Thailand attain a great deal of knowledge through repeating after teachers and through memorizing. While some group work is involved in classroom learning, groups in Thai classrooms are more likely to set up through traditional learning groups, where students just work together. There is no interdependence and no individual accountability involved in the group work. Some students in the group might be passive members and wait for other members to lead and do work. This leads to only a few members mastering the learning material while other members do not.

The aim of this research was to propose a different teaching method for learning English, one that would improve learning effectiveness by using an approach that more closely matches the Thai cultural context than does the current teaching method used in the Thai classroom. The cooperative learning approach was chosen to be the core model to compare with the traditional teaching method. Many researchers have suggested that the cooperative learning approach works better in terms of leadership, social interaction,

positive interdependence, and group process than traditional learning (Johnson & Johnson, 1984; Putnam, 1998; Slavin, 1983a). Cooperative learning may serve as a better match with the Thai way of learning, and also support the NEA Act of 1999, which was intended to help students further develop the cooperative learning process. In addition, students will get to deal with real-world situations while mastering the material they are learning as a group. See Table 1 for a comparison of the differences between cooperative learning groups and traditional learning groups

Table 1

The Difference between Cooperative Learning Groups and Traditional Learning Groups (Johnson & Johnson, 1984)

Cooperative learning groups	Traditional learning groups
• Positive interdependence	• No interdependence
• Individual accountability	• No individual accountability
• Heterogeneous	• Homogenous
• Shared leadership	• One appointed leader
• Shared responsibility for each other	• Responsibility only for self
• Task and maintenance emphasized	• Only task emphasized
• Social skills directly taught	• Social skills assumed and ignored
• Teacher observes and intervenes	• Teacher ignores group functioning
• Groups process their effectiveness	• No group processing

There are two major reasons that the Jigsaw and CIRC models were chosen to apply in this research project. First is the category of the model itself, which is matched to the target subject area in this research. Second is the matching of the model conceptualization with the Thai cultural context.

The cooperative learning approach is one of the instructional techniques frequently cited under learner-centered approaches. According to Slavin (1995), cooperative learning includes two different target-method categories. One is the general cooperative learning methods that can be applied in most subject areas and grade levels: (a) Student Teams-Achievement Divisions (STAD), (b) Teams-Games-Tournament (TGT), and (c) Jigsaw. The other category is the comprehensive curricula design, which is intended to be used with a particular subject at particular grade levels: (a) Cooperative Integrated Reading and Composition (CIRC) and (b) Team Accelerated Instruction (TAI).

In general cooperative learning methods, Jigsaw is a group working model that gives each of the team members an opportunity to lead, to follow, to learn from each other, and to participate in activities. The Jigsaw approach (Slavin, 1985) is to divide students into small groups and give them the same assignment. Each student in the group would get a different sub task, on which they would then have to work with members of their expert group. Later, when each student has mastered the material in their expert group, students will go back to their original group to teach their teammates. Then, they will take an individual quiz on the topic assigned at the beginning of the unit. See Figure 2 for the Jigsaw diagram.

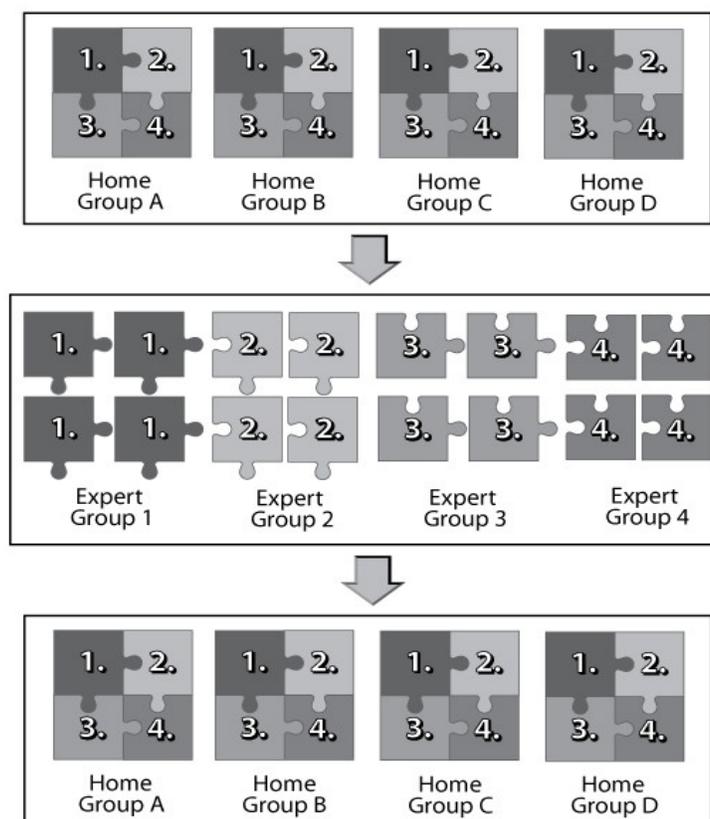


Figure 2. Jigsaw Diagram

Source : Adapted from Reilley (2010)

Among the general cooperative learning methods, Jigsaw seemed to be one of the better methods for Thai students. Jigsaw allows students to play the role of expert in a small group. This matches well with Thai students in the cultural context of *Krengjai* or losing face. On the one hand, students would be given chances to master their material in their small expert group. On the other hand, this process helps each of them practice the role of speaking up and leading, which they did not have in other general cooperative learning methods. It could even build up their personal confidence, which is often lacking in the traditional Thai classroom. In addition, each student on each team knows what role to play in his or her group. This could help Thai students not get lost and to know what to do in the group.

CIRC is the method chosen from the comprehensive design curricula for this research. In CIRC (Slavin, 1982), students are divided into teams with pairs of students from different reading groups. While the teacher is working with one reading group, students in the other groups are asked to work in pairs on their assignment, such as reading to one another or practicing spelling, decoding, and vocabulary. Later, students work in teams to master the main idea of the assignment and other comprehension skills. It concludes with an individual quiz for each team member.

CIRC is another good match to English-learning research within the comprehensive curricula design. It is better than the TAI approach, which is specifically focused on math. CIRC also has students work in smaller groups or in pairs. This method could help Thai students feel more comfortable when learning about how to work cooperatively with others. Again, students feel less anxiety and less afraid of losing face when they work in smaller groups. At the same time, CIRC still allowed teacher to involve with students' activities which included some explanation where students would find it slightly similar to teacher-centered in some parts of the instructional technique

Purpose of the Study

The aim of the cooperative learning technique was to promote a positive classroom environment where students were placed at the center of the learning process. This pedagogy was assumed as a tool to enhance students' learning motivation and to promote greater potential for individual language development. However, a strategy that is found to be successful in one socio-cultural environment may not work successfully in another one. This is because there are many other factors that play a role in students' response to the strategies, including basic knowledge of using instructional methods,

classroom environment, and the culture, values, and beliefs of the teacher and students in the classroom.

The specific purpose of this study was to contrast teacher-centered (lecture) and learner-centered (cooperative learning) techniques in the teaching of English vocabulary to Thai students. Research results can help identify the relative effectiveness of each approach, when applied in Thai classrooms, for three vocabulary skills (spelling, meaning of words, and use of words). By comparing results on these three dependent variables, this research was an attempt to learn which general technique was more effective in teaching vocabulary in the Thai classroom environment. Finally, the research was also used to examine learning motivation and feedback from teachers and students for each technique used in classrooms to determine what may explain “the best match” within the classroom culture in Thailand.

A mixed-methods approach was used in this study for interpreting, comparing, and contrasting the findings. Data gathering devices were constructed for both qualitative and quantitative analyses. The research results were expected to help teachers understand EFL students’ vocabulary learning problems and suggest teaching strategies that match the teacher, student, and classroom environment. This study addressed two research questions:

RQ1: What is the effect of three teaching strategies (Lecture, Cooperative Integrated Reading and Composition, and Jigsaw) on vocabulary learning (form, meaning, use) for 6th grade Thai students?

RQ2: How do students and teachers perceive the match of Thai cultural norms with the three different instruction techniques (teacher-centered (lecture), Cooperative Integrated Reading and Composition, and Jigsaw)?

CHAPTER 2

REVIEW OF THE LITERATURE

Background: Asian Students' Style of Learning Vocabulary

Students in Thailand learn a great deal of vocabulary by repeating after teachers and memorizing the spelling and meaning of words. This teacher-centered approach, used in most Asian classrooms, is believed to be more efficient and effective than other methods of teaching vocabulary. Asian students sometime think of vocabulary as a list of words with meanings in their native language but without any real context practice, which often prevents them from using the correct word meaning (Huyen & Nga, 2003). Memorizing vocabulary may help students in spelling words, but research shows that memorization of separate word forms with fixed meanings is too simplistic and inadequate for ESL/EFL students to build up their lexical knowledge (Gallo-Crail & Zerwekh, 2002; Wei, 2007).

Teacher-Centered Instruction

General Characteristics of the Teacher-Centered Method

In the teacher-centered approach to instruction, development of curriculum and control of the learning process is retained by the teacher and is closely related to the behaviorist tradition. The teacher's role is to create an environment which stimulates the desired behavior and discourages behaviors that are believed to be undesirable (Liu, Qiao, & Liu, 2006). In other words, teachers control the learning situation to obtain the desired outcome, guided by generalized characteristics of the learners (Wagner & McCombs, 1995).

Teachers' and Students' Roles in the Teacher-Centered Method

Schuh (2004) described the teacher-centered approach as a transmission model of teaching in which information is moved, or transmitted, to learners. Teachers who use this approach will be seen as people who give knowledge, which has been labeled and organized from the teachers' or experts' standpoint, to the student. Most of the teaching methods in these classes include lectures, whole group instruction, and memorization, with a strong reliance on textbooks.

Asian Teacher-Centered Instruction

Students who receive teacher-centered instruction in classrooms in Asian countries are assumed to be passive and reserved rather than expressive of their ideas. They rarely initiate class discussion until they are called on. Idoine-Shirai (2007) pointed out that traditional teachers in Asian countries require their students to memorize a large amount of information in class, yet this strategy does not result in effective learning because the majority of the information is lost within a short time.

Learner-Centered Instruction

A learner-centered approach emphasizes the importance of supportive classroom environments that promote positive, caring relationships. It helps create a learning environment that is well matched to the developmental needs of students, which is one of the factors that advance the levels of students' motivation. In her research, Meece (2003) found that students reported more positive forms of motivation and greater academic engagement when their teachers used a learner-centered approach while establishing higher order thinking, valuing student opinion, and adapting instruction to individual needs. Another source of motivation for students from the perspective of learner-

centered approaches is the desire to outshine one's ability and be recognized as an outstanding student who other classmates or teammates can turn to for help.

Cooperative learning is one of the techniques often categorized under learner-centered approaches. The structure of cooperative learning helps to create a situation that encourages each group member to reach his or her personal goal by helping the group be successful (Slavin, 1996). Therefore, group members must help accomplish both the setting or group goal and their own personal goals. Moreover, they can encourage their teammates to exercise maximum efforts in mastering the learning material.

Cooperative learning techniques could be categorized as a group discussion on the purpose of group tasks and the sharing of group learning with the class and instructor. Ravenscroft, Buckless, & Hassal (1999) gave examples of common tasks in cooperative learning activities, which included summarizing, discussing, answering assigned worksheet problems, answering test questions, reviewing, and editing student writing. In addition, the role of instructor is to select students to share their responses with other groups or with the whole class. The instructor's role is more to monitor students' interactions with their classmates than just to provide instruction for the lesson.

History of Cooperative Learning

Cooperative learning is one of the most fruitful and exceptional techniques in education. According to Johnson & Johnson (1999), cooperative learning exists when students work together to share the accomplishment of their learning goal. Adding to Johnson and Johnson's definition of cooperative learning, Deutsch (1962) explained that, in order for students to achieve their group's goal, all of the group members must achieve their own individual goals as well.

Johnson and Johnson developed cooperative learning in the mid-1960s. Over the next two decades, many researchers and developers such as De Vries, Edwards, Sharan, Kagan, and Slavin were involved with cooperative learning techniques as mentioned by Johnson, Johnson, and Stanne, 2000; Slavin, 1995 (see Table 2).

Table 2.

Key Researchers Involved in Cooperative Learning

Researcher-Developer	Date	Method
Johnson & Johnson	Mid-1960s	Learning Together & Alone
Devries & Edwards	Early 1970s	Teams-Games-Tournaments (TGT)
Sharan & Sharan	Mid-1970s	Group Investigation
Johnson and Johnson	Mid-1970s	Constructive Controversy
Aronson & Associates	Late 1970s	Jigsaw Procedure
Slavin & Associates	Late 1970s	Student Teams Achievement Divisions (STAD)
		Jigsaw II (adaptation from Aronson's Jigsaw technique)
Cohen	Early 1980s	Complex Instruction
Slavin & Associates	Early 1980s	Team Accelerated Instruction (TAI)
Kagan	Mid-1980s	Cooperative Learning Structures
Steven, Slavin, & Associates	Late 1980s	Cooperative Integrated Reading & Composition (CIRC)

Sources: Adapted from Johnson, Johnson, and Stanne, 2000; Slavin, 1995

Theoretical Basis of Cooperative Learning

Cooperative learning instruction is often viewed as an alternative instruction to traditional methods, since some teachers found that cooperative learning could not cure

all the problems that they faced in teaching. However, results of many studies showed that cooperative learning has a positive effect on students' achievement. In addition, a rapidly growing number of teachers are using cooperative learning techniques in variety of nations, at various academic levels, and in various disciplines. Still, some questions about cooperative learning remain, such as how and why cooperative learning methods affect students' achievement. Many researchers began their studies by starting with many different assumptions and coming up with conclusions that explains how and why cooperative learning methods affect students' achievement

Figure 3 shows an explanation of a simple path model of cooperative learning processes. The diagram begins with group goals and the individual learning process of group members. Proponents of this model believe that motivation in learning, encouragement, and helping others to learn is the key factor to encouraging active cooperative learning conduct, which will make learning more effective. The model includes both task and group motivation. In this model, motivation to succeed leads to learning and group unity. This promotes group interaction, equilibrant, and cognitive elaboration, which eventually enhances students' learning as well as academic achievement.

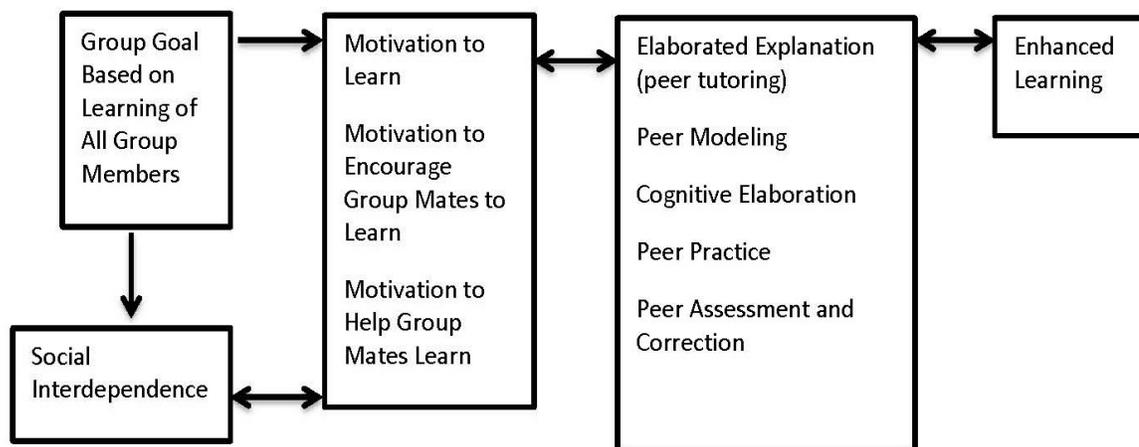


Figure 3. A simple path model of cooperative learning processes.
Source: Slavin, Hurley, and Chamberlain (2003, adapted from Slavin, 1995).

There are many definitions of cooperative learning and many theories related to cooperative learning techniques. Slavin (1989), one of the key scholars in the field of cooperative learning, defined four major theoretical perspectives supporting the achievement effect of cooperative learning: (a) motivational perspective, (b) social cohesion perspective, (c) cognitive perspective, and (d) empirical evidence for cognitive elaboration perspective.

Motivational Perspective. Motivation theory is one of the most widely studied subfields in the field of education. A short explanation of motivation theory is that action is caused by motivation, which can be formed through rewards and goals. The most important part of the process in cooperative learning is task motivation, due to the fact that task motivation is also the factor that drives other processes in cooperative learning. Cooperative learning strategy creates a situation where group members can achieve their personal goals when their group is successful. This means each group member needs to help his or her group mates give their best efforts. This leads to the situation that, when

students work together to achieve a common goal, they are likely to be more motivated to express norms favoring academic achievement and to support their teammates' academic achievement. It is not surprising that motivational theorists added group rewards to the cooperative learning method as this helps increase the motivation for academic achievement in a group.

Slavin (1995) explained further that, to improve the effectiveness in cooperative learning, group goals and rewards should be based on the individual learning of each member of the group. This means the team score would be calculated from the scores of individual quizzes, which were completed by each member without any help from his or her teammates. The only way for the group to be successful is to help each other within the group learning and to make sure each member masters the material before the individual quizzes.

Social Cohesion Perspective. The social cohesion perspective relies on positive affection and concern for one another. It emphasizes the idea of team-building activities and the idea of students helping each other because they care about their group's performance. Students will be engaged in task activity and try to help one another within their group because they want one another to be successful. Some researchers (Ashman & Gillies, 1997; Battistich, Solomon, & Delucchi., 1993; Slavin, Hurley, & Chamberlain, 2003) support the idea that social cohesion and the quality of group interaction play a role in the achievement effects of cooperative learning.

Cognitive Perspective. The concept of cognitive perspective is that the interactions among students increase students' achievement because of mental processing of information. Slavin, Hurley, & Chamberlain (2003) described the principle

assumption of developmental perspective on cooperative learning as the students' interaction with an appropriate task, which help improve students' learning ability. Vygotsky defined the zone of proximal development (ZPD), as the zone that is created between what a person can accomplish independently and what one can accomplish only with the assistance of someone who is more capable in that skill or knowledge. He also pointed out that collaborative group behaviors could be more advanced than behaviors performed by individuals. Cooperative learning response to both cognitive perspective and the characteristic of ZPD, where the focus is on what one can achieve only when assistance is available. Many studies supported the idea that students who are less likely to participate in conversation or discussion participate more when interacting with other students more likely to participate because students develop and maintain the concept of conservation (Bell, Grossen, & Perret-Clermont, 1985; Murray, 1982; Perret-Clermont, 1980)

Furthermore Piaget (1926) stated that arbitrary social knowledge, such as language, values, and symbol systems can only be learned by interacting with others. Moreover, Piagetians (Damon, 1984; Murray, 1982; Wadsworth, 1984) supported the idea that interactions among students during a learning task could enhance students' achievement. Since interactions among students are discussions and explanations about the content, some conflict will be created during the process, and this disequilibrium will bring about a higher understanding of learning tasks.

Empirical Evidence for Cognitive Elaboration Perspective. Student achievement is enhanced not only by disequilibrium in discussions but explaining material to others is also a factor that gives students an opportunity to improve their

performance. Many researchers (Dansereau, 1988; Newbern, Dansereau, Patterson, & Wallace, 1994; O'Dannell, 1996; O'Dannell & Dansereau, 1992;) have stated that cooperative learning techniques mean better learning results than when students work alone. This process would help students in retaining the information and relating it to existing knowledge. With cooperative learning techniques, students take roles as both listeners and recallers, which allows students opportunities to summarize information they have and correct errors during the process. This is also supported by Webb (1989, 1992), who found that students gain most when they get into the cooperative learning environment. This is because students learn more when they collaborated on the explanations presented to others than when they worked alone.

Concepts of Cooperative Learning

Slavin's studies (1995) identified six core concepts in cooperative learning techniques. First is the Group Goal, where all group members share the same goal in learning. Second is Individual Accountability, which means that each team success depends on each team member helping each other to learn and making sure all members master the material and are ready for the individual quiz. Third is Equal Opportunities for Success, where students contribute to their team by improving on their own past performance. Fourth is Team Competition, which could motivate students to cooperate within teams to be able to compete with other teams. Fifth is Task Specialization, where each group member would be assigned to accomplish a unique subtask. The last core concept is Adaptation to Individual Needs

Cooperative learning techniques are known to be one of the effective instructional approaches that create opportunity for language learning, by providing students a variety

of opportunities to practice their language and critical thinking skills (Storch, 2007; Van Lier, 1991). Similarly, Piaget (1926) stated that language, values, rules, morality, and symbol systems can only be learned in interactions with others. From a psychological perspective, a collaborative learning strategy also assists student in becoming more comfortable engaging in discussions. Vygotsky (1978) stated that collaborative activity among children also advances students' growth due to the fact that children at similar ages are likely to be operating within one another's proximal zones of development. He also pointed out that modeling in the collaborative group behaviors are be more advanced than those performed as individuals.

Language learning is a good example of cooperative learning. Many researchers all over the world seem to agree that students are motivated and learn language best through active engagement (Hansen, 2006; Pang, Muaka, Bernhardt, & Kamil, 2003), which is one of the characteristics of the cooperative learning technique. Hart (2003) pointed out that language learners should develop their understanding of the conventions of language use by engaging learners in the kinds of language activities found in real life, rather than by learning lists of rules or information. Especially in word study, it appears be more useful for students when appropriate words are introduced with interesting and engaging activities (Bear & Templeton, 1998).

Research on Specific Strategies and Activities in Vocabulary Learning

Words are like small pieces of a jigsaw puzzle in language since we use words to describe and name things. Without words, people could not express their intended meaning. "Without grammar, very little can be conveyed. Without vocabulary, nothing can be conveyed" (Wilkins, 1972, pp. 111).

Previously, from the 1940s to the 1960s, researchers generally believed that vocabulary would take care of itself when the student learned grammatical structure (Choudhury, 2010). Later, from the 1970s to the 1990s, vocabulary still played a second role in language learning (Decarrico, 2001). However, in the 1990s, vocabulary became a “current word” in language pedagogy (Kojic-Sabo & Lightbown, 1999). Moreover, Read (2004) reported that, in the early 2000s, there was a boom in second language vocabulary studies, which was reflected in the number of books and articles during that period of time. Read’s contention had been supported by Swan and Walter (1984) who pointed out the importance of vocabulary and asserted that it is one of the most important factors for ELLs.

Vocabulary acquisition was thought to be “incremental in nature” (Schmitt, 2000, p. 117), where students learn vocabulary through extensive reading and listening. No doubt that incremental in nature would benefit to upper intermediate or advance ELLs. However, beginners, intermediate ELLs might need a slightly different way of learning vocabulary. As Choudhury (2010) suggested the appropriate learning program for beginner and intermediate ELLs needs to have a good balance between explicit teaching and activities, which provide ELLs opportunities for incidental learning. Many theorists and researchers in the field now recognize the role of vocabulary in second or foreign language learning. A great number of approaches, techniques, and methods have been introduced to teach vocabulary (Hatch & Brown, 1995). Morin and Foebel (2001), and Newton (2001) suggested that the aim of teaching vocabulary should be for learners to expand their vocabulary knowledge, not just teach specific words.

Second language vocabulary learning strategies were listed by Gu and Johnson (1996) as metacognitive, cognitive, memory, and activation strategies (see Table 3). On the other hand, Schmitt (1997) categorized vocabulary learning strategies into two groups. One is to determine the meaning of a new word when that word is met for the first time. The other group is to consolidate the meaning when the word is encountered again.

Table 3

Vocabulary Learning Strategies List

Strategies			
Metacognitive	Cognitive	Memory	Activation
*Selective Attention: Identifying essential words for comprehension	*Guessing: Activating background knowledge, using linguistic items	*Rehearsal: Word lists, repetition, etc.	*Using new words in different contexts
*Self-initiation: Using a variety of means to make the meaning of words clear	*Use of dictionaries	*Encoding: Association (imagery, visual, auditory, etc.)	
	*Note-taking		

In order for ESL/EFL students to acquire different components of word knowledge, which include word form, meaning, and specific word usage, instruction must move to more demanding activities (Barcroft, 2004). Asher (1997) also suggested that physical activities and engagement applied to children would help them acquire new language more efficiently. Kojic-Sabo and Lightbown (1999) found that a more frequent and elaborate strategy use was associated with a higher level of achievement in vocabulary learning. For example, video projects in which teams of students plan, prepare, and perform on videotape in specific conversation situations, using target

vocabulary, can be instrumental in the vocabulary learning process (Sildus, 2006). Vocabulary parades, when students dress up and illustrate a particular word, are enjoyable activities that increase word knowledge (Frasier, 2000). Many researchers think that engaging children in wordplay activities and replacing the overused words with a new description is crucial in boosting students' vocabulary growth (Duke & Moses, 2003; Feldman & Kinsella, 2004; Wilcox, Murphy, Bacon, & Thomas 2001). Similarly, Richards and Renondya (2002) indicated that engaging students in activities that are centered in developing vocabulary would allow students the opportunity to use and expand their vocabulary knowledge and skills. All these strategies have one thing in common: they actively involve students. These active strategies used in learning language are reflected in Krashen's (1981) theories, which indicated that language is gained more through a natural acquisition process than through conscious learning. This theory shed light on cooperative learning, where students get to use language naturally by talking and discussing the classroom task with their classmates.

The cooperative-learning technique is one of the techniques involved with actively engaging students. Recently, interest in vocabulary learning strategies became evident in language pedagogy in several countries. Researchers explored the effectiveness of various vocabulary learning strategies (Hansen, 2006; Kojic-Sabo & Lightbown, 1999; Sildus, 2006; Wei 2007). They agreed that, in order to communicate effectively, ESL/EFL students needed to learn adequate vocabulary and be able to use those words in real-life situations. Most researchers agree that students are motivated and learn words best through active engagement (Baumann, & Kame' enui, 2004; Hansen, 2006; Pang, Muaka, Bernhardt, & Kamil, 2003). Moreover, the cooperative learning

process would walk learners through all strategies of vocabulary learning identifies in the lists of both Gu and Johnson (1996) and Schmitt (1997).

It is not only an academic area like language learning that benefits from cooperative learning, but also most research has shown that cooperative learning can promote healthy affective development as well (Cohen, 1994; Johnson & Johnson, 1982, 1989, 1991, 1992; Kagan, 1981, 1992; Sharan, 1994; Sharan & Sharan, 1994; Sharan and Hertz-Lazarowiz, 1980; Slavin, 1980, 1983b, 1988). Ryan (1997) stated that the importance of conversation within group learning is that it would enhance the understanding of “The Principle of Multiplicity.” This concept shows that it is improbable that people will view the world in the same way or solve a problem with exactly the same solution. Understanding and believing this principle allows students to be more tolerant of others.

Outcome between Teacher and Learner-centered Pair and Group Activities

Interaction in pair or group work activities, one of the techniques used in the learner-centered approach, allows students more opportunities to use English they already know to engage in the learning process (Storch, 2007; Garrett & Shortall, 2002). Even though pair work activity takes more time for students to accomplish the activity, in her study, Storch (1999) found that the pair completed the activity more accurately than the students who worked alone. The results showed that students who worked individually seemed to overlook some of their mistakes or weak points more than those working in pairs. Moreover, results from Storch (2007) and other researchers have also confirmed that students working in pairs are paid more attention than students who work individually on tasks that need improvement. Schmitt (2008) made a comparison of task

from 1992 to 1998 showing the results for the method effectiveness when methods were applied with vocabulary learning (see Table 4).

Table 4

Relative Effectiveness of Vocabulary Learning Methods

The more effective task	The less effective task	Study
Meaning selective from several options	Meaning explained by synonym	Hulstijn 1992
Meaning looked up in a dictionary	Reading with/without guessing	Knight 1994; Luppescu & Day 1993
Meaning looked up in a dictionary	Meaning provided in a marginal gloss	Hulstijn et al. 1996
Meaning negotiated	Meaning not negotiated	Newton 1995
Negotiated input	Premodified input	Ellis et al. 1994
Used in original sentences	Used in non-original sentences	Joe 1995, 1998
Used in a composition (L1-L2 look up)	Encountered in a reading task (L2-L1 look up)	Hulstijn and Trompetter 1998
Interactionally modified output	Interactionally modified input	Ellis & He 1999
Reading and a series of vocabulary exercises		Paribakht & Wesche 1997
Reading, words looked up in a dictionary	Reading only (and inferring meaning)	Cho & Krashen 1994
	Reading only, words not looked up	

Educators generally agree that to create effective teaching requires mastery of content knowledge and pedagogical skill. Many scholars (Hollins, King, & Hayman,

1994; King, Hollins, & Hayman, 1997; Pai & Adler, 1997; Smith, 1998) agree that an understanding of the cultural characteristics of ethnic groups is part of the knowledge that teachers should possess. Pai and Adler (1997) concluded that both educative process and product are influenced by culture. Some specific components of culture are very important for teachers to know and understand because these components have direct implications in teaching and learning in their classroom.

General Definitions of Culture

Definitions of “culture” have changed from time to time. In addition, there is some variance in the definition of culture from different perspectives. Tylor (1871) defined culture as a complex whole, which includes knowledge, beliefs, art, morals, law, custom, and any other capabilities and habits acquired by humans as a member of society. Another similar definition was given by Kroeber (1948), who said that culture consists of speech, knowledge, beliefs, customs, art, technologies, ideals, and rules that are learned from respected others.

Looking at culture from another perspective, it may be defined as that which is shared and has distinctive form in peoples’ lives. It is one of the factors that breaks through and shapes every human life. As Maehr (1974) stated, culture represents a group’s preferred way of understanding, evaluating and organizing the ideas or situation that comes into their daily lives. In addition, culture also represents the rules, guidelines, or customs used by individuals who share a common history or geography setting in judging their interaction with the environment. Culture also involves loyalty to religion, use of language, and style of communication. Moreover, preferences for various

communicative methods to represent people's perception of the world also reflect their culture.

To a person, culture is often described as learned behavior and, certainly, provides the basic materials for personality development, knowledge, systems of belief, and fundamental values. Alexander and Kumaran (1992) stated that "culture consists of patterns, explicit and implicit, of and for behavior, obtained and transmitted by symbols, which make up the distinctive achievements of human groups including their embodiment in artifact" (p. 11-12). In short, culture is the total social tradition acquired by a member of a society. It is transmitted from person to person and from generation to generation.

From another perspective, culture is a complex tool. Every individual person needs to learn the context of his or her culture to survive in a society. It takes action in a subconscious way, and whatever we see, judge, and perceive seems to be normal and natural. Each person grows up in a different family and different background; therefore, each member of the society is unique in some ways. We could say that culture plays the role of the basic background for a form of life. People from different cultures might feel a little strange when they are put in another society or surrounded by people who are from a dissimilar culture. This may be because the norm of each culture is not exactly the same.

Cultural Effects on Instruction

Gay (2002) stated that the elements of culture a teacher should know when teaching are cultural values, traditions, communication, learning styles, contributions, and relational patterns. Gay (2001) also noted that:

teachers need to know (a) which ethnic groups give priority to communal living and cooperative problem solving and how these preferences affect educational motivation, aspiration, and task performance; (b) how different ethnic groups' protocols of appropriate way for children to interact with adults are exhibited in instructional settings. (p. 107)

These elements and examples, Gay explained, shed light on culture as an important factor that affects the use of instructional models in classroom teaching-learning. Especially, understanding students' cultural background that affects their performance and motivation could help a teacher to choose a better-matching instructional model to use in the classroom. Knowing students' ways of interaction enhances a teacher's ability to adapt the chosen instruction model to be more appropriate and effective. Allen and Butler (1996) recommended that teachers should learn and understand students' cultural backgrounds that would impact their learning style because teachers could increase task engagement and task performance better when content conditions for learning are matched to students' culture.

Learning style has core structures and specific patterns by ethnic groups. Shade (1989) explained structures of ethnic learning style include (a) preferred content; (b) ways of working through learning tasks; (c) techniques for organizing and conveying ideas and thoughts; (d) physical and social settings for task performance; (e) structural arrangements of work, study, and performance space; (f) perceptual stimulation for receiving, processing, and demonstrating comprehension and competence; (g) motivations, incentives, and rewards for learning; and (h) interpersonal interactional styles. Most of the elements that Shade mentioned are similar to the cultural elements that affect the effectiveness of instruction applied in the classroom.

Culture in the Classroom

Culture in a classroom emerges within the teaching-learning relationships, which are built with teachers' and students' cultural awareness. In other words, cultural parameters in a classroom can be understood from two perspectives. One is the teachers' teaching modes, which are affected by the group's or the society's cultural views. The other one is students' individual background, which includes their families or previous educational environments. In terms of the classroom situation, Samovar et al. (1981) stated that culture influences the way students perceive, organize, and process information. In addition, culture also impacts how students communicate, interact with each other, and solve problems (Terpstra, & David, 1985).

From the perspective of the individual student, Guild (1994) indicated in the article *The Culture/Learning Connection* that even though distinctive leaning style patterns existed, educator must use diverse teaching technique or strategies with their students due to the fact that there is a great variation among individuals in a culture. In the other word "effective educational decisions and practices must emanate from an understanding of the ways that individuals learn" (p.16). In addition, "although people connected by culture do exhibit a characteristic pattern of style preferences, it is a serious error to conclude that all members of the group have the same style traits as the group taken as a whole."

Language learning is a good example of the cultural relationships between teaching and learning. Byram & Fleming (1998) explained that language reflects culture, and language is part of culture. It also constitutes culture and, in language learning, there are very few aspects of cultural life that are comprehensible without considering cultural

ways of speaking. Atkinson (1999) also defined six principles of culture when talking about learning language:

1. All humans are individuals
2. Individuality is also cultural
3. Social group membership and identity are multiple, contradictory, and dynamic
4. Social group membership is consequential
5. Methods of studying culture knowledge and behavior are unlikely to fit a positivist paradigm
6. Language (learning and teaching) and culture are mutually implicated, but culture is multiple and complex.

Hollins (1996) stated that a classroom teacher would bring his or her own cultural norms into professional practice. That means the teacher's teaching behavior would become an extension of the teacher's own culture exclusively or would be included the cultures of the students. In other words, a teacher's teaching may be influenced by his or her perceptions of the relationship between culture and school practices. Personalizing culture also refers to a process of deep introspection that reveals the centrality of culture in the teacher's own life.

Hollins (1996), in describing culture's roles in classroom, said that culture is an essential part of human existence that becomes invisible characters to direct our personal lives which make us view other people who are culturally different as aberrant, quaint, or exotic. Overall, the preceding discussion of the relationship between culture and information processing points to an important link between culture and classroom instruction. Hollins also explained that the link between culture and classroom

instruction is resulting from evidence that cultural practices shape the development of memory structures and mental operations, both of which are tools for learning within and outside of school.

Hollins (1996) explained that the basic premise underlying the theory of cultural mediation in instruction has two components based on the centrality of the students' home-culture in framing memory structures and mental operations:

1. Teaching and learning are more meaningful and productive when curriculum content and instructional processes include culturally mediated cognition, culturally appropriate social situations for learning, and culturally valued knowledge.
2. The authenticity of schooling is validated for students by the interactions and relationship between adult members of their community and school personnel. (p. 159)

On the other hand, research done by Vita (2001) showed that ineffective instruction might be caused by a mismatch of students' background and different approaches in the classroom. Gay (2001) also noted about the concept of culturally responsive teaching which is defined as "using cultural characteristic, experiences, and perspectives of ethnically diverse students as conduits for teaching them more effectively" (p. 106). This concept is based on the assumption that knowledge and skills are related to the lived experiences within students' frames of reference. In other words, students will improve their academic achievement when they are taught through their own cultural and experiential filters (Au & Kawakami, 1994; Foster, 1995; Gay, 2000; Hollins, 1996; Kleinfeld, 1975; Ladson-Billings, 1994, 1995). One of the critical

components of preparation for culturally responsive teaching is to create a classroom climate which would encourage students to learn (Gay, 2001). Gay wrote that a useful way to prepare for culturally responsive teaching is for the teacher to try to match his or her instructional techniques to the learning styles and cultures of her students. Examples of techniques that Gay (2000, 1995) suggested using with Asian students are a communication style conducive to storytelling, cooperative group learning, and peer coaching.

Cultural Context Influence

The cultural background of learners and teachers also plays an important role in the classroom when applying a traditional technique such as lecture, which is categorized under teacher-centered, or a non-traditional technique such as cooperative learning, which is categorized under learner-centered. Students' and teachers' cultures reflect on their behaviors and the styles of learning and instruction in classrooms. Most Asian students tend to be shy and not speak up, in large part because they are taught to pay respect to elders and teachers. One way to show their respect to elder people is to be polite and remain silent. Students who argue or disagree with elders, especially teachers, are thought to be impolite and disrespectful. For that reason, many Asian students seem passive, remain silent in the classroom, and feel uncomfortable initiating class discussion unless they are called on by their teacher.

Thai is a high power distance society, which involves a perceived level of dominance of one group over another, for example teachers over students (Hofstede, 1997). This idea is reinforced by traditional education from the days when classes were taught by monks in local temples. Saengboon (2004) explained that Thai education

valued “cooperation to preserve a natural, hierarchical, and social order” (p. 24). This claim is based on the concept of detachment and acceptance of status in order to avoid confrontation, which is known as “Karma” (Adamson, 2003; Foley, 2005; Klausner, 1993). This concept’s effect on Thai people is to avoid confrontation with people in higher status. In Thai society, there are multitudes of relationships that bear on relative seniority. Superior-inferior relationships are clearly defined by acceptance and implicit recognition of age, birth, title, rank, status, position, or achievement. Some of the characteristics used in describing Thai people’s personality reflect on these superior-inferior relationships. Those characteristics include (a) Power Distance; (b) *Kreng Jai*; (c) *Kreng Klua*; and (d) Saving Face.

Power Distance. Power distance is referred to as the acceptance of a hierarchical authority system, which Hofstede (1983) and Brown (1995) said could be related to the degree of centralization of authority and the degree of autocratic leadership. In other words, Hofstede (1991) explained that power distance referred to “the extent to which the less powerful members of institutions and organization within a country expect and accept that power distributed unequally” (p. 28). Thai society is one of the places where the culture is considered as a higher power distance (Hofstede, 1983). Thai people usually concord with respect and feel obligations to their superiors or those who have higher ranking positions (McKenna, 1995). Hallinger and Kantamara (2001) included *Kreng Jai* and *Kreng Klua* elements under cultural concepts occurring in Thai society

Kreng Jai. Literally, this word means “constricted heart.” This is one of the key concepts that Thai people use in describing their characteristic nature. To make this word easy to understand for English speakers, Klausner (1993) described this concept as

to be considerate, to feel reluctant to impose upon another person, to take another person's feeling (and ego) into account, or to take every measure not to cause discomfort or inconvenience for another person. (p. 199)

In other words *Kreng Jai* is concerned with respect toward others.

Kreng jai could happen within any level of Thai society, especially toward people of higher rank and seniority. *Kreng jai* can be interpreted as respect. In addition, *Kreng jai* is more than just politeness but includes an active unwillingness to force upon or bother another person. In terms of higher status in society, such as teacher and student relationship, *Kreng jai* could mean shyness and being polite towards a senior. In the classroom situation, student questioning of the teacher may be viewed as an expression of ungratefulness and challenging the teacher, displaying a lack of etiquette, and showing disrespect, which is highly inappropriate (Adamson, 2003; Foley, 2005; Liu, 2001; Mulder, 2000;).

Kreng Klua. *Kreng Klua's* definition is close to *Kreng jai*. *Kreng Klua* means the feeling of respectful fear (Mulder, 1979); the word *Kreng Jai* mean concern with respect but without fear involved.

Saving face. Saving face, or the avoidance of criticism, is a very common characteristic of Thai people. Komin (1991) stated that:

The "face" is identical with "ego" and is very sensitive. Since the Thais give tremendous emphasis on "face" and "ego," preserving one another's "ego" is the basic rule of all Thai interactions both on the continuum of familiarity unfamiliarity and the continuum of superior-inferior, with difference only in degree. (p. 135)

It is of great consequence to Thais that they are seen as good and able people, worthy of respect and in a good standing in society. Thais want to do the right (good)

thing and, if something bad happens, they worry that it will be seen as their fault. Further, bad things need to be hidden in order to save face.

Thai interpersonal relationships code insist that no one be placed in an embarrassing or shameful situation. Every effort is taken to avoid causing other people to lose face. To put someone into the situation of losing face would be recognized as an act of aggression. Critique is often experienced as criticism, and seen as a social offense or personal insult (Mulder, 1978). In addition, Thai people believe that a junior should never challenge seniors, as people in Thai society respect seniority.

In Thailand, teachers have a much higher status than students and, most of the time, are regarded as second parents (Thamraksa, 2003). The duty is not only to teach students knowledge but also to teach morals and to mold the students to be good citizens in society as well. Teachers act as partners of parents' functions and are easily placed at the center in the classroom. They easily organize teaching-learning activities efficiently. However, at the same time, this cultural positional relationship also promotes teaching methods as a spoon fed approach, where students wait for teachers to give them knowledge.

These cultural elements also influence Thai education in implementing more child-centered approaches, which is similar to a learner-centered approach in classrooms as well. Thai National Education Act 1999 was launched for Thai education reform to promote more learner-centered qualities in every subject and classroom. Thai students were not used to learning with active learning strategies and collaborative learning styles, which are the core included in these policy-shaped, learner-centered approaches. Some students have not adapted well to this new instructional approach. This newspapers

(Bangkok Post, 2002) reported on the feedback of “the child-centered approach” that people compared as “Kwai-centered approach.” In Thai, “Kwai” refers to the cow, which can be implied when compared to people or an idea that is considered stupid. Thai students described the child-centered approach as a disappointing. Critics claimed it does not help students to become smarter but rather delays their progress. These criticisms may reflect the failure and mismatch of new instructional activities with the nature of Thai students’ culture and the classroom, rather than the approach itself.

Storch (2007) pointed out that Southeast Asian students prefer to work individually. Students think that working individually provides them more opportunities to learn and practice the lesson. With limited resources and tough living environments, Southeast Asian societies are usually competitive. In attempts to gain a better life in the future, parents push their kids to be successful in academics. Students are urged to be their best in the class, and are likely to be highly competitive with each other. A well-developed sense of individual competition might be why they prefer to work as individuals rather than in a group.

Due to the fact that the curriculum for English language in Thailand tends to focus on memorizing vocabulary rather than applied vocabulary, teacher-centered approaches might be a good match for learning some vocabulary skills, but student-centered approaches would also assist students in some other part of knowledge attainment. As McCarthy (1984) explained, the purpose of vocabulary learning should involve both remembering words and the ability to use them in a wide range of language contexts. In maximizing students’ benefit from instruction, a good match of instruction would be to match vocabulary learning and classroom character background.

As Lawson and Hogben (1996) stated, “Other strategies, such as rehearsal, may be important for maintaining a particular item, but simple rehearsal alone should not be very effective for long-term use, because it does not involve extensive elaboration of the word-meaning complex” (p. 104). Since learning vocabulary consists of many tasks, such as spelling, meaning, and use of word, a different teaching approach would fit well with the different tasks of vocabulary learning. Basically, the more teachers know which instructional approach could better help improve students’ vocabulary knowledge, the more students should improve in vocabulary and other language skills.

Slavin’s Methods and Thai culture

Slavin created many instructional techniques under the concept of cooperative learning. Among those methods, Cooperative Integrated Reading and Composition (CIRC) is recommended by Slavin (1985) when teaching spelling, decoding, and vocabulary. In this method, teams are composed of pairs of students from two different ability levels. Students work in pairs within their teams on a series of cognitively engaging activities, including reading to one another; making predictions about how narrative stories will be resolved; summarizing stories to one another; writing responses; and practicing spelling, decoding, and vocabulary. Students also work in their teams to master a main idea and other comprehension skills. In this method, students follow a sequence of teacher instruction, team practice, team pre-assessments, and a quiz.

Another technique that might match Thai students’ culture (saving face and gaining the respect of others) would be Jigsaw. Slavin (1995) explained that, in this method, students would be assigned material to read, usually social studies, biographies, or expository material. Each team member is then randomly assigned to become an

“expert” on some aspect of the material assigned. After reading the material, experts from different teams meet to discuss their common topics, and then they return to teach topics to their teammates. Finally, there is an individual quiz over all topics.

Knowing and understanding students’ culture is not enough. Rather, teachers need to know how to convert it into culturally responsive instructional strategies as well as curriculum. Tharp and Gallimore (1988) argue that culturally responsive teachers need to understand how conflict between different styles of working may interfere with academic efforts and results; responsive teachers need to understand how to design more appropriate communal learning environments. Gay (2002) suggested that a useful way to deal with cultural elements in education is to match instructional techniques to the learning styles of students. The idea of “matching” is also suggested by Messick (1976) under the term aptitude-treatment interaction, that linking of specific treatment components to characteristics of learners is the key concept of the “matching.” Salomon (1972) pointed out that preferential matching treatments are sought that draw on the strengths of learners, allow students to exercise their strongest, which is usually also their most preferred, mode of functioning. In addition, Salomon (1972) and Snow (1970) stated that interactions occur when preferential matching is used because students perform best in the treatment that calls upon students’ strong or preferred styles.

Some authors, such Adamson (2003, 2005), Foley (2005), and Saengboon (2004) agree that part of the difficulties of implementing new curriculum according to the 1999 Education Act is the mismatch between Thai culture and western values of education reform. Being more specific in terms of language education, Muhlhausler (1996) suggested that language learning should only accept and reflect the values of linguistic

and cultural diversity, not favor blind modernization and streamlining. This is similar to Kachru (1998), who suggested that English language teaching materials in Asia should be less reliant on material or ideals from English-speaking countries. Material should be developed from or within the region. This could be reflected in the instructional technique as well. Teaching techniques used in English-speaking countries might not match well to non-English speaking countries due to many factors, such as cultural characteristics which pointed to carefully choosing or adjusting techniques to best match with the students' culture in the specific classroom environment. Those western techniques, such as communicative language teaching, learner-centered, cooperative learning, and so forth, will need to be carefully adapted to be matched with Thai cultural practices.

Summary

Chapter two shed light on such issues of mismatching instruction and students' cultural background in Thai classrooms. The chapter also explored characteristics of teaching strategies (traditional and cooperative learning) and their relation to the Thai cultural context. The present study explored the identified the need of a better match of classroom instruction and Thai students' culture. The larger goal of the study was to identify the best match of classroom instruction to the cultural norms of Thai students as a mean of enhancing effectiveness of instruction in teaching English vocabulary.

CHAPTER 3

METHODOLOGY

This study was focused on three different techniques used for teaching vocabulary to EFL students in Thailand. Specifically the study compared and contrasted the effectiveness of teacher-centered (traditional, lecture) versus learner-centered (cooperative learning; Jigsaw, and CIRC) in Thai classrooms by analyzing Thai students' objective learning outcomes and subjective learning cognition under the learner-centered (cooperative learning) and teacher-centered (traditional) approaches. In addition, the results from the comparison could help identify an optimal match between instructional technique and the Thai cultural context in classrooms. The results could also help demonstrate the effectiveness of learning vocabulary when an optional match between background culture and teaching method are applied in the classroom. Data on test scores, questionnaires, and interview questions with Thai students in Bangkok were collected. The vocabulary test scores (spelling, meaning, and use of words) under each approach were compared and contrasted. Results from the questionnaires were used to analyze the students' experience of culture norm attitudes within each method they experienced.

Participants

Participants for the study were recruited from schools in Bangkok, Thailand. Sixth-grade classrooms were selected to participate in this research. Sixth grade in Thailand is considered the highest level of elementary school in which students have studied the English language for a few years.

The final samples included 599 students. Students were separated into three groups. One group received vocabulary teaching in a teacher-centered (TC) approach while the other two groups received learner-centered (CIRC and Jigsaw) approaches.

Procedures for Gathering Data

The study used a mixed-methods approach for interpreting, comparing, and contrasting the findings. In the quantitative phase, schools were selected as convenience samples. Students who participated in this research were randomly assigned into each classroom by the school at the beginning of the academic year. Vocabulary pretests and posttests were given to students at the beginning and the end of the experimental period. Questionnaires were given to students together (with the posttest) asking students about their cultural norms and how it “fits” when each instructional method is applied.

In the qualitative phase, N = 84 students and 10 teachers. Teachers and 6 randomly selected students in each class were interviewed after the posttest. Interview questions focused on the perceived effectiveness of strategies and difficulties in learning and teaching vocabulary within each approach. As Gay (2002) noted, the element of culture, such as cultural value, tradition, learning style, and so forth also play a role in an effective instruction model. Accordingly, interview questions asked about the cultural element of teacher and learners based on the instructional model used in the classroom.

Procedures

Three different techniques were randomly applied to the groups of students. See Appendix D, E, and F for description of the three techniques. A set of vocabulary, containing 16 words, was given as a pretest to all groups (see Appendix C for the vocabulary list). The vocabulary pretest was given at the beginning of the experiment to

test students' background knowledge of those words (see Appendix A for the students' pretest). The posttest and questionnaire were given to students at the end of the third period of class, after they received the treatment, to ascertain the students' vocabulary knowledge after each technique was applied and their culture norm views toward the approach. (See Table 5 for vocabulary and approach applied to students in each group. See Appendix B for students posttest. See Appendix L for Material used in classroom).

Table 5.

Vocabulary and Technique Applied to Students in Each Group

	Group 1	Group 2	Group 3
Pretest of vocabulary knowledge before vocabulary list is given	Pretest	Pretest	Pretest
Vocabulary list (20 words) given	Teacher-centered (TC); Lecture	Student-Centered; Cooperative Integrated Reading and Composition (CIRC)	Student-Centered; Jigsaw
Posttest on vocabulary, questionnaire, and interview	Posttest, questionnaire and interview (6 students randomly selected)	Posttest, questionnaire and interview (6 students randomly selected)	Posttest, questionnaire and interview (6 students randomly selected)

All vocabulary tests (pretests and posttests) consisted of questions to assess students' knowledge on vocabulary in terms of spelling (See Appendix A1 and B1), meaning (See Appendix A2 and B2), and use of vocabulary (See Appendix A3 and B3). Dictation of five random words from the list was conducted to test spelling ability. To assess the meaning of words, students were asked to give the meaning for the 10 given

words. The last section on the vocabulary test asked students to identify if the given sentences (10 sentences) were correct or incorrect. If the sentence was incorrect, students were expected to correct the sentence.

A questionnaire was administered to the students at the time of the vocabulary posttests. The questionnaire included two sections. The first gathered general information about the student (name and class). The second section asked about their cultural norm in terms of the instructional perspective. The first four questions were about the general point of view in learning vocabulary with the instruction model used in the classroom. Questions 5-12 were targeted to probe the Thai cultural context that might affect students in the classroom with the approach used in the classroom. Questions 5-8 asked about the cultural concept of “save face;” questions 9-12 were aimed toward the cultural concept of “Kreng Jai” (See Appendix G for the student questionnaire).

Data Analyses

A field test for pretest and posttest was administered to approximately 90 students in 6th grade in a school that has similar background compared to the research participants. The results of the field test were used to analyze the difficulty of vocabulary tested. Adjustment were made to both pretest and posttest. This analysis lead to creating equal difficulty of student pretest and posttest. A pilot test for pretest, posttest, and questionnaire was administered to this group of students. Pilot test were composed of two pretests and two posttest to find out the reliability of both pretest and posttests. The first pretest and posttest were given approximately two days apart from the second pretest and posttest. The treatment was administered in between the second pretest and first posttest. The results from the pilot test were used to analyze the quality of the pretest,

posttest, and questionnaire by using a standard factor analysis methods (See appendix J for factor analysis results for questionnaire). Reliability analysis was used to test reliability level within pretest and within posttest (See appendix K for summary of pretest and posttest reliability analysis results) Adjustment was made to the questions that appeared to be unrelated to the objective of the test.

The research questions for this study were designed to identify effective teaching techniques for vocabulary learning and to identify the match of Thai culture norms with this strategy. Responses were organized in the form of a database for statistical analysis using Microsoft Excel and the SPSS program.

Student Surveys: Pretest, Posttest, and Questionnaire

For the students' surveys, the data were organized by creating a frequency table of major themes of the survey in the SPSS program. The raw data of the students' survey consisted of the following: survey number, gender, instruction applied, total score in each test section (form, meaning, use), and total frequency score of Likert scale from the questionnaire.

The pretest and posttest were given to students to gather information on their vocabulary knowledge. A 2 (Time) x 2 (Gender) x 4 (Test part) repeated measure ANOVA was used to analyze students' scores in each skill within each instruction technique. A 2 (Time) x 2 (Gender) x 3 (Type of Instruction) x 4 (Test part) Repeated Measures of Analysis of Variance was used to compare score across three instructional techniques. The questionnaire was given to students in order to gather information on technique vs. Thai culture. A One way ANOVA was used to analyze culture norm attitude data from each group (technique: Lecture, CIRC, Jigsaw). In addition, correlation

was used to help analyze the relationship between culture norm attitude and students' posttest score from each technique (see Table 1).

Qualitative Study

In the qualitative phase of the study, questions were posed for analyzing specific cultural norms. Ten teachers and 6 random students from each group were interviewed. Each interview lasted about 30 minutes. Interview questions were classified into two parts: (a) experience; difficulty, and assistance when each teaching technique is applied and (b) culture, norms and attitude.

For the teacher and student interview, the data were organized by chunking and creating a frequency table of major themes found in the interviews and entered into an Excel spreadsheet. The raw data of student interviews consisted of the following: interview number, gender, technique applied, and information on culture norm and attitude.

The teachers interview (see Appendix 8) and student interview (see Appendix 9) began with a question such as "What did you notice?" "What is your experience?" or "What do you feel?" to allow each interviewee to explain the environment and his or her attitude toward the approach. This section was open to interviewees to share their experience and talk about the feelings and attitudes that they have experienced in their classroom. Subsequent questions were conversational in an attempt to get the interviewee to discuss something he or she mentioned as culturally relevant about his or her classroom and its relation to the form of the teaching experienced.

The second section of the interview focused on the interviewees' attitude toward cultural norms according to an education perspective. This section asked the interviewee

for his or her perspective and cultural beliefs. The follow-up questions for this section were intended to prompt students to talk about the difficulty (uncomfortable feelings) as well as positive experiences that happened in the class due to the culture norm and attitude factor fit or non-fit. In addition, this section allowed interviewees to explore in more detail where students found any mismatches between culture and teaching that obstructed their learning.

Implications and Limitations

The results of the study have important implications for Thai teachers in choosing the teaching technique that is the best match for their students. In addition, the results aid curriculum design by fitting students' learning preferences about approaches to teaching into the Thai classroom environment. These results could help teachers improve students' skills in learning and vocabulary.

In any study, there are variables that are difficult to control. These variables present serious limitations and should be taken into consideration when interpreting the findings:

1. This research focuses upon EFL students and teachers in grade 6 in Thailand, which may not be generalizable to other grade levels and other countries.
2. Students in this research may have begun learning English at different ages.
3. Some students in this research may attend English tutoring class outside of school, which may influence scores on the vocabulary test.

CHAPTER 4

FINDINGS

This study focused on three different instructional techniques used in teaching vocabulary to EFL students in Thailand. The instructional techniques used in this study were Jigsaw, CIRC, and Teacher Centered (lecture). Pretests and posttests were completed to determine the progress of students and their preferences toward different instruction applied in the classroom. Questionnaires were given to students to gather information on the instruction used in the class and their relation to Thai culture concepts. A total of 599 students participated in this research (288 male and 311 female).

RQ1 :What is the Effect of Three Teaching Strategies (Jigsaw, CIRC, and Lecture) on Vocabulary Learning (Form, Meaning, Use) for Sixth-Grade Thai Students?

Jigsaw

To examine the students' achievement in learning vocabulary by using the Jigsaw technique, the data were subjected to a 2 (Time) x 2 (Gender) x 4 (Test Part) Repeated Measures of Analysis of Variance with a repeated measurement on time of test (pretest vs posttest). The results from the repeated measures ANOVA with a Greenhouse-Geisser correction determined that the mean score of the Jigsaw technique applied in the English classroom that emphasized vocabulary were statistically different between time points (pretest and posttest) in Part I (Spelling), $F(1,206) = 108.28, p < .001$; in Part II (Meaning), $F(1,206) = 395.72, p < .001$; in Part III (Function of word), $F(1,206) = 33.59, p < .001$; and Overall, $F(1,206) = 312.68, p < .001$. The results of the repeated measures between pretest and posttest of each part are shown in Table 6 and Figure 4.

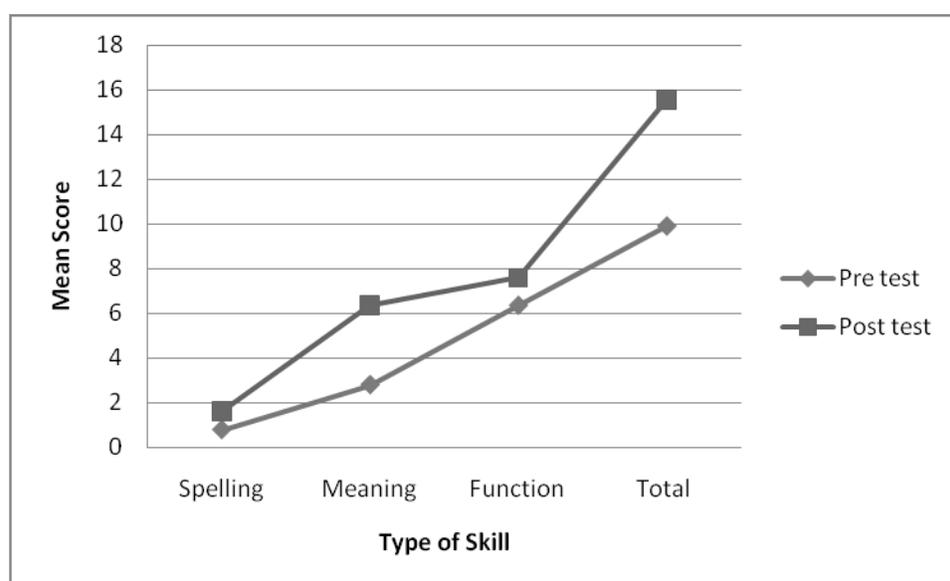
Table 6

Mean Score by Type of Skill, Pretest, and Posttest in Jigsaw Classroom

	Spelling	Meaning	Function	Overall
Pretest	0.77*	2.78*	6.33*	9.88*
Posttest	1.61*	6.35*	7.58*	15.54*

NOTE: *sign indicates there were significant differences between two times of the test results

Figure 4. Mean Score by Type of Skill, Pretest, and Posttest in Jigsaw Classroom



The results from repeated measures ANOVA with a Greenhouse-Geisser correction determined that there were not significant differences for gender when the Jigsaw technique was applied in English classrooms between time points (pretest and posttest) in Part I (Spelling), $F(1,206) = 1.029, p > .05$; in Part II (Meaning), $F(1,206) = .12, p > .05$; in Part III (Function of word), $F(1,206) = .51, p > .05$; and Overall $F(1,206) = .29, p > .05$. The mean score of students' progress by gender in the Jigsaw classroom can be seen in Table 7.

Table 7

Mean Score of Students Progress by Gender in Jigsaw Classroom

	Spelling	Meaning	Function	Overall
Male	1.28	4.34	7.01	12.63
Female	1.11	4.77	6.90	12.79

CIRC

To examine students' achievement in learning vocabulary by using the CIRC technique, the data were subjected to a 2 (Time) x 2 (Gender) x 4 (test part) Repeated Measures of Analysis of Variance with a repeated measure on time of test (pretest and posttest). The results from a repeated measures ANOVA with a Greenhouse-Geisser correction determined that the mean score of the CIRC technique applied in English classrooms emphasizing vocabulary were significantly different between time points (pretest and posttest) in Part I (Spelling), $F(1,208) = 33.62, p < .001$; in Part II (meaning), $F(1,208) = 266.77, p < .001$; in Part III (Function of word), $F(1,208) = 26.63, p < .001$; and Overall, $F(1,208) = 212.60, p < .001$. The results of the repeated measures between pretest and posttest of each part are shown in Table 8 and Figure 5.

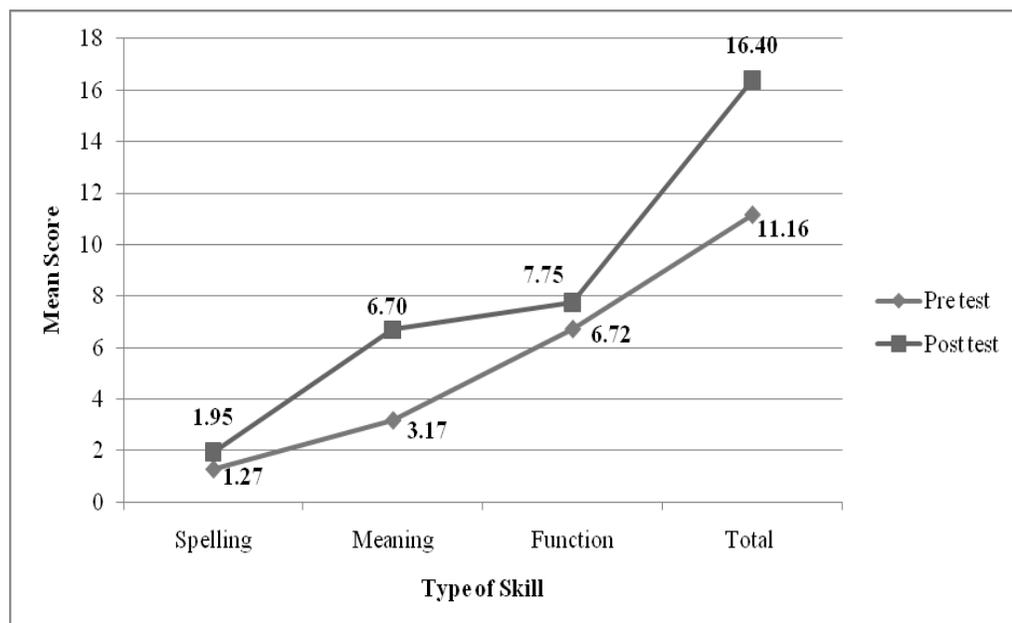
Table 8

Mean Score by Type of Skill, Pretest, and Posttest in CIRC Classroom

	Spelling	Meaning	Function	Overall
Pre test	1.27*	3.17*	6.72*	11.16*
Post test	1.95*	6.70*	7.75*	16.40*

NOTE: *sign indicated there were significant differences between two times of the test results

Figure 5. Mean Score by Type of Skill, Pretest, and Posttest in CIRC Classroom



Therefore, the results from repeated measures ANOVA with a Greehouse-Geisser correction revealed that there were not significant differences on gender in the CIRC technique applied in English classrooms between time points (pretest and posttest) in Part I (Spelling), $F(1,208) = 2.63, p > .05$; in Part II (Meaning), $F(1,208) = .94, p > .05$; in Part III (Function of word), $F(1,208) = .2, p > .05$; and Overall, $F(1,208) = 1.91, p > .05$. The mean score of students' progress by gender in CIRC classroom can be seen in Table 9.

Table 9

Mean Score of Students Progress by Gender in CIRC Classroom

	Spelling	Meaning	Function	Overall
Male	1.51	4.38	7.10	12.99
Female	1.69	5.40	7.35	14.44

Teacher Centered

To examine students' achievement in learning vocabulary by using the Teacher-Centered technique, the data were subjected to a 2 (Time) x 2 (Gender) x 4 (test part) Repeated Measures of Analysis of Variance with a repeated measure on time of test (pretest and posttest). The results from a repeated measures ANOVA with a Greenhouse-Geisser correction revealed that mean scores of the Teacher-Centered technique applied in English classrooms emphasizing vocabulary were significantly different between time points (pretest and posttest) in Part I (Spelling), $F(1,179) = 146.53, p < .001$; in Part II (Meaning), $F(1,179) = 290.65, p < .001$; in Part III (Function of word), $F(1,179) = 75.31, p < .001$; and Overall, $F(1,179) = 349.42, p < .001$. The results of the repeated measures between pretest and posttest of each part are shown in Table 10 and Figure 6.

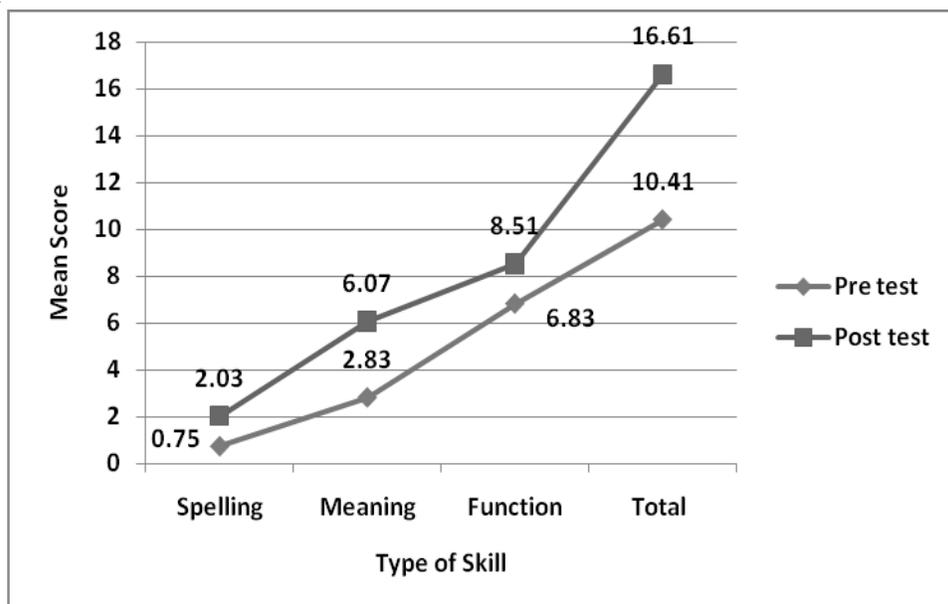
Table 10

Mean Score by Type of Skill, Pretest, and Posttest in Teacher-Centered Classroom

	Spelling	Meaning	Function	Total
Pre test	0.75*	2.83*	6.83*	10.41*
Post test	2.03*	6.07*	8.51*	16.61*

NOTE: *sign indicated there were significant differences between two times of the test results

Figure 6. Mean Score by Type of Skill, Pretest, and Posttest in Teacher-Centered Classroom



The results from the repeated measures ANOVA with a Greenhouse-Geisser correction revealed that there were not significant differences for gender in the Teacher-Centered technique applied in English classrooms between time points (pretest and posttest) in Part I (Spelling), $F(1,179) = 2.44, p > .05$ and in Part II (Meaning), $F(1, 179) = .24, p > .05$. There were significant differences on gender in Part III (Function of word), $F(1, 179) = 5.19, p < .05$ and Overall, $F(1, 179) = 4.48, p < .05$, namely females outperformed males on both parts. The mean score of student progress by gender in the Teacher-Centered approach can be seen in Table 11.

Table 11

Mean Score of Students Progress by Gender in Teacher-Centered Classroom

	Spelling	Meaning	Function	Overall
Male	1.25	3.99	7.55*	12.79*
Female	1.54	4.94	7.80*	14.28*

NOTE: *Sign indicated number indicated there were significant differences between two genders results

Comparing the Three Instruction Methods

To examine the results between instructional techniques used in teaching vocabulary to sixth grade Thai students, the data were subjected to 2(Time) x 2(Gender) x 3(Type of Instruction) repeated Measures Multivariate Analysis of Variance with repeated measures on time (Pretest and Posttest) with each part in the test (Spelling, Meaning, Function, and Overall) as dependence variables. The results from the data analysis are described below.

Dictation (Spelling)

The results from repeated measures MANOVA with a Greenhouse-Geisser correction indicated that there were significant differences on students' progress (pretest and posttest) techniques in Spelling (Part I Spelling), $F(1, 593) = 9.37, p < .001$. Bonferroni post-hoc analyses indicated that there were significant differences between students' progress as a function of instructional technique for "Spelling" ($M_{\text{Jigsaw}} = 1.195$ and $M_{\text{CIRC}} = 1.6$), with students studying in CIRC classrooms performing higher on spelling skill than students in the Jigsaw classroom. There was no significant difference between teacher-centered and the other instructional techniques ($M_{\text{Teacher-centered}} = 1.395$). The results of the Bonferroni post-hoc analyses of students' spelling performance under different instructional techniques can be seen in Table 11 and Figure 5. The results also indicated that there were no interactions on students' progress (pretest and posttest) for gender among instructional techniques in Spelling, Instruction x Gender, interaction $F(2, 593) = 2.221, p > .05$, for Jigsaw instruction ($M_{\text{Jigsaw Male}} = 1.281$ and $M_{\text{Jigsaw Female}} = 1.109$); for CIRC instruction ($M_{\text{CIRC Male}} = 1.51$ and $M_{\text{CIRC Female}} = 1.689$); and for Teacher-Centered instruction ($M_{\text{Teacher-Centered Male}} = 1.25$ and $M_{\text{Teacher-Centered Female}} = 1.54$).

Meaning

The results from repeated measures MANOVA with a Greenhouse-Geisser correction indicated that there was no significant difference on student progress (pretest and posttest) among types of techniques in Meaning (Part II), $F(1, 593) = .769$, $p = .464$ with $M_{\text{Jigsaw}} = 4.555$, $M_{\text{CIRC}} = 4.892$, and $M_{\text{Teacher-centered}} = 4.466$). Bonferroni post-hoc analyses indicated that there were no significant differences between students' progress as a function of instruction technique for "Meaning." Table 11 shows a summary of performance with significant difference indicated across instructional methods and Figure 5 shows the comparison of mean scores across instructional technique by skills. The results indicate that there was no significant interaction on student progress (pretest and posttest) between genders among instruction techniques in Meaning, Instruction x Gender, interaction $F(2, 593) = .159$, $p > .05$; for Jigsaw instruction ($M_{\text{Jigsaw Male}} = 4.337$ and $M_{\text{Jigsaw Female}} = 4.773$); for CIRC instruction ($M_{\text{CIRC Male}} = 4.38$ and $M_{\text{CIRC Female}} = 5.404$); and for Teacher-Centered instruction ($M_{\text{Teacher-Centered Male}} = 3.989$ and $M_{\text{Teacher-Centered Female}} = 4.943$).

Use of Word (Function)

The results from repeated measures MANOVA with a Greenhouse-Geisser correction indicated that there were no significant differences on students' progress (pretest and posttest) among types of techniques in Function (Part III), $F(1, 593) = 2.717$, $p > .05$. Bonferroni post-hoc analyses indicated that there were significant differences between students' progress as a function of instructional technique for "Function" ($M_{\text{Jigsaw}} = 6.957$ and $M_{\text{Teacher-centered}} = 7.676$), with students who studied in Teacher-Centered classrooms outperforming on word function those students in Jigsaw

classrooms, and ($M_{\text{CIRC}} = 7.225$ and $M_{\text{Teacher-centered}} = 7.676$) and students who studied in CIRC classroom out performed on word function students in the Jigsaw classroom. Therefore, there was no significant difference between Jigsaw and CIRC instruction technique in the Pairwise comparison results. Figure 5 shows mean score of use of words across instruction techniques. The results of the Bonferroni post-hoc analyses of students “Function” performance from different instructional techniques can be seen in Table 11 and Figure 5.

The results also indicated that there was no interaction on students’ progress (pretest and posttest) between genders among instructional techniques in Function, Instruction x Gender, interaction $F(2, 593) = 2.094, p > .05$; for Jigsaw instruction ($M_{\text{Jigsaw Male}} = 7.01$ and $M_{\text{Jigsaw Female}} = 6.905$); for CIRC instruction ($M_{\text{CIRC Male}} = 7.099$ and $M_{\text{CIRC Female}} = 7.351$); and for Teacher-Centered instruction ($M_{\text{Teacher-Centered Male}} = 7.553$ and $M_{\text{Teacher-Centered Female}} = 7.799$).

Overall (All Three Test Parts)

The results from repeated measures MANOVA with a Greenhouse-Geisser correction indicated that there were no significant differences on students’ progress (pretest and posttest) among type of instructional techniques when the three test parts are combined, $F(1, 593) = 2.236, p > .05$. Bonferroni post-hoc analyses indicated that there were significant differences between students’ progress in each instructional technique when “Overall” parts were compared ($M_{\text{Jigsaw}} = 12.707$, $M_{\text{CIRC}} = 13.716$, and $M_{\text{Teacher-Centered}} = 13.537$) with students who studied in teacher-centered classrooms outperformed students in Jigsaw classrooms. However, there was no significant difference between CIRC ($M_{\text{Jigsaw}} = 13.537$) and Teacher-centered instructional techniques in the pairwise

comparison results. Figure 5 shows mean scores for Overall across instruction techniques. In addition, the results of the Bonferroni post-hoc analyses of students “Overall” performance from different instructional techniques can be seen in Table 12 and Figure 7.

The results also indicated that there were no interaction on students’ progress (pretest and posttest) between genders among instructional techniques in Overall, Instruction x Gender, interaction $F(2, 593) = 1.832, p > .05$, for Jigsaw instruction ($M_{\text{Jigsaw Male}} = 12.628$ and $M_{\text{Jigsaw Female}} = 12.786$), for CIRC instruction ($M_{\text{CIRC Male}} = 12.99$ and $M_{\text{CIRC Female}} = 14.443$), for Teacher-Centered instruction ($M_{\text{Teacher-Centered Male}} = 12.793$ and $M_{\text{Teacher-Centered Female}} = 14.282$).

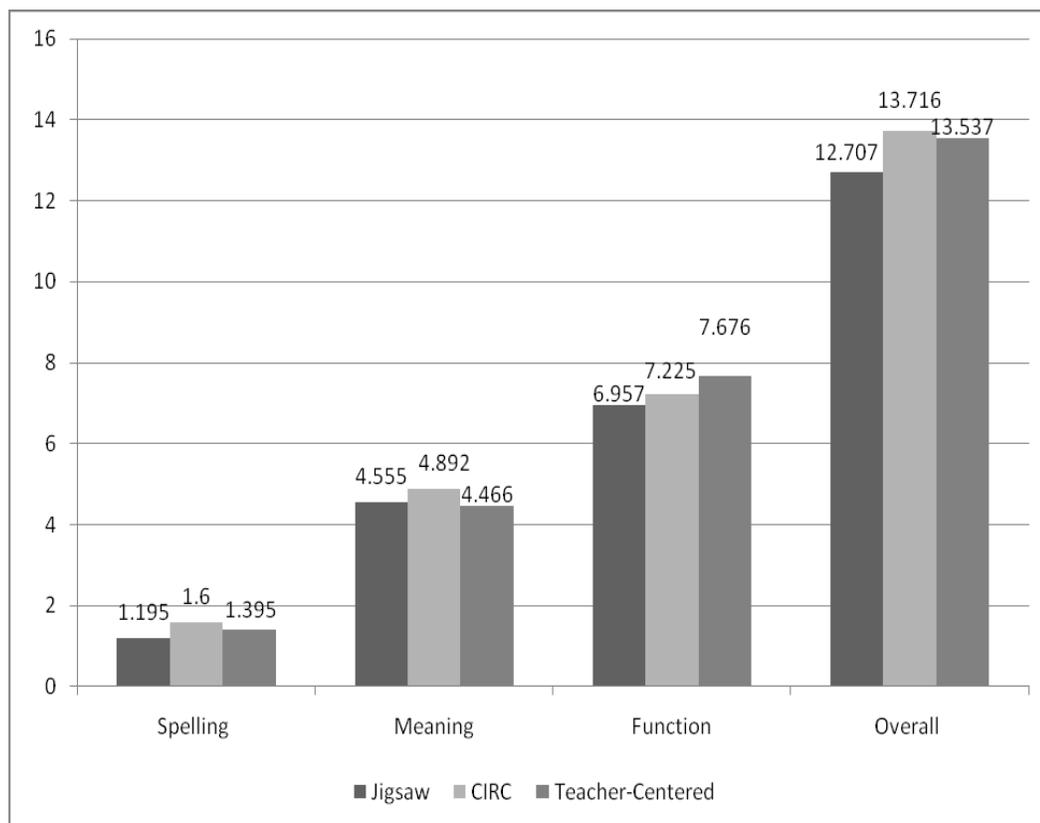
Table 12

A Summary of Performance from Different Instructional Techniques

Spelling	<u>Jigsaw</u>	<u>CIRC*</u>	Teacher-Centered
Meaning	Jigsaw	CIRC*	Teacher-Centered
Function	<u>Jigsaw</u>	<u>Teacher-Centered*</u>	CIRC
Total	<u>Jigsaw</u>	<u>CIRC*</u>	Teacher-Centered

NOTE: Underline indicates there were significant differences between two instructional technique results
*Indicates the higher score in these contrasts.

Figure 6. Students' Progress Mean Score across Instruction and Skills



RQ2: How do students and teachers perceive the match of Thai cultural norms with the three different instruction techniques (teacher-centered (lecture), Cooperative Integrated Reading and Composition, and Jigsaw)?

Student Questionnaire Results

In collecting data on cultural factors, students were asked to complete the questionnaire after the treatment and posttests were done. The data from the questionnaire were analyzed using correlation to examine the relationship among cultural factors and overall students' views of the class. Items in the questionnaire were

classified into three parts (each part consisted of four questions) which are: overview of the class, the save face concept, and the *Kreng Jai* concept.

To examine relationships, correlation analysis was used to determine if two concepts of culture are related or if any of these two concepts are related to how students think and feel when learning vocabulary with the assigned instructional technique. The results indicated that overview of the class and save face, were correlated $r(597) = .16$, $R^2 = .0256$, $p < 0.001$; overview of the class and *Kreng Jai*, were correlated $r(597) = .16$, $R^2 = .0256$, $p < 0.001$; and the concept of save face and *Kreng Jai*, were strongly correlated $r(597) = .44$, $R^2 = .1936$, $p < 0.001$.

To examine the difference in the overview of the class and two cultural concepts between three instruction groups, the data were subjected to a 3(instruction) x 3(part of questionnaire) Analysis of Variance. The results indicated that there were significant differences between these three instructional methods, $F(2, 598) = 8.19$, $p < .001$. The results from the pairwise comparison indicated that there were significant differences in “overview of the class” between Jigsaw ($M_{\text{Jigsaw}} = 9.66$) and Teacher-centered ($M_{\text{Teacher-Centered}} = 10.71$) with $p < 0.001$, and between CIRC ($M_{\text{CIRC}} = 10.01$) and ($M_{\text{Teacher-Centered}} = 10.71$) with $p < 0.001$. Among these three instructional techniques, students reported more positive views toward Jigsaw than other instructional techniques. However, there were no significant differences between Jigsaw and CIRC in terms of overview of the classroom instructions with $p > 0.05$. The results from the analyses indicated no significant difference among the three instructional groups on the save face concept, $F(2, 598) = .19$, $p < .05$, ($M_{\text{Jigsaw}} = 10.84$, $M_{\text{CIRC}} = 10.84$, $M_{\text{Teacher-Centered}} = 10.65$). The results from the analyses indicated that the last part of the questionnaire, *Kren Jai* concept, were

significantly different among these three instructional methods $F(2, 598) = 3.52, p < .05$.

The results from the pairwise comparison indicated that there were significant differences in “Kren Jai” between CIRC ($M_{\text{CIRC}} = 11.39$) and Teacher-centered ($M_{\text{Teacher-Centered}} = 10.48$) with $p < .05$. The results of the Bonferroni post-hoc analyses of questionnaire from instructional techniques can be seen in Table 13.

Table 13

Summary of Questionnaire Mean Difference Among Instructions Techniques

	Jigsaw Mean	Teacher-Centered Mean	CIRC Mean
Overview of the instruction**	9.66	10.71	10.01
Mean of save face***	10.84	10.65	10.65
Mean of Kreng Jai***	10.8	10.48	11.39

*Underline indicates significant differences between two instructional technique results

** Lower mean score indicated more positive view toward instructional technique

*** Lower mean score indicated lower level of concern on culture factor in each instruction

Note: First three questions in questionnaire were reversed in score

The Interviews: Background

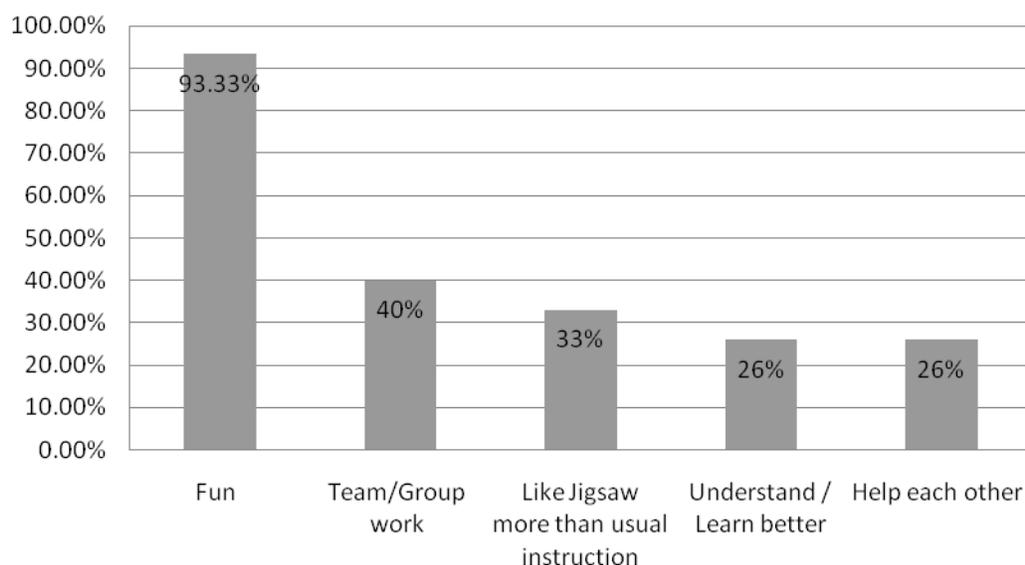
In using the interview as a qualitative method, both students and teachers were interviewed and asked to provide feedback on the instruction used during the experimental period and cultural issues they experienced in the classroom. In this phase of the research, there were total of 84 students randomly selected for the interview. A total of 10 teachers were interviewed with a purpose similar to the student interviews. In addition, teachers were asked to share their opinion on how their students reacted in the classroom toward the instructional technique used and the effect the culture factor may have had on students learning and participation in the class.

Student Interviews

Overview of the Class

In the first part of the interview, students were asked to provide feedback on the class where the instruction was applied in the experimental period. Students in the class reported 100% positive feedback on the jigsaw technique. Most of students (93.33%) stated that learning with jigsaw was “fun.” For example, students expressed their experience on the jigsaw instruction technique as “Me and my friends had so much fun working together. We talked and shared our ideas within our group.” Forty percent (40%) of the students mentioned that they got the chance to work as a team member and they believed that it helped improve their work quality. As one student stated, we did not get much chance to work as a group in a regular based, so most of the time we have to finish tasks by our own. This instruction allowed us not only working together, but also learned from each other. One-third of the students in the jigsaw classroom (33%) indicated that they liked and enjoyed jigsaw methods more than the method they usually experienced (teacher lecture) in their regular classroom. Students stated that they enjoyed the time spent with their friends while getting the task done. As one student said, “I enjoy the class which me and my friends were involved in getting the task done and not just copy from friends or from the blackboard.” Another student mentioned that they enjoyed moving around doing activities rather than sitting still in the class and just listening to the teacher’s lecture. Other comments students gave were “understood and learned in the class” (26%), and “help each other” (26%). Figure 8 shows students’ overview toward the class using the jigsaw instructional technique.

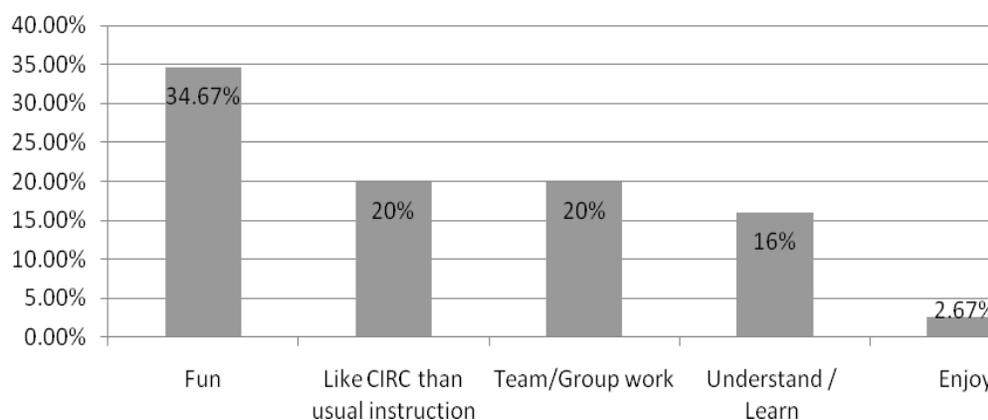
Figure 8. Students' Feedback toward Jigsaw Classroom Instruction



Students in classrooms in which the CIRC technique was applied reported 100% positive feeling toward the CIRC technique. About one-third of the students' feedback toward this form of instruction showed that they had fun in the class (34.67%). Twenty percent (20%) of students reported that they liked CIRC better than the usual technique where they passively listened to the lecture and memorized information from the lectures. Teamwork and group work were other areas of feedback that students stated they experienced favorably in CIRC classrooms. Twenty percent (20%) of the students said that learning under CIRC instruction allowed them more chances to interact with their friends as a team. Sixteen percent (16%) of students felt that they understood and learned well with the CIRC technique. As one student said, "I get to apply what I learned by trying it out together with my friends." In addition, students also mentioned that they enjoyed the time learning vocabulary in the class while getting to help other friends learn. Students noted that they learned more effectively when they got to discuss

and use information with their team members. Figure 9 shows students' feedback toward the CIRC technique.

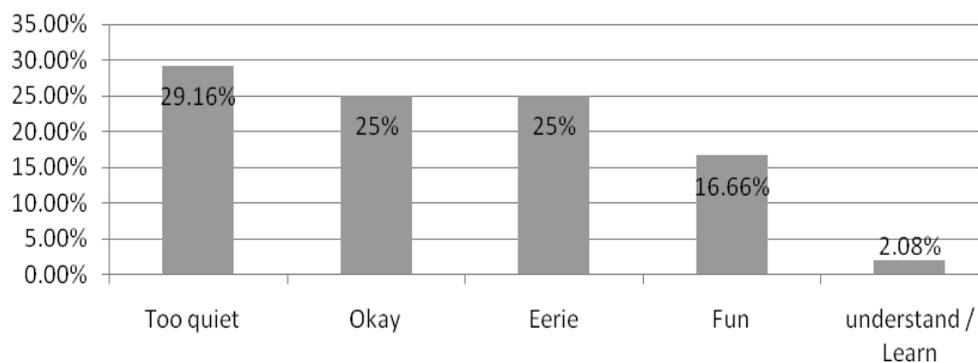
Figure 9. Students' Feedback toward CIRC Classroom Instruction



On the other hand, 42.85% of students reported negative feedback, 19.05% neutral feedback, and 38.09% positive feedback toward Teacher-Centered instruction. Almost one-third of the students (29.16%) felt that the classroom environment in this treatment was too quiet. One-fourth of the students said the classroom was “eerie” (25%) which made them afraid when they had to participate in the class. Similarly, feedback from students (25%) reported that they felt “okay” with the classroom instruction. As one student said, “I am not that enjoy with the class but not that negative as well. I guess I feel okay with the class.” Only 16.66% of students in the teacher-centered classroom felt that they had fun while learning in the class. Other feedback revealed that students felt they learned best under a teacher-centered instructional technique. However, students admitted that they felt sleepy in the classroom due to the fact that the teacher was talking most of the time in the classroom and they only were required to be passive and listen to the lecture. Students said they copied notes or exercises from the

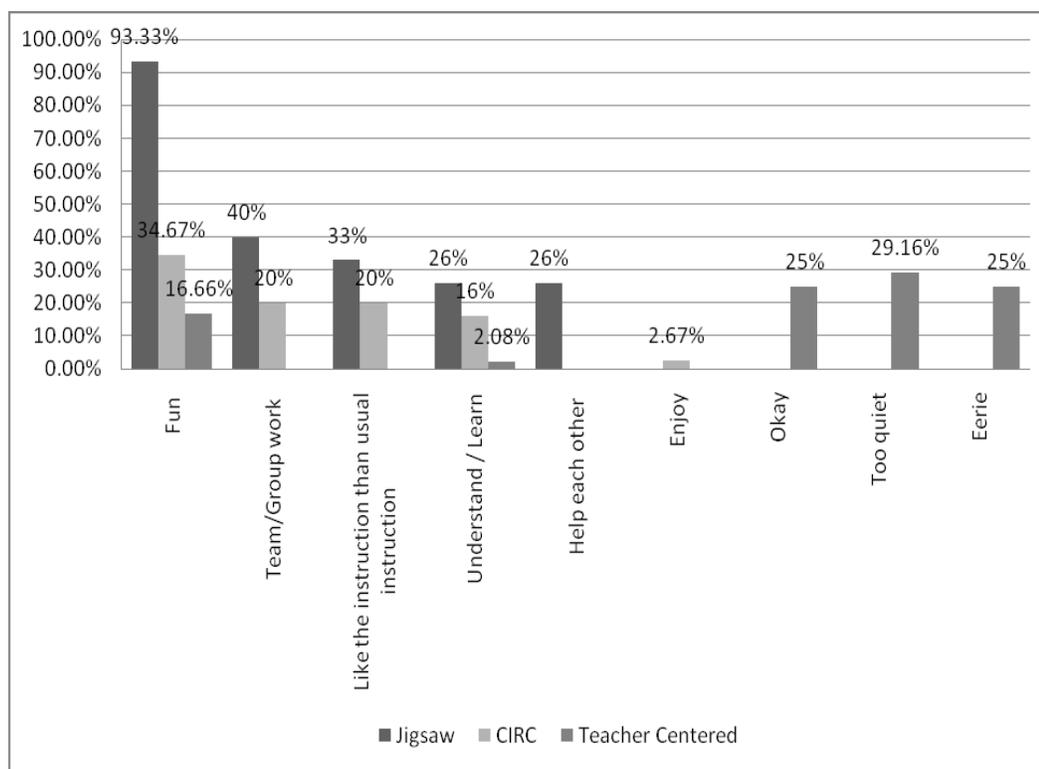
blackboard or friends in order to submit their work to the teacher. Students stated that learning with this technique required that they behave in a “good” manner, which they said is too strict for them. Figure 10 shows students’ feedback toward the Teacher-Centered classroom.

Figure 10 Students’ Feedback toward Teacher-Centered Classroom Instruction Technique



In comparing students’ feedback toward classroom instruction, cooperative learning methods (jigsaw and CIRC) received more positive feedback than the Teacher-Centered instruction technique. Students seemed to prefer Jigsaw more than they did the CIRC instruction technique. On the other hand, students’ negative feedback toward Teacher-Centered classroom instruction was clearly evident. Figure 10 shows students’ feedback toward the three instructional models.

Figure 11. Comparing Students' Feedback toward Jigsaw, CIRC, and Teacher-Centered



General Classroom and the Way Teachers Ask Questions in the Class

The method teachers used when asking students questions during class is one of the factors which might affect students' feelings of being pressured, losing face, and power distance between them and their teachers. More than half of the students (54%) reported that their teacher usually called on individual students by asking them to stand up and answer specific questions. Forty-six percent of students (46%) said that their teacher asked for volunteers to participate answering the teacher's questions.

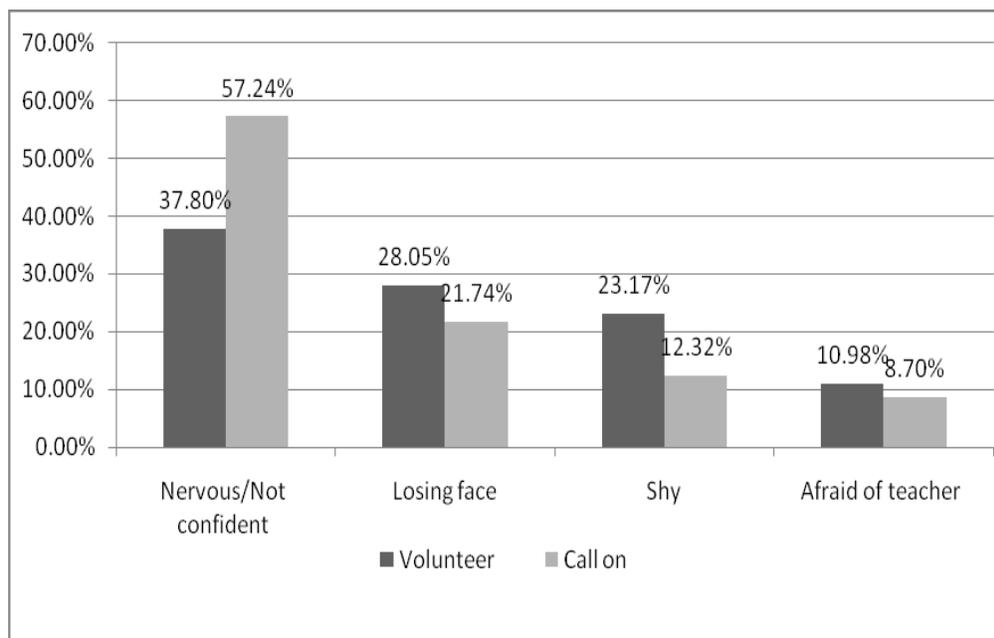
Overall, students reported more positive feelings when their teacher asked for volunteers to respond to a question. More than half of the students (56.63%) indicated that they were willing to volunteer in responding to teachers' question or express their own opinion. One student said, "I felt less pressure when teacher ask for volunteer. I felt

more confident to participate because when I decided to volunteer, I am sure that my answer is correct.” On the other hand, 43.37% of students reported negative feelings when the teacher asked for a volunteer. Students who reported negative feeling in volunteering were asked to explain why they do not want to volunteer in class. Thirty-seven percent (37.80%) among those students reported negative feelings when volunteering and indicated that they were not confident with their answer. They often thought that their answer was incorrect. Some students (28.05%) were afraid of losing face if their answer was wrong. Many students mentioned that they do not want their friends to laugh at them when they stand up and try to answer the teacher’s question. Other reasons given for not wanting to volunteer in the class were, “shy to stand up and talk (23.17%),” and “afraid of being the teacher (10.98%).” Several students stated that they were afraid that their teacher would deduct points or blame them if they said something incorrectly, so they decided to keep quiet and listen to other classmates talk.

Students were asked how they felt when teachers called on an individual student to answer or participate in the class. Only 35.37 % of students had positive feedback toward the teacher calling on individuals for participation. Another 64.63% reported negative feedback toward this method of soliciting participation. Among these students who reported negative feelings toward being called on, more than half of the students (57.24%) claimed that they were nervous and lacked confidence. Some students explained that they were nervous because they were afraid of giving an incorrect answer when they were called on. A few students agreed that they felt uncomfortable when they were called on, since they become a center of focus for their class. They felt bashful when they had to stand up and give an unsure answer since it is an uncontrolled situation

for them. Students also reported that they were at risk of losing face (21.74%) when they were called on, due to the fact that they did not know the correct answer. Quite a number of students admitted that answering incorrectly in front of the class made them lose face to their friends and teacher. As one student said, “It showed that I do not understand what teacher taught in front of everyone in the class. I felt embarrassing when other students laughing at my answers.” Twelve percent (12.32%) reported that, when they were called on, they were shy about standing up and talking in the class since they became the center of the class. This idea was also supported by another student who said, “I am lack of confident and do not enjoy talking or doing anything in front of many people.” Students said they were afraid of the teacher (8.70%), another reason that was reported under the negative feeling when students were called on. Several students said that they were afraid that their teacher was going to blame them if they did not give a correct answer. As stated by a student in the interview “Teacher always thinks that I am not listening to her when I gave incorrect answer. Sometime she blamed or punished me because she mistaken that I am not listen to her lecture.” Figure 12 shows the comparison of negative feelings between volunteer and called-on question initiation by the teacher.

Figure 12 Comparing Negative Feeling between Volunteer and Called on

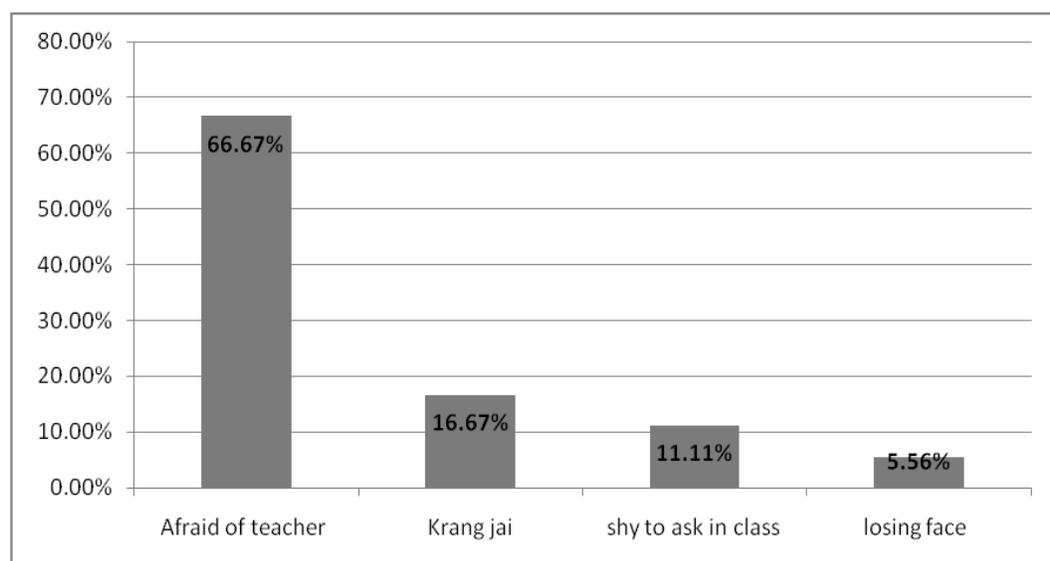


Students' Preferences between Friends and Teachers When They Do Not Understand

Students reported that when they were in doubt or had questions regarding a lesson in the classroom, they preferred to ask their friends (60.98%) than their teacher (39.02%) for clarification. Students stated the most common reason they preferred to ask their friends was because they were afraid of the teacher (66.67%). Many students mentioned that they do not want the teacher to blame them when they asked questions of the teacher. One student stated, "Teacher normally blamed us that we were not listening to the lecture when we asked about the information taught in the class." Almost seventeen percent (16.67%) reported that they felt *Kreng Jai* to their teacher if they had to ask questions or asked their teacher to explain the lesson to them again. Some of the students also mentioned that asking questions of the teacher in front of the class might be interpreted as challenging or not respecting the teacher, which students should not act like

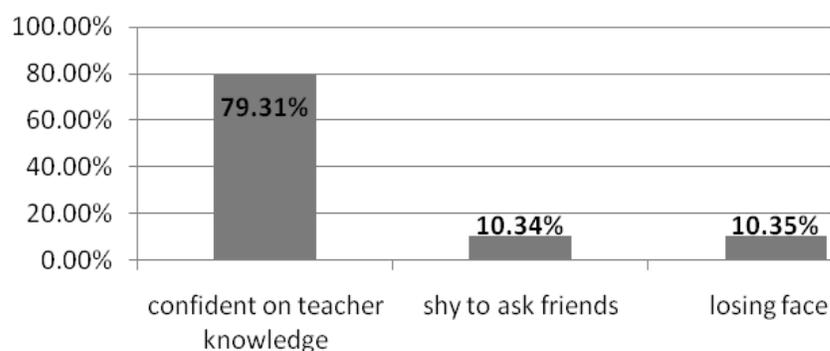
toward their teacher. As reflected by one student, “We are student and we learn from teacher, we should show our respect to teacher and not challenging them.” About eleven percent of students (11.11%) preferred asking a friend to explain a question to them privately, due to the fact that they were shy when they asked the teacher in front of the class. Some students (5.56%) stated that they preferred asking their friend because they felt like they lose face when asking the teacher in front of their friends in the class. As reflected in a student response, I think it is ashamed to show to public that I don’t know or don’t understand lesson. Asking teacher in front of everyone make me felt that way but asking friend privately made me felt better because I only ask to my close friend or asking to only a few friends. Figure 13 shows the reasons students decided to ask friends when they have questions in class.

Figure 13. Reasons Students Decided to Ask Their Friends Rather Than Their Teacher



Among 39.02% of students who preferred to ask the teacher rather than friends, 79.31% stated they chose to ask the teacher because they were confident that the teacher would be the best person to ask. Students ask teachers based on the belief that teachers know best and so they do not risk learning incorrect information from their friends' explanation. One student said, If I ask friends to explain to me, sometime I still doubted that the information is correct or not. Also sometimes I disagree with my friends, which creates arguments and I still need to go to teacher. So, I think going to teacher directly is a better choice. Other students reported they were shy about asking friends (10.34%). A student explained, "I felt ashamed to ask friends to explain lesson to me again, since we all listened to the same lecture." Students (10.34%) also reported that they are afraid of losing face if they asked their friends. Apparently, they do not want to let their friends know that they do not understand the lesson. See Figure 14 for reasons students gave why they decided to ask their teacher.

Figure 14. Reason students decided to ask teacher.

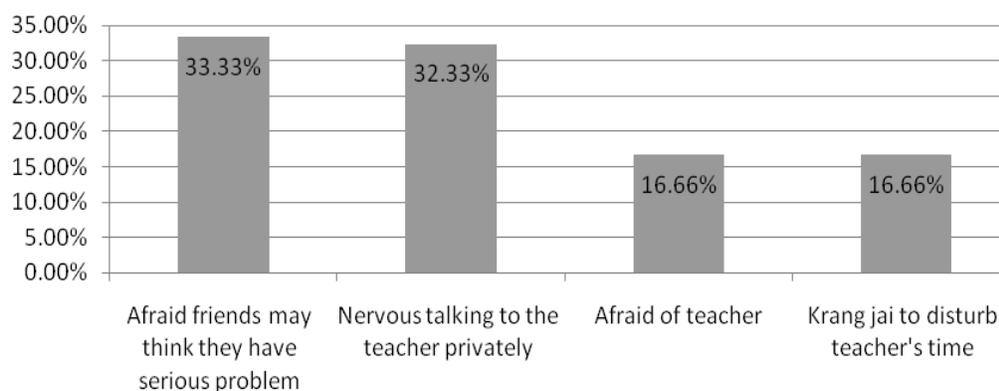


Ask Teacher in Class or Personal

Students who participated in this interview were asked, if they need the teacher's help about a lesson learned in class, what their preferences were about when to ask their

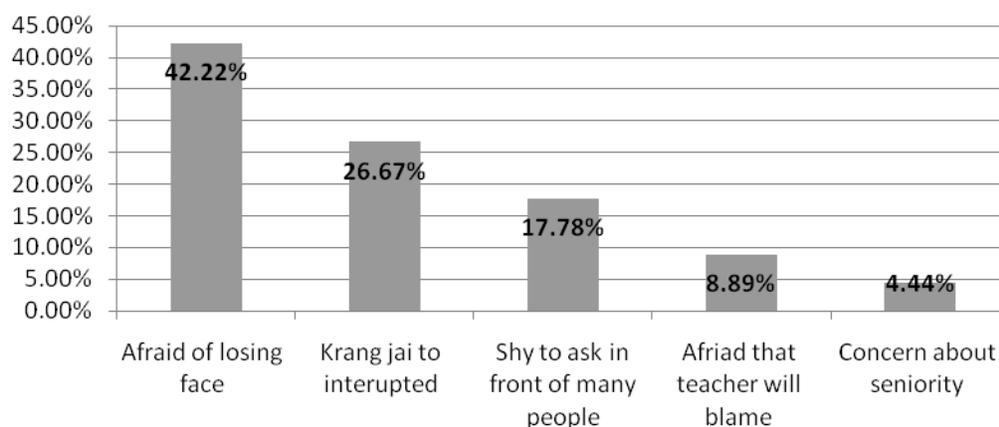
teacher for help. Students' responses were almost equally split between asking the teacher in class (54.32%) and asking teacher privately outside of class (45.68%). One-third of the students (33.33%) reported that they felt uncomfortable asking the teacher privately, since that could be interpreted as being a bad student. One student said, "I felt that I am not a good student when I need to talk to teacher outside class. It seemed like I have serious problem or I was not behave well that teacher need to talk to me privately." Another third of the students (33.33%) felt nervous talking to the teacher privately. Students stated that they needed to behave more politely than what they did in the class due to the fact that the teacher is older. As one student shared, "I am not sure how to behave that would show my respect to teacher and not to challenge teacher when I visit teacher in the teacher's room." Other reasons were *Kreng Jai* to disturb teacher's time outside the class (16.66%), and that students were afraid of the teacher (16.66%). A student said, "Asking teacher privately mean I have to directly deal with teacher. I am afraid that I am going to do something not proper." See Figure 15 for the most common reasons students asked teachers for help during the lesson in the class.

Figure 15. Reasons Students Preferred to Ask Teachers in the Class



On the other hand, 42.22% of the students who preferred asking the teacher privately stated that they chose this way because they were afraid of losing face if they had to ask the teacher to repeat or clarify the lesson in front of their classmates. As one student mentioned, “I felt like other friends were looking at me with the question mark on their face on why I am not understand these easy things.” About 26.67% among these students preferred asking the teacher privately, noting that they *Kreng Jai* their teacher and friends if the teacher had to spend time explaining the lesson again in class. One student said, “Some of my friends might already understand the lesson and would like to go on to other point. So, I do not want to disturb them and make them listen to the information teacher already explained again.” Almost eighteen percent (17.78%) of students reported that they were shy asking questions in the class so they chose to talk to the teacher privately to avoid their shyness in front of many people. Other reasons students mentioned were, being afraid of teacher (8.89%), and concerned about seniority between students and teacher (4.44%). Again, students mentioned that sometimes questions about a lesson might be interpreted as rude and intended as challenging teachers. Figure 16 shows the reasons students preferred asking questions of their teacher privately.

Figure 16. Reasons Students Preferred Asking Questions of Teachers Privately

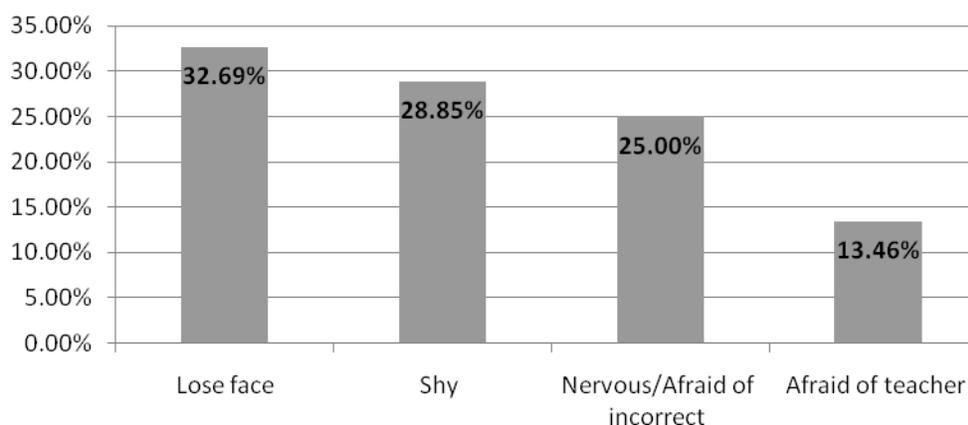


Sharing Opinions in Class

Students were asked if they were comfortable sharing their opinion in class.

Most of the students (66.73%) reported that they were comfortable sharing their opinion in class because they were expressing their own opinions. The rest of the students (33.27%) preferred to keep quiet even though they had opinions. Those who preferred not to express their opinion explained that they were afraid of losing face if their opinion did not agree with their friends' views (32.69%). Shyness was another reason that almost one-third of the students (28.85%) reported for not sharing their opinions with their classmates. Twenty five percent of students (25%) reported that they were nervous about their answers and afraid of causing arguments among friends. Another reason that leads students to keep quiet was that they were afraid of their teacher (13.46%). As one student said, "I am afraid that my opinion will not be agreed by teacher or even against what teacher's idea is. Also this could bring to the argument where teacher could blame me of being against her" See Figure 17 for the most common reasons students gave for not expressing their opinion in class.

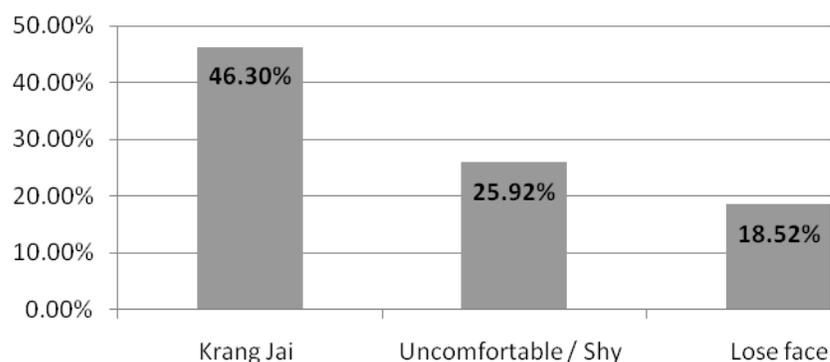
Figure 17. Reasons Students Do Not Express Their Opinion in Class.



Disagree With Friends

Students were asked in the interview about their reaction when they disagreed with their friends' ideas. More than half of the students (64.10%) reported that they decided to keep quiet when they disagreed with their friends. Almost half of the students (46.30%) chose to stay quiet when other students indicated that they *Kreng Jai* their friends, that is, if they show that they disagree with their friends' ideas. Many students mentioned that they *Kreng Jai* to disagree because disagreement might make their friends lose face and could lead to personal problems at the end of the conversation. Nearly 26 percent (25.92%) indicated that they were uncomfortable and shy disagreeing with their friends. Students reported that they lose face when they disagree or have different opinions than their friends (18.52%). Students indicated that they were afraid that their different opinion would not be accepted by others, which they take as losing face among friends. Figure 18 shows the reasons students stated for not expressing their opinion when they disagreed with friends.

Figure 18. Reasons why students stay quiet when they disagree with their friends



Friends Disagree With You

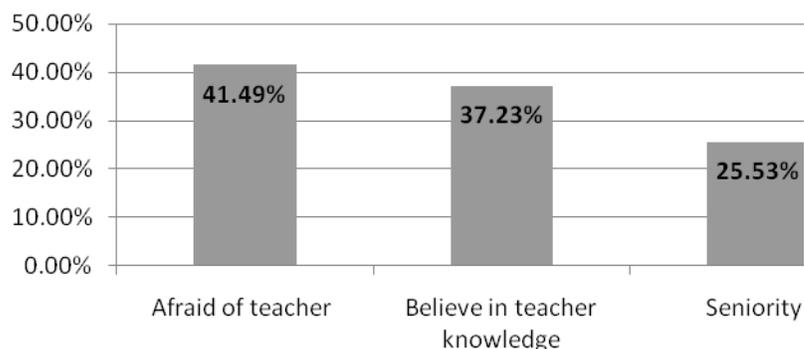
On the other hand, when students were asked about their feelings when their friends expressed opinions that disagreed with them, only 28.92% reported that they felt negative toward friends who disagreed with them. Many students stated that they were uncomfortable and lost face when someone disagreed with them. Other students viewed disagreement as normal when any opinion is brought up. As a student said, “I am not usually take it personally when my friends disagreed with me. On the opposite, I took it as opportunities to learn new ideas.”

Disagreeing With the Teacher

Students were asked about their reactions when they disagreed with their teacher. Only 15.85% of students indicated that they would express their opinion. On the other hand, 84.15% of students chose to keep quiet and pretend they agreed with their teachers. Among students who choose to keep quiet, 41.49% indicated that they were afraid that their teacher would deduct points or punish them if they disagreed with teacher. One-third of the students (37.23%) said that they preferred to remain quiet because they believed in the teacher’s knowledge. As one students stated, “Teacher is the person who educate us. Teacher knew everything which means everything that teacher said is

correct and we should follow that opinion.” One-fourth of the students (25.53%) believed in seniority; that is, younger people should not argue or disagree with their elders. As reflected in a student’s response, “We as a student should not argue against teacher because teacher is not only be our educator but they also older than us and that’s mean we must respect them as they are older too.” Another student said, “*Kreng Jai* should be apply to this situation especially disagreements with teachers.” Students explained that disagreeing with older persons, especially a teacher, would mean challenging them and that could be interpreted as not respecting teachers. Other reasons that make students decide to remain quiet are shyness, uncomfortable, and losing face when students need to express disagreement with their teacher. Figure 19 shows reasons students decided not to express their disagreement with their teachers.

Figure 19. Reasons Students Stay Quiet when They Disagree with the Teacher

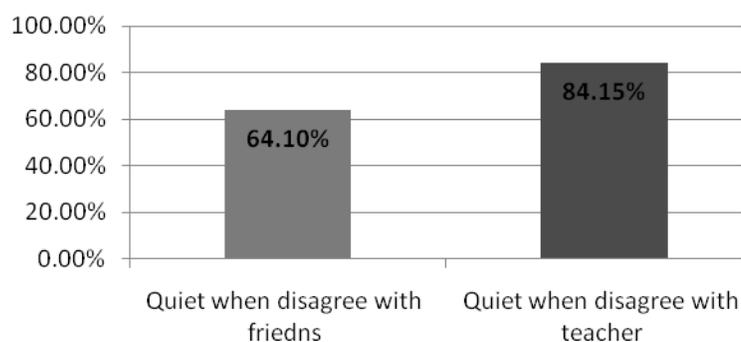


In comparing disagreement reaction toward both teachers and friends, students tended to express their disagreement with their friends more than with their teachers. However, more than half of students indicated that they would just keep their disagreement to themselves. No matter whether they disagree with their friends or with their teacher, they chose not to mention anything. *Kreng Jai* plays a major role in both

cases. However, students seemed to feel less *Kreng Jai* toward their friends than toward their teacher. This is because their teachers are older than they are. Seniority was one of the reasons students indicated as a reason not to argue or disagree with teachers.

However, seniority or power distance is not the factor that students most often mentioned when they were asked about the reaction on disagreement with friends. Most students were afraid that arguing with their friends would hurt their friends' feelings, which they usually prevent by keeping quiet when they disagree. See Figure 20 for disagreement reaction toward teacher and friends.

Figure 20. Disagreement Reaction toward Teacher and Friends



Teacher Interviews

There were 10 teachers who participated in this phase of the study. All of the teachers were asked to participate in the interview session. All of the teachers who participated in this study were taught to use teacher centered approaches as the regular instructional technique in their classes. Some teachers were assigned to teach two out of three techniques examined in this study while some teachers were assigned to only one technique.

Experience with Instruction

Jigsaw. Five teachers who taught vocabulary by using the jigsaw instruction technique were interviewed. Four out of five teachers indicated that they liked the jigsaw instructional technique. One of the teachers who liked the technique said, “I really love and enjoy using this method; I would like to continue using it with other lessons of mine.” A few teachers who were assigned to use the jigsaw method also were assigned to use CIRC as one of their instruction techniques in another class. All of them mentioned that they loved the jigsaw more when compared to the CIRC technique. As one teacher expressed her experience, “I think it is easier to manage the class with Jigsaw instruction technique since students were getting into smaller groups. Another teacher said, “I like Jigsaw instruction technique because there were about 4-5 students in each group. It is easy to manage the students not to be too loud and the group is small enough to get all students to work together.” The size of the group was noted positively by another teacher who said, “The small size of group fits well with students and eliminated the chances that some students would just sit and wait for the answer from other members of the group.” In addition, teachers stated that Jigsaw allowed good opportunities for students to interact with other friends, which they felt was good for developing social skills in students. Teachers viewed these methods as a chance to build students’ confidence in expressing their opinion to others.

Among these five teachers who used jigsaw as their instructional technique, there was only one teacher who indicated that she was not very impressed with the technique. She said students did not do well getting into groups and that the teacher needed to help manage students in groups. She also mentioned that students were a bit too loud when

working as a group. In addition, she thought it might not be a good fit for students who are lazy and do not care about others and that the work was loaded on other members of the group. As she said, “Group of students who is lazy still need teacher to point on them and tell them what to do step by step.”

CIRC. Five teachers who used the CIRC instructional technique participated in this interview. Three out of five teachers’ feedback was largely positive. One of the teachers stated that she liked the method because it allowed students to interact and work with others. Another teacher added that, even though this is a great method, both students and teachers need some time to adapt to the learning environment since they all are familiar with the teacher centered method. As reflected in a teacher’s response, “I think this method is a bit difficult for teacher to manage the class, but in a long run, when student and teacher used to the technique, I think this is a great method to apply in my classroom.”

Two other teachers indicated that they found this method difficult for teachers in terms of time management. One teacher stated, “Since we only have one teacher per class, it is difficult to take care and manage time and activity into two groups that need your different type of explanation and attention.” The size of student groups was another issue that teachers commented on in the interview. As one teacher mentioned, I think divided students into two group make each group a little too big for the hands-on activity since there are about 40-50 students in the whole classroom. Some students were not working and waiting for their friends to tell them the answer. One teacher stated that she would prefer teaching students with a teacher-centered instructional technique as it allowed her to push or call on weaker students to participate in her questions more than

CIRC. She felt that teaching with a teacher-centered technique would allow her to deliver more solid information to students than any of the cooperative learning techniques.

Teachers Observations of Students' Reaction to Jigsaw

Teachers were asked about their students' reactions to the instructional technique used in the class. All of the teachers stated that they felt students were excited and enjoyed using the Jigsaw technique. However, during the working session, students were a little confused about how they should complete their task. This was solved when teachers provided more explanation.

While working with their friends, teachers noted that girls seemed to be quieter than boys. One of the teachers said he had observed that "girls were shy and seemed like they were not confident with their answer. I think they were afraid that boys will laugh at them if their answer is wrong." Other teachers mentioned that students had more confidence in sharing their answers and opinions than when they learned as a whole class. Students still asked the teacher when they did not understand what to do on their tasks. As one teacher explained, "Students sent one or two members, which most of the time were the same set of members, to ask for more explanation. Then they go back to their group and share the information to their group members."

Teacher Observations of Students' Reactions to CIRC

Only one out of the five teachers who used the CIRC technique stated that students were excited and had fun learning with this type of instructional technique. However, most of the concerns the teachers had were about the quality of the students' work when students helped each other. Teacher mentioned that they were surprised that

not many students waited to copy from their friends. Students performed well in the team. Teachers reported that students tried to adapt their style of work, so that they could complete their task. However, one teacher indicated that students still were not confident with their quality of work and still needed to confirm with their teachers on completing their tasks.

Teachers' Observations of Students' Reactions to Teacher-centered Instruction

The teachers reported that, when teaching with the teacher-centered instruction technique, students seemed to wait for the answer from the teacher and were less willing to participate in the class. Most of the time, teachers had to call on individual students to answer questions. The teachers felt that teacher-centered instruction is effective in delivering information to students, but did not help in improving students' social skills or in developing self-directed learning behavior. One teacher said, teacher-centered is like a spoon feed method. Students would get the entire knowledge and information teacher planned to include in the lesson, but students do not have chance to interact with others in the class. In addition, students will have a hard time on self-learning because they get used to the information or knowledge fed by their teacher.”

Teachers' Observations about Students' Questions and Opinions

Teachers were asked how they felt when students asked questions or expressed their opinions in class. All the teachers who participated in this interview indicated positive feelings when students asked questions during the lesson. One teacher said, “I felt good when students asking question or sharing their opinion in the class, even though

I have to repeat some parts of the lesson. At least students learn how to express themselves.” She added that “students’ questions help me realize on what part students still need further explanation.” Teachers view students’ opinions as a way to help form students’ thinking skills. As one teacher said, “when students shared their opinion, that makes me know in what way students think and how I should I help guiding students to a better process of thinking.” Another teacher commented, “I felt comfortable to answer students’ question or accept students’ opinion if that is not students’ intention to challenge me.”

Most of the teachers welcomed questions from students. However, they preferred that questions be asked after class rather than having students ask them in class. One teacher stated, “I don’t like when students asked questions in class, since it interrupted my teaching, and also interrupted other students’ learning as well.” In addition, teachers mentioned that they felt that students do not like to ask question in class, since they have to ask questions in front of their friends, resulting in losing face.

Even though students were comfortable asking questions of the teacher, a different reaction was reported in terms of expressing their opinions to the teacher. Teachers reported that students seemed uncomfortable sharing their opinions. The main reason the teachers gave was students losing face. Some teachers mentioned that it might be because students believe that teachers know best, and students, therefore, should agree with the teacher. One teacher said, “Students think that they should not argue or disagree with teachers, since teachers are the people who deliver knowledge; teachers know everything. With this reason, students should not argue or challenge anything, but follow.” Another teacher stated that she needed to ask students to share their opinion

before the teacher's opinion was stated to prevent students from being afraid that their opinions will be seen as being against the teacher's opinion. Even though this helped in encouraging students to express their opinion, a good number of students still were uncomfortable expressing their opinions in class.

According to the data in this study, students in each instructional techniques improved their vocabulary knowledge. It appears that, students in the CIRC classroom performed better than other students in vocabulary spelling. In terms of function, students receiving teacher-centered instruction achieve better progress than students in other instructional techniques. Even though students who received CIRC instructional technique did not perform as well as students who received the Teacher-centered technique in word function, but for the total of all vocabulary skills, students in CIRC achieved the highest progress score. In terms of gender, females outperformed males in function of word when students received Teacher-centered technique. Other than these two skills in the teacher-centered classrooms, both males and females performed similarly across instructional treatments.

Summary

Students were asked to complete a questionnaire giving feedback about the instructional technique they received in learning vocabulary. Students from both Jigsaw and CIRC classrooms reported positive feedback toward these instructional techniques. However, students in Jigsaw classrooms reported a higher positive feedback when compared to students in CIRC classrooms. In addition, the teacher-centered classrooms received the lowest positive feedback among the three instructional techniques. The same results were also reflected in student interviews. In terms of other feedback toward

the classroom environment, save face and *Kreng Jai* were the cultural factors that appeared to have the greatest effect on students' behavior in the classroom. These two cultural factors influenced students both in their performance and in their encouragement during the class with both their classmates and their teachers.

CHAPTER 5

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This study compared and contrasted teacher-centered (lecture) and learner-centered (cooperative learning: Jigsaw and CIRC) techniques to teach vocabulary to sixth-grade students in Thailand in English classrooms. In addition, the researcher sought to identify the relative effectiveness of each instructional technique applied in the classes in terms of language skills (spelling, meaning, and use of word). This research examined cultural factors, learning motivation, and feedback from teachers and students in each technique used to determine whether a “best match” of instruction with the classroom culture in Thailand exists.

Students in Thailand learn a great deal of vocabulary through teacher-centered instructional techniques in which students largely listen to the lecture and memorize information taught by the teacher in the classroom. Currently, Thai students face the problem of applying knowledge of the English language effectively to real world situations. The dean of the School of Education from Chulalongkorn University recently reported on ASTV (Jan 8, 2012) that most Thai students cannot apply English language learned in the class to real world situations. Similar observations were reported by Thailand Information Center for Civil Rights and Investigative Journalism (TCIJ, Dec 31, 2012).

The objective of this study was to analyze the instructional techniques that best fit Thai students culturally when learning English vocabulary in terms of spelling, meaning, and use of word skills. In addition, specific cultural factors from teachers and students

were analyzed with the learning outcomes to help identify an optional match between instructional techniques used in Thai classrooms, student learning, and their experience culturally with each technique examined.

The study used a mixed methods approach for interpreting, comparing, and contrasting the findings. Questions were constructed for both qualitative and quantitative aspects of the study. The final sample for the quantitative phase of the study (pretest, posttest, and questionnaire) was 599 students, with 288 males and 311 females. Data were organized in the form of a database for statistical analyses. A Repeated Measures Analysis of Variance with a repeat on time was used to analyze students' pretest and posttest data. A one way ANOVA was used in analyzing cultural norm attitude data from the questionnaire. For the qualitative portion of the study, a final sample of 84 students and 10 teachers was used. Responses were coded and organized using the Microsoft Excel program.

Summary of Findings: Effect of the Teaching Strategies

RQ1: What is the effect of three teaching strategies (Lecture, CIRC, and Jigsaw) on vocabulary learning (form, meaning, use) for sixth grade Thai students?

The present study examined the effect of different teaching strategies in vocabulary in Thai classrooms on students' progress in spelling, meaning, and function of words. In addition, this study examined cultural factors that could play a role in mediating the effectiveness of the instructional techniques. The study showed the progress of vocabulary knowledge of students for each instructional technique. Moreover, the results from the comparison showed differences in students' progress

under each instructional technique in terms of each skill area and overall vocabulary knowledge.

Students' Progress in Each Instructional Technique

Results from students' pretests and posttests indicated that students under all three instructional techniques (Jigsaw, CIRC, and Teacher-centered) made progress on vocabulary knowledge in every skill tested (spelling, meaning, and word function). In comparing vocabulary knowledge progress between genders within each instruction, the results indicated that both boys and girls in Jigsaw and CIRC classroom performed similarly in each skill tested. In Teacher-centered classrooms, boys and girls made similar progress in spelling and meaning of the vocabulary; however, girls performed better than boys on the function of words and overall (see Figure 5 and Table 11).

Students' Progress in Each Skill Tested

To be able to find the most effective instructional technique for students in terms of vocabulary learning, progress results from each instructional technique were compared within each skill. For spelling, which was tested by vocabulary dictation, students in CIRC classrooms had the highest progress scores, while students in Jigsaw classrooms had the lowest progress scores among all three instructional types. Students in all three instructional techniques performed at about the same level of progress in giving Thai meaning to English vocabulary. When tested on the function of words, or how to use the vocabulary, students in the teacher-centered classes outperformed students who received other instructional techniques. Students in Jigsaw classrooms had the lowest progress score. In combining all three skill scores, CIRC was the instructional technique under which students performed best.

Students' and Teachers' Responses to Jigsaw

Based on students' responses toward each instructional technique, Jigsaw was the form of instruction students enjoy most among the three instructional techniques used in this research experiment. This could be seen in the students' questionnaires, as they reported higher and more positive feelings toward classroom instruction with this technique. In addition, students responded to the questions in the interview session that they enjoyed and had fun while learning and working as a team member in the jigsaw instructional technique.

Not only were responses from students positive, but the teachers' observations were also positive. Moreover, teachers seemed to enjoy applying Jigsaw instructional techniques with their classes because they thought Jigsaw gave them better classroom management, and made it easier to encourage students to interact with others more productively. However, teachers had some concerns about teaching students with Jigsaw, especially regarding unmotivated students, who needed extra care and attention in the classroom. Some teachers thought that Jigsaw might not be a perfect instructional technique in teaching those students who need teachers to push and point them step by step along the way to learning.

Students' and Teachers' Responses to CIRC

CIRC was another instructional technique on which the students reported positively. Even though students in CIRC classrooms did not report positive feelings as highly as those in Jigsaw classrooms, they did report positive feelings toward this form of classroom instruction. Responses from students who received CIRC as their classroom instruction, had similar responses from students in Jigsaw classrooms. Students felt that

they had fun and enjoyed their opportunities to learn and work as a member of a team. In addition, students mentioned that they preferred CIRC over teacher-centered instructional technique which was the way they usually learned in typical Thai classrooms.

Teachers' observations similarly reflected that students had fun and were more excited with the CIRC technique. In addition, teachers reflected that students' performance and the quality of their work increased over that achieved when the usual instructional technique was applied.

In terms of teachers' feedback toward the CIRC instructional technique, teachers reacted positively toward it because this technique allowed their students the opportunity to interact with others while learning. However, teachers still have concerns about applying CIRC in terms of time management due to the technique's structure and influence on the nature of classrooms in Thailand. Typically there is only one teacher managing 40-50 students and with this many students in class, teachers find it a difficult to manage the class with the CIRC instructional technique. Even though teachers had concerns with this technique, they preferred using this technique with the caveat that both teachers and students need time to adjust their management and behavior to this type of instructional technique. Teachers believed that, in the long run, CIRC would work well with Thai students.

Students' and Teachers' Responses to Teacher-centered

The teacher-centered technique was the least preferred classroom instructional technique reported on by students. Students felt the classroom environment was neither friendly nor enjoyable. Some indicated that this classroom environment was too quiet

and made them feel eerie and sleepy because they did not get a chance to interact much in the classroom.

From the teachers' point of view, they felt that this instructional technique is good in delivering informative lessons to students, especially in learning language structure. However, teachers had some concerns about the teacher-centered technique. One concern was that students do not have much opportunity to interact with their classmates to improve their communicative and social skills. In addition, teachers saw the teacher-centered approach as spoon-fed instruction, which does not help students develop self-directed learning behavior, but rather to wait for information to be taught to them.

Summary of Findings: Culture Concept

RQ2: How do students and teachers perceive the match of Thai cultural norms with the three different instruction techniques (teacher-centered; lecture, CIRC, and Jigsaw)?

Cultural background is an important factor that teachers need to understand in order to motivate student learning and their participation in the classroom (Gay, 2002). Results from the interview sessions and students' questionnaires showed two cultural factors that affect students' behavior in class, namely the power distance and save face concepts.

Power Distance

According to Hofstede (1991) power distance refers to "the extent to which the less powerful member of institutions and organizations within a country expect and accept that power is distributed unequally (p. 28)." Thailand is one of the countries that enacts high power distance in its society. This is reflected in its hierarchical and routine-

driven society. Hallinger and Kantamara (2001) explained that power distance in Thai culture included *Kreng Jai*, as being self-effacing, and wishing to avoid embarrassing other people. *Kreng Klua* is another cultural concept under power distance, and Dakins (1988) defined this define as “the feeling of fear often held by subordinate persons towards those in positions of authority and power, and senior in age and rank” (p. 15).”

The results of this research showed that power distance is one of the factors that affects how students think and react in class to their learning experiences. Students preferred to ask their friends when they have questions about the lesson rather than asking the teachers. This is because they *Kreng Klua* and *Kreng Jai* their teachers. The same reasons were reported from both groups of students who choose to ask their questions of their teacher either inside or outside of class. These reasons were *Kreng Jai* to interrupt their teacher during class, and *Kreng Jai* to disturb their teacher’s time outside of class. Similarly, students felt *Kreng Klua* in both situations of either asking their teacher privately or asking their teacher in class. Students were afraid of being blamed by teachers when asking about lessons that the teacher had already taught in the class.

Regarding expressing opinions, *Kreng Jai* was the main reason why students remain quiet and do not state their disagreement to their classmates. For a different reason, but with the same result, students felt *Kreng Klua* to their teacher to state their disagreement and chose to keep quiet. In addition, students are concerned about seniority and rank (younger and elder, student and teacher). This influenced students to stay quiet and follow what the teacher told them since the teacher is older than the students and also ranked higher than the students in Thai culture. In Thai society, students are taught that

teachers' opinions or elder people's opinions are correct, and there should be no argument toward those opinions. (TCIJ, Dec 31, 2012)

Save Face

Saving face was another cultural factor that influenced students' behavior in class. Students were afraid of losing face and were aware of save face in most of the situations in the classroom. Students try their best to save face for both their teachers and friends. Overall, students do not want to be called on by teachers, do not express their opinion in the class, and also keep quiet when they disagree with their friends. Many students reported that they felt less afraid of losing face when they talk in a smaller group of people. Most of students were afraid that their friends would laugh at them when they said or did something wrong and that was when students felt they lose face.

In light of the cultural factors reflected from questionnaire and interview data, the cooperative learning instructional technique is a good match when students are dealing with a smaller group of people compared to the teacher-centered context. Students were more comfortable actively participating and expressing themselves in their small group. As Fu (2003) suggested, talking in a smaller group is a good place for students who are not used to sharing their opinions. Cooperative learning could help eliminate the feeling of losing face and *Kreng Jai* since students are working with their friends in a smaller (and 'safes') group. In addition, teachers would be the person who supported students when needed but not the person who, from the students' point of view directly, provides the critical knowledge. Moreover, students are not responding directly to their teacher, which would make students feel more comfortable discussing and interacting with less feeling of *Kreng Jai* and *Kreng Klua* toward their teacher.

Jigsaw was the instructional technique that students preferred as reflected by student interviews. Cultural issues may be less of a concern when students are dealing with a smaller group of people as in Jigsaw. In Jigsaw classrooms, students participated into two types of groups (groups of four and groups of approximately 8-9). This type of instructional technique helped students to feel more confident to talk and share their opinions with less concern about losing face. *Kreng Klua* of the teacher did not play a major role in this type of instruction due to the fact that the teacher is not the one who directed knowledge acquisition, from their point of view.

Match and Mismatch of Instructions Techniques according to Thai culture

Not only should the instruction match with students' cultural view, but also the learning outcome is another factor that should be a major consideration for achieving a best match in classroom instruction. Even though Jigsaw was the technique that was the best match among the instructional techniques in this research, Jigsaw is not the best match for the Thai classroom in terms of learning outcome. It was not surprising that the Jigsaw classroom did not show a very impressive learning outcome compared to other instructional techniques used in this research. Previous research has also yielded inconclusive results when Jigsaw was applied as a classroom instructional technique. For instance, in Slavin's meta analysis (1995), he reported only two out of eight studies that showed significant difference in results favoring Jigsaw. Two favored the control group and four of them showed no significant difference. Similarly, Moskowitz, Malvin, Schaeffer, and Schaps (1983), and Shaaban (2006) did not find results of their research on Jigsaw significant in learning outcome improvement. In addition, Johnson, Johnson, and Stanne (2000) reported results favoring Jigsaw II on comprehension with small effect

sizes when compared to competitive individualistic instruction. In contrast, Aronson, Blaney, Sikes, Stephan, and Snapp (1978) and Mattingly and Van Sickle (1991) reported results in favor Jigsaw II.

It would be wrong to conclude that Jigsaw is not an effective instructional technique to be used in the classroom. In terms of the Thai classroom environment and Thai culture, Jigsaw might be a good technique to use occasionally. Jigsaw instructional technique could be a good fit when the purpose of lessons is more likely to encourage students to actively engage, interact, and express their opinion with their classmates. In other words, Jigsaw could be used as an alternative instructional technique to promote selected students' learning activities.

In a similar concept of working in a small group, students in CIRC classrooms were divided into two groups. One group of students worked with their teachers while another group worked on a task assigned by the teacher. Within the group working on assignment, students were put into pairs to help each other complete the assignment. Students had chances to discuss and express their opinion with their partner. The group of students who worked with their teacher would be able to learn some knowledge from the teacher within a smaller group than the whole classroom. In this part of the instructional technique, the teacher would have more opportunity to help the students learn and also easily be able to provide corrections or feedback. Students in a CIRC classroom would get the opportunity to work in both groups before getting into the group of four, to make sure all their group members master the lesson.

Based on the results of this research, CIRC is a very good instructional technique matched to Thai students in terms of both cultural factors and learning outcomes.

Specifically, students in CIRC classroom have higher progress scores on vocabulary knowledge in spelling and overall skills. Similarly, students who received the CIRC instructional technique outperformed those instructed by traditional teaching, as shown in other studies (Durukan, 2011; Calderon, M., Hertz-Lazarowitz, R., Ivory, G. Slavin, R. (1998). Moreover, reflection from students interviewed in this research confirmed that students had positive feedback toward the CIRC instructional technique because students had opportunities to be actively engaged with classroom activities.

Teacher-centered is the instructional technique that seems to least fit the character of Thai students these days. Power distance and save face concepts are significant factors that affect the way students behave and participate in class. Even though students gain a considerable amount of knowledge from their teacher, they appear to would lack other applied skills. Since students are afraid and not confident in expressing their opinion in teacher-centered classrooms, students would have less opportunity to improve their communicative skill and apply them in real life situations. Furthermore, students have less chance to develop their thinking skill due to the fact that students are not actively engaged in activity and have less chance to discuss and express themselves as they make learning decisions.

In terms of learning outcome in vocabulary, the teacher-centered technique is more likely to be useful in teaching word function, since the results from students' progress in word function outperform other instructional techniques within the word function section. Similarly, results from teachers' interviews also showed that teachers preferred using teacher-centered (lecture) in teaching solid detail lessons such as language structure, due to the fact that teachers could be positive that students understand

the core concept clearly and correctly. Similar results, but from students' perspectives, were reported in Garrett and Shortall's (2002) research results that students learning English at the beginning level preferred learning grammar with teacher-centered instructional technique because they felt that teacher-centered instruction is much easier to understand.

Conclusion

Considering both students' progress and culture factors, CIRC is a better match to Thai classrooms when teaching English vocabulary to sixth grade students, since students in CIRC had higher mean scores in spelling and overall on the vocabulary test than students taught under other instructional techniques. CIRC appears to encourage students to express themselves, interact with others, and develop thinking skill and social skill, while still having the chance to interact with their teacher on the core information of the lesson while completing their assignment within their small group.

It would be inappropriate to conclude that the teacher-centered technique is not an effective instructional technique. Teacher-centered instruction is appropriate and effective when teachers need to deliver core academic information to students. Even though this instruction could provide solid information to students, perhaps better than the other instructional techniques studied, students in teacher-centered technique classrooms have less opportunity to develop other skills, such as communicative skills, critical thinking skills, and social skills. This is because teacher-centered is more likely to be a passive instructional technique and not encourage students to engage actively in the class activity.

In responding to government education policy on developing Thai students' English communicative skill (ASTV, Jan 8, 2012) and improving students' social skills, CIRC appears to be the best match for Thai classrooms. As Guo (2012) recommended, learners need to incorporate the corrective feedback to be able to reflect the positive progress of learning. Especially in the implementation process, CIRC allowed teachers to still be involved in student learning, and students had more opportunity to interact with their group than they would have had in the teacher-centered technique. CIRC seemed to be the compromise between teacher-centered and Jigsaw. Since one aspect of CIRC allowed students to work on their own in a small group and in another part of CIRC, students would get to work with their teacher. This would allow teachers more opportunity to provide feedback, suggestions, and corrections to students and make sure students learn the desired information. In addition, working in a small group in CIRC would encourage students to communicate, express their opinion, and discuss with their friends more to accomplish the task given by teachers. Students in teacher-centered classrooms receive less practice with their classmates and less communicative activity. CIRC would help promote a more positive classroom environment as well as encourage students' learning effectiveness. George (1999) reported on the research results of a study conducted with Thai students that showed cooperative learning methodologies could help promote more positive attitudes toward classroom instruction. This would help improve vocabulary knowledge in both structure and communicative skills together with developing the thinking skills, social skills, and self learning of Thai students as the Thai government policy seeks.

Implementation of the Instruction Used in the Classroom

In the implementation of cooperative learning in Thai classrooms, both teachers and students need to adapt to the new learning style in order to maximize the effectiveness of these instructional techniques. One of the important factors that could help ease teachers and students in the adaptation process is an appropriate classroom setting. As Sylvester (1994) stated, a classroom should be friendly due to the fact that “stressful school environments reduce students’ ability to learn” (p. 65). Following are classroom situations for creating a learning-centered classroom as suggested by Combs (1976), Savoie and Hughes (1994) and Marzano (1992):

- Opportunities for involvement, interaction, and socialization to explore meaning should be provided in the classroom.
- Frequent opportunities for students to encounter new information and experiences as a process of personal discovery.
- Students should engage in collaborative problem-solving that relate to real world activities.

At the beginning of applying cooperative learning in Thai classrooms, teachers will have to be patient in referring both classroom-management and time-management. Due to the fact that students are not used to the instructional techniques and working in a small group, students will need to learn what their roles are within their learning environments. Teachers need to step in and suggest to students what they should do as a group. Another factor that teachers should be concerned with is that they allow students to express their opinions freely without teacher distraction or teachers complaining about students’ disagreement. TCIJ (Dec 31, 2012) reported that students were afraid and

reserved their opinions due to the fact that teachers did not welcome students' disagreement. Thus, students are reserved and stay quiet in the classroom. These implementation steps would bring education to the point where cooperative learning would optimize its effectiveness in Thai classrooms. Moreover, the choice of instruction that matches with Thai culture would enhance students' motivation and learning to perform at a higher level, using communicative language in a real world situation.

Future Research

This study raises a focus not only on cultural factors that play a role in students' learning, but also on other factors, such as students' preferences for learning, teaching, and classroom structure. Students' different personality characteristics may influence learning due to the match and mismatch of instruction and student character and personality. Students' preferences are another factor that would increase students' motivation in learning in the classroom, which would affect their learning progress. A more in-depth study of students' personalities would be suitable for the type of instructional technique and how matching and mismatching learning preference with type of instruction affect students' learning outcome should be conducted. In addition, different education levels of students and different nationalities might reflect different matches with the instruction as well.

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APPENDICES

Appendix A1: Student Pretest : Spelling

Name _____ Class _____
Date _____

Dictation

1. _____
2. _____
3. _____
4. _____
5. _____

Word for dictation: remember, sleep, please, clap, pretend

*Dictation will be given to students separately from other part of the pretest to prevent students from looking at other word in the question paper

Appendix A2: Student Pretest : Meaning

Name _____ Class _____

Date _____

Please give the meaning of these following words in Thai.**1. Secret**

Meaning in Thai: _____

2. Please

Meaning in Thai: _____

3. Pretend

Meaning in Thai: _____

4. Feel

Meaning in Thai: _____

5. excite

Meaning in Thai: _____

6. surprise

Meaning in Thai: _____

7. enough

Meaning in Thai: _____

8. Explain

Meaning in Thai: _____

9. Busy

Meaning in Thai: _____

10. Pretty

Meaning in Thai: _____

Appendix A3: Student Pretest : Function/ Use of vocabulary

Please answer if the underline word in each sentence is correct or not. Indicate (✓) in the box in front of the word “correct” when the word is in the correct form; write (X) in the box in front of the word “incorrect” when the form of underline word is incorrect and correct the underline word in the space provided.

1. It is not much funny going to a party alone
 - Correct
 - Incorrect : _____
2. Please explanation why you are late.
 - Correct
 - Incorrect : _____
3. I am surprised that he didn't come.
 - Correct
 - Incorrect : _____
4. Doctors are busily people.
 - Correct
 - Incorrect : _____
5. The children were very much excitation by the news.
 - Correct
 - Incorrect : _____
6. After the accident, she couldn't feel anything.
 - Correct
 - Incorrect : _____
7. You will be asked to present yourself for interview
 - Correct
 - Incorrect : _____
8. She is very prettily.
 - Correct
 - Incorrect : _____
9. She pretended that she was not hurt.

- Correct
- Incorrect : _____

10. She's old enough to make her own decisions.

- Correct

Incorrect : _____

Appendix B1: Student Post-test : Spelling

Name _____ Class _____

Date _____

Dictation

1. _____

2. _____

3. _____

4. _____

5. _____

Word for dictation: excite, explain, enough, surprise, present

*Dictation will be given to students separately from other part of the pretest to prevent students from looking at other word in the question paper

Appendix B2: Student Posttest : Meaning

Name _____ Class _____

Date _____

Please give the meaning of these following words in Thai.**1. Secret**

Meaning in Thai: _____

2. Pretend

Meaning in Thai: _____

3. Feel

Meaning in Thai: _____

4. Excite

Meaning in Thai: _____

5. Explain

Meaning in Thai: _____

6. Surprise

Meaning in Thai: _____

7. Funny

Meaning in Thai: _____

8. Busy

Meaning in Thai: _____

9. Pretty

Meaning in Thai: _____

10. Enough

Meaning in Thai: _____

Appendix B3: Student Posttest : Function/ Use of vocabulary

Please answer if the underline word in each sentence is correct or not. Indicate (✓) in the box in front of the word “correct” when the word is in the correct form; write (X) in the box in front of the word “incorrect” when the form of underline word is incorrect and correct the underline word in the space provided.

1. I am so sleepy today.
 - Correct
 - Incorrect : _____
2. You got a lot of prettiness gift.
 - a. Correct
 - b. Incorrect : _____
3. I was very busy in the office.
 - a. Correct
 - b. Incorrect : _____
4. Please explanation why you are late.
 - a. Correct
 - b. Incorrect : _____
5. You look very happiness today.
 - a. Correct
 - b. Incorrect : _____
6. This cartoon is very funny.
 - a. Correct
 - b. Incorrect : _____
7. They gave him a big crap.
 - a. Correct
 - b. Incorrect : _____
8. It is a please to meet you.
 - a. Correct
 - b. Incorrect : _____
9. I am old enough to take care of myself.

- a. Correct
- b. Incorrect : _____

10. I can't remembrance him.

- a. Correct
- b. Incorrect : _____

Appendix C: Students Vocabulary List

Tested vocabulary

	Noun	Verb	Adj	Adv	Meaning	Sample of sentence
Remember						
Secret						
Funny						
Excite						
Please						
Explain						
Sleep						
Enough						
Surprise						

	Noun	Verb	Adj	Adv	Meaning	Sample of sentence
Happy						
Pretty						
Pretend						
Present						
Clap						
Busy						
Feel						

Appendix D: Lesson Plan: Teacher-Centered (Lecture)

Period 1: Individual Pretest (about 20 minutes)

Period 2: vocabulary list and vocabulary table (whole period)

- Teacher gives out vocabulary table to the whole class.
- Teacher teaches the vocabulary listed (Meaning, synonym, form of words)
 - Teacher might give the answer or allow students to be involved as a whole group
 - Write the answer on the board to guide students in how to spell those words
- Allow students to work on their own on coming up with sentences using words in vocabulary list

Period 3: Example of sentences & story reading

- Teacher allows students to share their sample of sentences.
 - Teacher might allow students to come and write their sentences on the board.
- Teacher might correct if students' example is wrong. Also would give more examples if necessary.
- Teacher gives story reading to students
 - Teacher might allow students to read the story in the class (around 5-10 minutes)
- Students are required to answer question after reading story by writing down the answering in their paper

Period 4: Feedback on question from reading & review vocabulary list

- Teacher gives feedback (and correct the answer if need) to students in answer question after reading.
- Teacher might ask students to answer the form or the meaning of the vocabulary

Period 5: Individual Post-test and Interview

Appendix E: Lesson Plan : Student-Centered (Learning Cooperative Integrated Reading and Composition(CIRC))

Period 1: Individual Pretest (about 20 minutes)

Period 2: Getting students into group

- Divide students into two reading groups (according to the score from pretest; Higher and Lower score)
- Divide students into group of 4 (two member from each reading group)

Vocabulary list and vocabulary table and story reading

- Lower score group work on vocabulary table in pair.
 - Students practice reading and spelling vocabulary
 - Students complete the vocabulary table with the example of sentences
 - Teacher might assist and give some explanation to students when needed.
- Higher score group work with their teacher on story reading.
 - Teacher allows students to read the story in the class (around 5-10 minutes)
 - Teacher might help to explain the story to students when needed
 - Students are required to answer question after reading story by writing down the answer their paper

Period 3: Vocabulary list and vocabulary table and story reading (switching group)

- The higher score group works on vocabulary table in pair.
- The lower score group work with their teacher on story reading.

Period 4: Feedback on questions from reading & review vocabulary list

- Students get into their group of four.
- Students help each other in reviewing and practice using vocabulary on the list.
- Teacher gives feedback (and correct the answer if need) to students in answering question after reading.
- Teacher might ask students to answer the form or the meaning of the vocabulary

Period 5: Individual Post-test and Interview

Appendix F: Lesson Plan : Student-Centered (Jigsaw)

Period 1: Individual Pretest (about 20 minutes)

Period 2: Getting students into group

- Divide students into small groups of 4 (with different levels of pretest score)

Vocabulary list and vocabulary table (whole period)

- Teacher gives out vocabulary table to all students.
- Each member in each small group is responsible for four words.
- Students from small group get into the expert group according to the vocabulary they are responsible for
 - Expert group 1 : vocabulary 1-4
 - Expert group 2 : vocabulary 5-8
 - Expert group 3 : vocabulary 9-12
 - Expert group 4 : vocabulary 13-16
- Each expert group helps each other to complete the given vocabulary table (Form of word, meaning and sample of sentence) according to the vocabulary each expert group is responsible for.
 - Teacher might assist each expert group as needed.
 - Teacher might allow students to use dictionary to complete this exercise.
- Students get back to their small group to teach other members and share their what they learned from expert group.
 - Teacher might assist students in small group when they need help.

Period 3: Story reading

- Teacher gives story reading to students to work on their small group.
 - Teacher might assist students while reading the story.
- Students are required to answer question after reading story by writing down the answer on their paper as a group

Period 4: Feedback on question from reading & review vocabulary list

- Teacher give feedback to each group (and correct the answer if need) to students in answering questions after reading.
- Allow some time for students to review vocabulary learned in class.

Period 5: Individual Post-test and Interview

Appendix G: Student Questionnaire

Name: _____ group/class _____

Please select the answer that most reflects your belief and your attitude toward the classroom (1= strongly disagree and 5=strongly agree)

- | | | | | | | | | |
|----|---|-------------------|---|---|---|---|---|----------------|
| 1. | I feel comfortable participating in the class. | Strongly Disagree | 1 | 2 | 3 | 4 | 5 | Strongly Agree |
| 2. | I feel that I learn vocabulary well in this class. | Strongly Disagree | 1 | 2 | 3 | 4 | 5 | Strongly Agree |
| 3. | I enjoy the class and activity in the class. | Strongly Disagree | 1 | 2 | 3 | 4 | 5 | Strongly Agree |
| 4. | I hesitate to share my opinion or knowledge in the class/group. | Strongly Disagree | 1 | 2 | 3 | 4 | 5 | Strongly Agree |
| 5. | I feel that it is a discredit me when I say something wrong or make any mistake in the class/group. | Strongly Disagree | 1 | 2 | 3 | 4 | 5 | Strongly Agree |
| 6. | I am afraid that no one will listen or believe my opinion/information. | Strongly Disagree | 1 | 2 | 3 | 4 | 5 | Strongly Agree |
| 7. | I'm afraid to show that I am not sure about the content taught in the class/group. | Strongly Disagree | 1 | 2 | 3 | 4 | 5 | Strongly Agree |

8.	I feel uncomfortable and lose credit when someone disagrees with me.	Strongly Disagree	1	2	3	4	5	Strongly Agree
9.	I hesitate to ask the teacher question in the class.	Strongly Disagree	1	2	3	4	5	Strongly Agree
10.	I hesitate to show that I disagree with my classmates' opinion.	Strongly Disagree	1	2	3	4	5	Strongly Agree
11.	I hesitate to show that I disagree with my teacher's opinion.	Strongly Disagree	1	2	3	4	5	Strongly Agree
12.	I tended to be quiet when I disagree with other's idea in the class.	Strongly Disagree	1	2	3	4	5	Strongly Agree

Appendix H: Interview Question (Teacher)

Overview of the class

1. What is your experience when applying teaching technique in your classroom?
 - a. Do you enjoy using the technique? Why/why not?
 - b. Is there any difficulty teaching with the method? If yes, could you give example?
2. In your opinion, what are the pros and cons of the method used in the class?
3. Could you share your experience on how your students reacted when you taught with the technique?
 - a. Did your students ask any questions in the class?
 - b. If yes, what kind of information did they ask?
 - c. How did you respond to the question?
4. Did you notice any difficulty or uncomfortable feelings when you applied the techniques in your classroom?

Preparation

5. How did you prepare your lesson plan using the method with the given vocabulary list?
 - a. Is there any difficulty in preparing for the class?
6. How did you feel when students ask you a question?
 - a. Are you comfortable answering questions from students? Why/why not?
 - b. If not comfortable, how did you deal with the situation?

Save face

7. How would you react when your students disagree with your opinion?
 - a. Why did you react like that?
 - b. How did you deal with the situation?
8. How did you make your students interact with you and their classmates?

Kreng Jai

9. Did you call on your students to answer question or interact in the discussion?

- a. How did you feel when you call on your students?
- b. How did you deal with situation when your students are struggling to interact with others?

Appendix I: Interview Question (Student)

Overview of the class

1. Could you share your experience on how your teacher taught you in the class?
 - a. Did your teacher ask students any question in the class? If yes, what kind of information did they ask?
 - b. How did you respond to the question?
2. What is your experience in your classroom?
 - a. Do you enjoy being in the classroom with the instruction used by teacher? Why/why not?
 - b. Can you share some example that you enjoyed or not in the class?
 - c. Is there any difficulty in the class with the teaching method used? If yes, could you give examples?
3. In your opinion, what are the pros and cons of the technique used in the class?

Save face

4. How did you feel when you did not understand something in the class?
 - a. Who would you prefer to seek help from?
 - i. Did you seek help from your friends? Why or why not?
 - ii. Did you seek help from your teacher? Why or why not?
5. Did you answer question or interact in the discussion?
 - a. Did you volunteer to join the discussion or you were called on?
 - b. How did you feel when you were call on to answer a question or involved in the discussion?
6. How did you act when you disagree with your classmate?
 - a. Why did you react like that?

Kreng Jai

7. How would you react when you were disagreeing with your teacher's opinion?
 - a. Why did you react like that?
 - b. How did you deal with the situation?

8. How did you react when you have question about to the lesson in the class?
 - a. Did you ask your teacher?
 - i. At what point in time do you feel comfortable to ask a question?
During the explanation (with the whole class), after class
(individually with teacher)
 - ii. Why did you choose to deal with the problem like that?
9. Did you have difficulty or feel uncomfortable in asking a question of your teacher? Why is that so?

Appendix J : Pilot Test: Factor Analysis Results for Questionnaire

Communalities

	Initial	Extraction
Question 1 : General Info	1.000	.719
Question 2 : General Info	1.000	.738
Question 3 : General Info	1.000	.700
Question 4 : General Info	1.000	.678
Question 5 : Save Face	1.000	.720
Question 6 : Save Face	1.000	.690
Question 7 : Save Face	1.000	.628
Question 8 : Save Face	1.000	.430
Question 9 : Kreng Jai	1.000	.569
Question 10 : Kreng Jai	1.000	.618
Question 11 : Kreng Jai	1.000	.729
Question 12 : Kreng Jai	1.000	.352

Appendix K : Summary of Pretest and Posttest Reliability Analysis Results

Part of Test	Reliability Statistics	
	Pretest 1 and 2 (N=99)	Posttest 1 and 2 (N=99)
Dictation	0.839	0.829
Meaning	0.886	0.896
Function of word	0.710	0.928
Total	0.912	0.942

Appendix L : Material used in classroom

Mother's Secret

By: Deborah Lynn

Seven year old Eva could still remember that day. Mother and Daddy took her to the park and they ate hot dogs and drank cokes. Mother said that she had a secret and daddy had a funny smile on his face.

“A secret?” Eva asked. “Tell me please!”

It was then that she learned that she was going to be a big sister! She was so excited and when she got home she began putting all of her old toys and clothes in a basket.

“These are for the baby,” she told her mom and dad. “I am going to teach her how to play all of my games. It will be so fun to have a sister to play with” “Eva, the baby will be too little to play,” explained mother. “It will be a long time before you will be able to play with the baby because it will only eat and sleep at first. But you can help me. There will be a lot to do.”

Daddy said, “We don't know if the baby is a girl or a boy, Eva. We will have to wait to find out. If they put a pink hat on her we will know it's a girl.”

“I hope it's a girl,” said Eva. “Girls are more fun to play with.”

It seemed to take forever for the baby to come. Mother's tummy grew bigger and bigger until it looked like it was about to “pop”!

“The baby is growing inside my tummy, Eva,” explained mother. “When the baby is big enough it will be born. We will go to the hospital and the doctor will help.” Mom showed Eva the picture the doctor took of the baby.

“Wow!” Eva said in surprise.

One day mother said, “Look Eva, you can see the baby moving in my tummy!” Eva's mother put her small hand on her tummy and she could feel the baby moving, it was really neat! Eva smiled, she was so happy. Later when she was playing house she stuck a pillow in her shirt and pretended she was going to have a baby too! Mother and Daddy just laughed.

Mother's friends gave Eva's mom a surprise party; they called it a “Baby Shower”. They didn't take a shower or anything, they just brought presents to the baby and had cake to eat and punch to drink. The baby got lots of pretty gifts.

Finally, the big day came and everyone was happy. Aunt Rose took Eva to the hospital so she could see the baby, but she could not see her mother because she was busy having the baby. When the baby was born Eva was able to look through a window to see it. “It has a pink hat, that means it's a girl,” Eva said clapping her hands. “Her name is Serena,” said daddy with a smile. “Do you like that name, Eva?” Eva liked that name and she was going to love being a big sister.

Name: _____

Mother's Secret

By: Debora Lynn

Use the information in the story to answer the questions below.

1. What was Mother's secret?
 - A. She was going to get a new job.
 - B. They were getting a puppy.
 - C. They were moving to a new home.
 - D. Eva was going to be a big sister.

2. Where was the baby growing?
 - A. In Mother's tummy.
 - B. In the hospital.
 - C. Under a cabbage patch.
 - D. It doesn't need to grow.

3. Why did Mother put Eva's hand on her tummy?
 - A. So she would know where Eva was.
 - B. Because her hands were cold.
 - C. So she could feel the baby move.
 - D. Because Eva's mom needed help.

4. What was the name of the party Mother's friends gave her?
 - A. A Birthday Party.
 - B. A Baby Shower.
 - C. A Surprise Party.
 - D. A Tea Party.

5. How did Eva know the baby was a girl?
 - A. Because her name was Serena.
 - B. Because she wanted a girl.
 - C. Because her dad told her.
 - D. Because the baby had a pink hat.

ANSWER KEY

Mother's Secret

By: Deborah Lynn

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