THE EFFECTS OF COLLABORATIVE TASK-BASED APPROACH WITH AND WITHOUT NETWORK-BASED LANGUAGE TEACHING ON UNDERGRADUATE STUDENTS' ENGLISH LANGUAGE ACHIEVEMENT AND STUDENT ENGAGEMENT

Mr. Sarapol Chirasawadi

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วิทยานิพนธ์นี้เป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปริญญาศิลปศาสตรดุษฎีบัณฑิต สาขาวิชาภาษาอังกฤษเป็นภาษานานาชาติ (สหสาขาวิชา) บัณฑิตวิทยาลัย จุฬาลงกรณ์มหาวิทยาลัย ปีการศึกษา 2551 ลิขสิทธิ์ของจุฬาลงกรณ์มหาวิทยาลัย

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สรพล จิระสวัสดิ์ : ผลกระทบของการใช้และไม่ใช้เครือข่ายคอมพิวเตอร์ในการสอนตามแนวคิดการ เรียนรู้แบบร่วมงานต่อผลสัมฤทธิ์ในการเรียนภาษาอังกฤษและสภาวะผูกพันของนักศึกษาระดับ ปริญญาบัณฑิต. (THE EFFECTS OF COLLABORATIVE TASK-BASED APPROACH WITH AND WITHOUT NETWORK-BASED LANGUAGE TEACHING ON UNDERGRADUATE STUDENTS' ENGLISH LANGUAGE ACHIEVEMENT AND STUDENT ENGAGEMENT) อ.ที่ปรึกษา วิทยานิพนธ์หลัก : รศ.ดร.สุพัฒน์ สุกมลสันต์, 337หน้า.

้งานวิจัยนี้มีวัตถประสงค์ที่สำคัญคือ 1) เพื่อเปรียบเทียบผลกระทบของการใช้และไม่ใช้เครือข่าย คอมพิวเตอร์ในการสอนตามแนวคิดการเรียนรู้แบบร่วมงานต่อผลสัมฤทธิ์ในการเรียนภาษาอังกฤษ 2) เพื่อ เปรียบเทียบผลกระทบและการพัฒนาสภาวะผูกพันของนักศึกษาทั้งสองกลุ่ม และ 3) เพื่อหาความสัมพันธ์ ระหว่างผลส้มฤทธิ์ในการเรียนภาษาอังกฤษและสภาวะผูกพันของนักศึกษา กลุ่มตัวอย่างได้แก่นักศึกษา ้โปรแกรมวิชาภาษาอังกฤษธุรกิจ ของมหาวิทยาลัยราชภัภูสวนดูสิต จำนวน 48 คน ที่ได้มาจากการสุ่มแบบ แล้วแบ่งออกเป็นสองกลุ่ม คือกลุ่มทดลองเพื่อเรียนภาษาอังกฤษโดยใช้เครือข่ายคอมพิวเตอร์ตาม เจาะจง แนวคิดการเรียนรู้แบบร่วมงาน และกลุ่มควบคุมเพื่อเรียนภาษาอังกฤษโดยไม่ใช้เครือข่ายคอมพิวเตอร์ จำนวน กลุ่มละ 24 คน ทั้งสองกลุ่มมีความสามารถพื้นฐานทางภาษาอังกฤษรวมทั้งลักษณะอื่นที่สำคัญไม่ต่างกัน เครื่องมือวิจัยประกอบด้วยแบบทดสอบผลสัมฤทธิ์ทางการเรียนภาษาอังกฤษ แบบประเมินตนเองด้านสภาวะ ผูกพันทางอารมณ์และสภาวะผูกพันทางพฤติกรรม แบบประเมินตนเองด้านสภาวะผูกพันทางกระบวนการคิด และแบบสัมภาษณ์เชิงลึก ข้อมูลที่ได้วิเคราะห์โดยโปรแกรม SPSS ด้วย t-test, Simple Correlation, Cohen's d และ Trend Analysis ผลการวิจัยสรุปได้ดังว่า ผลส้มฤทธิ์ในการเรียนภาษาอังกฤษของนักศึกษาทั้งสองกลุ่ม ต่างกันอย่างไม่มีนัยสำคัญ (p = 0.05) นักศึกษาที่เรียนโดยการใช้เครือข่ายคอมพิวเตอร์มีสภาวะผูกพันทาง พฤติกรรมและทางกระบวนการคิดสูงกว่านักศึกษาที่เรียนโดยไม่ใช้เครือข่ายคอมพิวเตอร์อย่างมีนัยสำคัญและมี ้ ผลกระทบขนาดกลาง (Cohen's d = 0.70 และ Cohen's d = 0.73, ตามลำดับ) แต่ทั้งสองกลุ่มมีสภาวะผูกพัน ทางอารมณ์ต่างกันอย่างไม่มีนัยสำคัญ นอกจากนี้พบว่ามีแนวโน้มรูปแบบผสมในสภาวะผูกพันทางกระบวนการ คิดทั้งในกลุ่มควบคุม (r =0.95, p < 0.05) และกลุ่มทดลอง (r =0.90, p < 0.05) ขณะที่แนวโน้มในรูปเส้นตรง ในสภาวะผูกพันทางพฤติกรรมในกลุ่มทดลองอาจเกิดขึ้นได้ (r = 0.74, p = 0.61) ผลสัมฤทธิ์ในการเรียน ภาษาอังกฤษไม่มีความสัมพันธ์อย่างมีนัยสำคัญกับสภาวะผูกพันในนักศึกษาทั้งสองกลุ่ม แนะนำให้พิจารณา ระดับความเชี่ยวชาญภาษาอังกฤษและนิสัยการเรียนของนักศึกษาก่อนนำการใช้เครือข่ายคอมพิวเตอร์ในการ สอนตามแนวคิดการเรียนรู้แบบร่วมงานมาใช้ในการสอนวิชาภาษาอังกฤษอื่น

สาขาวิชา <u>ภาษาอังกฤษเป็นภาษานานาชาติ</u>	ถายมือชื่อนิสิต
ปีการศึกษา <u>2551</u>	ลายมือชื่ออ.ที่ปรึกษาวิทยานิพนธ์

##4789686020 : MAJOR ENGLISH AS AN INTERNATIONAL LANGUAGE KEYWORDS : COLLABORATIVE LANGUAGE LEARNING / TASK-BASED LANGUAGE TEACHING / COLLBORATIVE TASK-BASED APPROACH / NETWORK-BASED LANGUAGE TEACHING / STUDENT ENGAGEMENT

SARAPOL CHIRASAWADI : THE EFFECTS OF COLLABORATIVE TASK-BASED APPROACH WITH AND WITHOUT NETWORK-BASED LANGUAGE TEACHING ON UNDERGRADUATE STUDENTS' ENGLISH LANGUAGE ACHIEVEMENT AND STUDENT ENGAGEMENT. THESIS ADVISOR : ASSOC. PROF. SUPHAT SUKAMOLSON, Ph.D., 337 pp.

The main objectives of the research study were: 1) to compare the effects of Collaborative Task-Based Approach (CTBA) with, and without, Network-Based Language Teaching (NBLT) on students' English language achievement; 2) to compare the effects and the developments of the effect of CTBA with, and without, NBLT on student engagement; and, 3) to find the relationship between English language achievement and student engagement. The subjects in this study were 48 students from Business English Program, Suan Dusit Rajabhat University. The subjects were purposively selected, and randomly divided into the experimental group, which was taught using CTBA with NBLT, and the control group which was taught using CTBA without NBLT. There were 24 subjects in each group. The subjects had insignificant differences in general English proficiency, and in other important characteristics. The research instruments included an English language achievement test, self-evaluated rating scale questionnaires for affective and behavioral assessment, as well as self-evaluated guiding questions for cognitive engagement assessment. In addition, group interviews were conducted to investigate student engagement in depth. Data were analyzed by SPSS with t-test, Simple Correlation, Cohen's d and Trend Analysis. The findings herein were concluded that 1) English language achievement in both groups was insignificantly different (p > 0.05); 2) the experimental group had behavioral engagement and cognitive engagement significantly higher than those of the control group (p < 0.05), with moderate effect size (Cohen's d = 0.70 and 0.73, respectively). However, the affective engagement in both groups was insignificantly different. The cognitive engagement trends were found in compound formation in both the control (r =0.95, p < 0.05) and the experimental groups (r =0.90, p < 0.05) (0.05), while the behavioral engagement trend was likely to occur in linear formation (r = 0.74, p = 0.61) in the experimental group; 3) the significant relationships between English language achievement and student engagement were not found in both groups. Students' English language proficiency and learning habits are suggested to be considered before CTBA with NBLT is to be implemented in other English courses.

Field of Study English as an International Language	Student's Signature :
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Table of Acronyms

Acronyms

Blog	Web log
CALL	Computer-Assisted Language Learning
CLL	Collaborative Language Learning
CLT	Communicative Language Teaching
CMC	CMC Computer-Mediated Communication
CTBA	Collaborative Task-Based Approach
CU-TEP	Chulalongkorn University Test of English Proficiency
EFL	English as a Foreign Language
ESL	English as a Second Language
GPA	Grade Point Average
IELTS	International English Language Testing System
IOC	Item-Objective Congruence
IRE	Initiation-Response-Evaluation
NBLT	Network-Based Language Teaching
NSSE	National Survey of Student Engagement
ONEC	Office of National Education Commission
ORIC	ORIC Office of Rajabhat Institutes Council
SDRU	Suan Dusit Rajabhat University
SLA	Second Language Acquisition
TBLT	Task-Based Language Teaching
TPR	Total Physical Response
WBI	Web-Based Instructions
WWW	World Wide Web

CHAPTER I INTRODUCTION

1. Rationale

In the knowledge economy, knowledge becomes outdated very rapidly, thus Thailand educational system in which teacher-centeredness predominated was considered obsolete (ADB, 2003; Yuthavong, 2003; UNESCO, 2004). Most of the teachers in that system still focused mainly on the so-called "talk and chalk" method in which teachers were the main source of knowledge and learners absorb knowledge by rote learning (Kaewdang, 1999). It was the economic crisis in 1997 that caused Thai society to look back and then to realize that something should be done with its educational system so that it could recover from bankruptcy and get back into the world economic competition again. In order to sustain Thailand's competitive potential in the world economy, in which capital and investment have no physical or ethnical boundary, learning should not be limited in the classroom where teachers are the main source of knowledge. According to Secretary-General of the Office of the National Education Commission (ONEC), Dr Rung Kaewdang, who was a driving force behind the National Education Act of 1999, Thai young generations should have cultivated "the skills of searching knowledge through self learning so that they can learn continually at any time and any place throughout lives" (Kaewdang, 1999). To achieve the main goal of educational reform, factors in three educational levels should be taken into consideration: national, institutional, and classroom levels.

1.1 The national level: the National Education Act of 1999

A concrete attempt for educational reform at the national level is the National Education Act 1999 (ONEC, 1999) which emphasizes the principle of educational reform as learning reform. The National Education Act, hereafter the Act, puts emphasis on learners, integration of knowledge, and learning process.

Section 22 of the Act focuses on learners. It states that "Education shall be based on the principle that all learners are capable of learning and self-development, and are regarded as being most important. The teaching-learning process shall aim at enabling the learners to develop themselves at their own pace and to the best of their potentiality" (ONEC, 1999: 10). To achieve this goal, it is proposed that teachers and learners must change their roles. Teachers should no longer be the source of knowledge who spoon-feed content to passive learners but should become facilitators who assist learners to construct knowledge themselves actively. Learners, therefore, should be more active, independent and responsible for the purposes and betterment of their own knowledge construction.

In the 21st century, knowledge and skills should not be learnt separately, but simultaneously. In this way, learners will not learn "about" each part of knowledge but learn "how" to adapt them to solve the problems in real life. Section 23 of the Act, which focuses on integration of knowledge, states that education through formal, non-formal, and informal approaches shall give emphases to knowledge, morality, the learning process, and integration of the following knowledge namely, knowledge about oneself and the relationship between oneself and other communities, science and technology, religions, art, culture, sports, Thai wisdom, as well as knowledge and skills necessary in pursuing one's career and a happy life, all depending on the appropriateness of each level of education (ONEC, 1999: 10).

Furthermore, in order to create sufficient human capital that has the potential for self development throughout life, cultivating lifelong learning literacy is a key aspect. Section 24 of the Act, which focuses on the learning process, states that in organizing the very necessary learning process, educational institutions and agencies concerned should provide:

- 1. materials and activities appropriate with the learner's interests and aptitudes, with individual differences in mind;
- training in the thinking process, management, and the application of knowledge for preventing and solving problems;
- activities for learners to draw from authentic experience and drills in practical work for complete mastery;
- 4. a balanced integration of subject matter, honesty, values, and desirable attributes;

- 5. the ambiance, environment, instructional media and facilities for learners to learn and be all-round persons, as well as benefit from research as part of the learning process;
- co-operation with parents, guardians, and all parties concerned in the communities so that learners are able to learn at all times and in all places (ONEC, 1999: 11).

1.2 The classroom level: the English for Mass Media course

Education in the classroom level refers to the teaching/learning components that actually exist in the classroom, namely teacher, learners, course content, teaching methods and procedures, materials, and the related environment. To have a clearer picture, the course entitled English for Mass Media was purposively chosen to be a sample of actual English classes that were practiced at present.

English for Mass Media is a core course for undergraduate students in the Business English program, Suan Dusit Rajabhat University (SDRU). The course description for English for Mass Media was written in 1993 by the Office of Rajabhat Institute Council, hereafter the ORIC (ORIC, 1993). The syllabi and courses taught in Rajabhat Institutes were designed by the ORIC and were identical throughout the country. Though SDRU has shifted its status from a Rajabhat Institute to a university and has had rights and freedom to design its own courses, the ORIC course descriptions are still used at present. Not only the course descriptions, but also the course syllabi, lesson plans, and teaching methods have not been changed for a considerable time. Therefore, the English for Mass Media course could not fulfill the requirements of the Act or the needs of the today's learners. Three main difficulties in the course are as follows:

- 1. Limited grammatical content in the syllabus,
- 2. Change of technology, and
- 3. Lack of critical thinking skill.

These key pointes are discussed below.

1. The limited contents in grammatical syllabus

Controlled by the course description, the syllabus is grammar-based and the content focused primarily on the syntax and lexis, usually found in newspapers. Students in this course were required to read news stories simply to identify the grammatical structures in headlines. Sentences in news leads are also read just to analyze and identify the subjects, main verbs, subject heads, and modifiers. Thus, English in the course is taught for language sake. The strength of this teaching method is that learners have more chance to focus fully on linguistic elements and vocabulary existing in printed media. However, the weakness is that the pedagogical tasks in this method are quite far away from real life activities. Learners are not required to pay any attention to domestic or international current events. Their background experience and attitudes toward situations happening in the world community are not involved in their learning per se.

2. The change of technology

Learning materials in the English for Mass Media course were prepared in advance and then were compiled into a textbook by teachers in charge. Though learners are asked to bring copies of local English newspapers to class from time to time, the newspapers are out-of-date due to an excuse of financial limitations. This has resulted in learners studying out-of-date news stories.

The world is changing rapidly; so are the printed media. Printing is no longer a sole option. Many newspapers, news networks, and magazines, both Thai and international, are moving into a new context, being that of networks. They have, for example, set up their own Web sites. The Internet allows them to update content quickly, to provide text content together with multimedia, to link related articles in other sources by hyperlinks, and to reach readers worldwide without physical boundary. For the sake of news readers, the online news possibly helps them reach

news stories that are up-to-date, various and more interesting than can be expected of a paper-based newspaper.

3. Lack of development of critical thinking skills

News, whilst it is supposed to be reported with an objective point of view, is sometimes mixed up with opinions, biases, or misunderstanding, either intentionally or unintentionally. "Malls closed to welcome mob," (ThaiPost, 2006). "Malls closed to avoid mob," (Komchadluek, 2006). The two different headlines from two different Thai newspapers reported the same political rally in Bangkok, Thailand in March 2006. These are good examples to confirm that media do not always report the objective facts to the readers and can send conflicting messages.

Thai students should be equipped to identify such reporting. They should be able to retrieve information from various sources, as well as to compare, share, interpret, criticize, and judge the reliability, validity, and authenticity of such information. Thailand, though it just recovered from an economic crisis, is now facing many other problems, such as social, politic, and economic. Educational reform, which was initiated after the economic crisis in 1997, is a way to prepare Thai people to survive problems. Now, with political turbulence, it is the right time for Thai students to learn, under guidance of the Act, in order to maximize their potentials for dealing with fierce competition in international trade, digital literacy in the age of information, critical thinking for media consumption, and liberal mindedness in term of accepting diversity.

As illustrated in Figure 1, if the educational reform proposed by the Act is thought of as the goals, and the difficulties addressed by the course of English for Mass Media are considered the needs, Information and Communication Technology (ICT) was chosen to the best solution for closing the gap between those goals and needs.

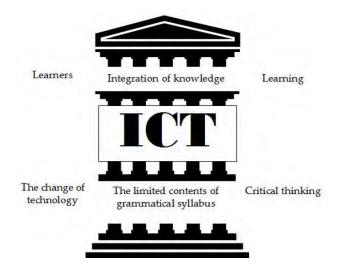


Figure 1: The roles of ICT in bridging the gap between the goals and needs

According to the Act, the goal of the educational reform is to craft Thai citizens who are able to develop themselves throughout life. To ensure that the goal would be achieved, ONEC has set up the National ICT Education Master plan which has a vision "that learners are able to use ICT as a tool for learning throughout their lives," (ONEC, 2002: 24). The objectives of the plan are as follows:

- enable the learner to acquire technological literacy and information literacy at a fundamental level in order to access and make use of ICT to investigate, collect, and process data from various sources, as well as to create new knowledge;
- integrate technological knowledge and information management skills to develop the ability to analyze, think creatively, solve problems, and work in teams;
- 3. encourage the learner to develop positive values, attitudes and ethics as well as accountability for using ICT, which will be useful to lifelong learning and analytical thinking processes;
- 4. increase learners' opportunity for using ICT for learning;
- enable schools to support the learner as the centre of the learning process in ICT-based learning. The school must adjust its use of technology as well as curriculum to suit the integration of ICT in school;

- 6. provide learners with opportunities to apply and develop ICT literacy in every course taken;
- ensure that the learning process is not confined to being within the classroom walls. Learners should have the opportunity to view the wide world through an ICT network, ICT literacy, and the development of positive attitudes towards ICT;
- 8. enable the learner to use ICT through the provision of computers and equipment adequate to the learner's needs, as well as increasing efficiency of available computers and equipment.

According to ONEC (2002), the objectives of the National ICT Education Master Plan are based directly on the advantages of ICT in the educational field as follows. ICT can:

- 1. provide effective communication between teachers and learners;
- 2. create more effective learning environment;
- increase access to information, authentic learning experience, and authentic materials;
- 4. increase student engagement;
- 5. improve learning efficiency and effectiveness.

Similarly to ONEC, UNESCO realizes the importance of digital literacy. In 2001, this prominent organization declared in the UNESCO Universal Declaration on Cultural Diversity that members were asked to implement this declaration by "encouraging 'digital literacy' and ensuring greater mastery of the new information and communication technologies, which should be seen both as educational discipline and as pedagogical tools capable of enhancing the effectiveness of educational service" (UNESCO, 2002: 5). UNESCO also encourages members to narrow the "digital divide" through "fostering access by the developing countries to the new technologies, by helping them to master information technologies and by facilitating the digital discrimination of endogenous cultural products and access by those countries to the educational, cultural, and scientific digital resources available worldwide" (UNESCO, 2002: 6).

The knowledge and skills to use ICT to retrieve information from various sources as well as having a high level thinking process with retrieved information have been widely accepted as a vital aspect of literacy for the 21st century and is called many terms, namely technology literacy and information literacy (ONEC, 2002), technology literacy (ITEA, 1996), information literacy (AASL & AECT, 1997), electronic literacy (Shetzer & Warschauer, 2000), and digital literacy (UNESCO, 2002). However, the ICT master plan suggested by ONEC (2002) per se could not help bridge the gap between the goals of educational reform and the needs of the English for Mass Media course, unless there is promptness and cooperation at the institutional level.

1.3 Institutional level: Suan Dusit Rajabaht University

SDRU is an example of an educational institute which widely implements technology to serve educational reform. The university sets its vision that it "... will integrate ICT for education and administration, systematically and effectively," (SDRU, 2006b) with a mission to " ...create graduates and develop teachers to a standard accepted by stakeholders and society by integrating ICT for education and administration effectively, efficiently, and with verifiable transparency; in order to compete with the world's torrent of change..." (SDRU, 2006a).

SDRU, formerly known as Rajabhat Institute Suan Dusit, is responsible for providing higher education for Thai people. The university is located in Dusit district, the center of Bangkok, in a small area of 31 rai. Despite space limitation at the main campus, the university provides higher education to 40,000 students, and is considered the largest institution of higher learning in Thailand, apart from the open universities, such as Ramkhamhaeng and Sukhothai Thammathirat (Fredrickson, 2002). To cope with the limitation of space, the university employs technology as a vital instrument for pedagogical and administrative management. All centers are linked together through a high speed fiber-optic network. With video conferencing, classes taught at the main campus are simultaneously broadcast to thousands of learners studying at the outlying centers. At present, Suan Dusit has totally 10 centers (Charansnitwong, educational in Bangkok Dusitphanitchayakarn,

Thanalongkorn, Busayamas, Pongsawat, Ranong 2, Rangnam, Lumpini, Santirat, and Sukhothai) and 11 educational centers in other provinces throughout the country (Chonburi, Pattaya, Prachin Buri, Nakorn Nayok, Pitsanulok, Lampang, Saraburi, Suphanburi, Nongkai, Hua Hin, and Trang).

As a two way communication, the ICT used allows SDRU students at the remote sites to ask questions, or have discussions, in the same way as the Bangkok students can. Moreover, with the high-speed fiber optic network, SDRU students can log in to the university's "Virtual Library," a library without books, but that is fully equipped with computers and servers, as well as databases. These can be accessed from centers or from home. The Virtual Library is run under the supervision of the university's Office of Academic Resources and Information Technology (ARIT). Many services provided by ARIT include news databases, journal databases, electronic books, electronic theses, electronic clips, and videos on demand. All of these services can be retrieved online. In addition, in 2006 all freshmen were provided with computer laptops equipped with wireless LAN. SDRU students can connect laptops to the virtual library, or to the Internet, via wireless access points which were installed throughout the university areas. An initial survey showed that freshmen accepted they gained some advantages from computer laptops (DusitPost, 2006). Images of ICT-enhanced environment in SDRU could be found in Appendix 1.

1.4 Issues before ICT implementation

Despite the goal in national level, which is to develop active autonomous learners of Thais, the needs in classroom level, and the readiness in institutional level, three major concerns should be put into consideration, providing ICT is planned to be implemented in Thai classrooms, specifically meaningful and collaborative context in which the ICT is to be implemented, the popularity of English language and Thai culture that possibly affect Thai students' learning.

Firstly, what should be kept in mind is that ICT per se does not significantly change any essential elements in learning. ICT is just a set of tools which simply facilitate the learning process. What counts is the ways that ICT is implemented into education meaningfully (Bowen, Zahner, Starnes, Rohacek, & Brazeal, 2003; Chen & McGrath, 2003; Garrett, 1991; Milliron & Miles, 2000; Warschauer, 2005). Because learning is about making connection (Cross, 1926 cited in Milliron & Miles, 2000), one mission of educational institutions is to encourage learners to make meaningful connections with content, and with each other in all levels of the cognitive processes. ICT has a crucial role in facilitating the capacity of faculty staff to engage learners in making connection quickly and conveniently. As a result, learners' learning experience and performance will improve (Milliron & Miles, 2000). If the faculty members do realize the importance of ICT in learning, and implement it in their teaching, there would be a potential that learners would have an opportunity to learn actively and meaningfully. On the other hand, if the faculty members do not do so, then computer laptops and the Internet connection would be used for simple office works, such as report typing, which require only a very low level of cognitive processes. Even worse, such ICT tools might be used for online gaming, chatting, or as a portal to pornography and gambling Websites.

Secondly, a major obstacle of accessing information on the Internet is language. In spite of the gigantic volume and diversity of information on the Internet, it is not really linguistically diverse. The English language dominates the Internet. Eighty per cent of the world's electronically stored information is in English, and 36 per cent of estimated users of the Internet communicate in English (British Council, 2006). In addition, 70 per cent of Web pages are published in English (Pimienta, 2005). The solutions to lessen English supremacy on the Internet, such as local language translation and construction of content in local languages, still require substantial time, effort, and funds. In the mean time, Thai students should receive education on both English and digital literacy. Students in Thailand who are empowered with English and digital literacy will be able to develop themselves throughout life, doing so autonomously by connecting themselves through ICT to the online communities and sources of information and knowledge.

Thirdly, scholars have demonstrated concerns over the implementation of Western, active, autonomous, independent education in Thailand. Hallinger and Kantamara (2001) view that there is a conflict between Thai culture and the notions in educational reform that possibly prevents the educational reform from success. Pagram and Pagram (2006) exhibit anxiety over negative effects from e-learning that might negatively affect Thai virtuous culture and values of Thai young generation.

Therefore, with a goal, needs, readiness, as well as possible obstacles of ICT implementation in Thai context, as previously mentioned, the research was conducted with the objectives which are described in detail in the next section.

2. Research Objectives

As previously expressed, ICT is just an instrument; the values of ICT do not rely solely on itself. Placing learners in a laboratory equipped with computers and the Internet connection does not guarantee that they will access, remember, understand, apply, analyze, evaluate information, and then later create some knowledge. In short, using ICT does not assure learning. The effectiveness of ICT is on how it is meaningfully implemented with learning theories, pedagogical approaches, and teaching techniques (Garrett, 1991). ICT has not changed any essential elements of learning process; it just helps facilitate and foster them (Milliron & Miles, 2000). As stated in Section 24 of the Act, it is still mainly the responsibility of educational institutions and faculty members to create activities and environments that allow learners the opportunities to engage in learning in an effective manner (ONEC, 1999).

Consequently, in this research, Task-Based Language Teaching (TBLT) and Collaborative Language Learning (CLL) were together implemented in an English course, the English for Mass Media course, as promising pedagogical approaches to engage learners. Also, Network-Based Language Teaching (NBLT) is used as a catalyst to enhance English language achievement and student engagement. It is claimed that ICT, a main component in NBLT, helps connect learners with content, contexts, and communities, more quickly, widely and conveniently than any other tools have done before (Kern & Warschauer, 2000). By doing so, learners have more opportunities to gain both English and digital literacy while they are engaging with meaningful tasks, collaboratively with their peers, their instructor, and other members in the learning communities.

However, it is impossible to judge a learner who regularly spends a great deal of time surfing the Internet and has routine online communication as one who is learning or is an engaged learner. That Web pages are opened does not imply that they are read. Even if they are read, there is still a question how reading Web pages supports learning in any way. Moreover, it is quite a bold and unhelpful statement to interpret the success of ICT integration from learners' scores in examinations. This is due to the following limitations of such examinations (Lally & De Laat, 2002: 1):

- Examination does not give a clear and detailed insight as to what type of teaching methods or techniques works and what does not work. It does not give any details which can be used later to improve teaching;
- Examination does not put learners' different needs into consideration. Thus, it cannot explain why some learners did well in the examination while some did not;
- 3. Examination cannot measure learning in the sense that it is processes, happening in time and space, within an individual and groups; and
- 4. Examination does not make connection with learning theories.

Given these limitations, the main goal of the research undertaken and detailed in this dissertation was to answer questions whether ICT helps Thai students learn better and, if so, in what ways. The research, therefore, studied the effects of NBLT implementation, not only on undergraduate students' language achievement, but also on student engagement, doing so in an English course in which meaningful tasks and a collaborative environment were integrated. The objectives of this research were formulated as follows:

1. to compare the effects of CTBA with, and without, NBLT on undergraduate students' English language achievement;

- 2. to compare the effects and the development of the effects of CTBA with, and without, NBLT on undergraduates' student engagement in three aspects:
 - 2.1 to compare the effects and the development of the effect of CTBA with, and without, NBLT on undergraduate students' affective engagement;
 - 2.2 to compare the effects and the development of the effect of CTBA with, and without, NBLT on undergraduate students' behavioral engagement; and
 - 2.3 to compare the effects and the development of the effect of CTBA with, and without, NBLT on undergraduate students' cognitive engagement;
- 3. to find relationship between English language achievement and student engagement of undergraduate students in three aspects;
 - 3.1 between English language achievement and undergraduate students' affective engagement;
 - 3.2 between English language achievement and undergraduate students' behavioral engagement; and
 - 3.3 between English language achievement and undergraduate students' cognitive engagement.

3. Research Questions

From the aforementioned research objectives, the research questions addressed in this study were as follows:

- 1. Does CTBA with NBLT have significant effects on undergraduate students' language achievement? If it does, what is the size of the effect?
- 2. Does CTBA with NBLT have any impact on undergraduate students' engagement? If it does, what is the magnitude of the effect size and is there any development of the effect?

In addressing the second question, three sub-questions are involved. Specifically:

- 2.1 Does CTBA with NBLT have any effect on undergraduate students' affective engagement? If it does, what is the size of the effect and is there any development of the effect?
- 2.2 Does CTBA with NBLT have any effect on undergraduate students' behavioral engagement? If it does, what is the size of the effect and is there any development of the effect?
- 2.3 Does CTBA with NBLT have effects on undergraduate students' cognitive engagement? If it does, what is the size of the effect and is there any development of the effect?
- 3. Is there a significant relationship between English language achievement and student engagement of the undergraduate students? If there is, what is the size of the effect?

In mentioning the third question, three sub-questions are involved. Specifically:

- 3.1 Is there a significant relationship between English language achievement and affective engagement of the undergraduate students? If there is, what is the effect size of the correlation?
- 3.2 Is there a significant relationship between English language achievement and behavioral engagement of the undergraduate students? If there is, what is the effect size of the correlation?
- 3.3 Is there a significant relationship between English language achievement and cognitive engagement of the undergraduate students in each group? If there is, what is the effect size of the correlation?

4. Research Hypotheses

According to the literature review which showed the promising effects of NBLT on student engagement but uncertain effects of NBLT on English language achievement due to the learning habits of Thai students, the hypotheses were reached as follows:

- The English language achievement of the undergraduate students who were taught using CTBA with NBLT was not significantly different from those who were taught without such an approach;
- 2. Student engagement of the undergraduate students who were taught using CTBA with NBLT was significantly higher than those who were taught without such an approach;
 - 2.1. Affective engagement of the undergraduate students who were taught using CTBA with NBLT was significantly higher than those who were taught without such an approach;
 - 2.2. Behavioral engagement of the undergraduate students who were taught using CTBA with NBLT was significantly higher than those who were taught without such an approach;
 - 2.3. Cognitive engagement of the undergraduate students who were taught using CTBA with NBLT was significantly higher than those who were taught without such an approach;
- There was not a significant correlation between the English language achievement and student engagement of the undergraduate students in each group;
 - 3.1. There was not a significant correlation between the English language achievement and affective engagement of the undergraduate students in each group;
 - 3.2. There was not a significant correlation between the English language achievement and behavioral engagement of the undergraduate students in each group;
 - 3.3. There was not a significant correlation between the English language achievement and cognitive engagement of the undergraduate students in each group.

5. Scope of the Study

Research reported in this dissertation was conducted to study the effects of CTBA with, and without, NBLT on undergraduate students' English language achievement and student engagement. The scope of this study, thus, is as follows:

- The subjects in this study were third-year students in the Business English Program of SDRU;
- 2. There were two dependent variables in this study;
- 3. English language achievement was the mastery of syntactic and lexical features usually found in newspaper news and articles;
- 4. Student engagement consisted of affective, behavioral and cognitive engagement;
- 5. The independent variable in this study was CTBA with, and without. NBLT;
- 6. The study focused mainly on academic-related student engagement in the English for Mass Media course only. (Student engagement at the classroom level in other courses, or student engagement at the school level, was beyond the scope of this study;) and,
- The data of student engagement and English language achievement were collected from above mentioned subjects while they were studying the English for Mass Media course during the second semester, academic year 2007.

6. Assumptions

In order to study student engagement, and to assess the degree of such engagement, various measurements were employed, such as self-evaluated questionnaires, guiding questions, semi-structured interviews, reflective journals, and observations. The questionnaires and the guiding questions were constructed in Thai in order to avoid any misunderstanding. The students' written contributions in response to the guiding questions were also required to be in Thai in order to help students to reflect upon their cognitive process accurately, as much as possible. Therefore, the assumptions in this study were as follows:

- 1. The students were willing to answer the regular questionnaires and guiding questions frankly; and
- 2. The cognitive process that occurred within subjects' minds were transcribed and presented into the written form accurately.

7. Limitations

The findings reported in this dissertation are not able to be generalized into other groups of Thai undergraduate students due to the following limitations:

- The subjects in this study were purposively selected from undergraduate students in SDRU Business English Program who enrolled in the English for Mass Media course. It was done so due to the appropriateness in research methodology. More details on the English for Mass Media course are available in Chapter III;
- 2. The numbers of the subjects in this research decreased after the research proposal was submitted. Some students quit the university, did not enroll in the course, or withdrew after the course had been running for a few weeks. Therefore, the number of subjects (48) was not sufficient to be a viable sample size of the whole population (120 students);
- 3. The data on student engagement were collected biweekly right after the course began, in order to study possible development. Therefore, limited by statistics used to analyze the data, in case that students did not attend the class for two consecutive weeks, their missing data on student engagement were replaced with the average scores of the whole group; and
- 4. The responses to the guiding questions in the form of reflective journal writing were found later in the study to be insufficient to support the findings. Students were required to write reflective journals totally five times and to submit them biweekly during the semester. However, the students gradually reduced their interest in contributing cognitive

reflection in their journals. To cope with this limitation, the instructor's observations and text analyses were applied to support the cognitive engagement results found by ways of the guiding questions and semi-structured interviews.

8. Definition of Terms

8.1 Collaborative Task-Based Approach

Collaborative Task-based Approach (CTBA) is a teaching approach which integrates the philosophy of Collaborative Language Learning (CLL) and the framework of two prominent Task-Based Language Teaching (TBLT) proponents, Jane Willis (Willis, 1996) and David Nunan (Nunan, 2004).

Based on the TBLT framework, the teaching procedure of weekly class in CTBA is composed of six steps that are schema building, controlled practice, language focus, tasks, presentation and wrap-up. With the procedure, students had chance to be exposed to the target language in contexts, as in schema building, and to learn the target language through using it collaboratively, communicatively and meaningfully, as in tasks, while at the same time, the explanations and exercises of lexical and syntactic features were not overlooked, as in language focus.

With CTBA, students were required to work in teams and to stay with their teams for the whole semester. Based on the goal of CLL which requires students to exercise their higher levels of cognitive processes in order to achieve non-fundamental knowledge, content and tasks in CTBA are organized into two orders, particularly order of open-endedness and order of cognitive complexity. With order of open-endedness, in each weekly class teaching procedure, the controlled practice, which required close-ended answers, came before the tasks, which required more open-ended answers. With order of cognitive complexity, tasks at the beginning of the semester required less complex cognitive processes to be completed than tasks at the end of the semester did. Without collaboration in teams, students could complete open-ended tasks and complex tasks with difficulty.

8.2 Network-Based Language Teaching

Network-Based Language Teaching (NBLT) refers to a teaching approach in which Information and Communications Technology (ICT) is employed to enhance the connection of learners to learning content, learning contexts and learning communities. Students who studied the English for Mass Media course with NBLT were required to receive the course contents online; to have interactive languagefocused exercises online; to read news stories from newspaper and news agency Web sites regularly; to use the Internet to help complete required tasks; to use other computer application programs, such as word processor or picture editor to help complete tasks, to present task outcomes online; to give their feedback on other students' work verbally, or in online written form; to collect their task outcomes in their electronic portfolios; to write their reflective writing online; and, to consult teacher via Computer-Mediated Communication (CMC) such as e-mailing, as an alternative channel of communication.

On the contrary, students who studied the English for Mass Media course without NBLT were required to receive content from the print textbook; to have language-focused exercises in the print textbook; to read news stories from print newspapers regularly; to use print newspapers to help finish required tasks; to present task outcomes to the class in hardcopy; to give their feedback to other students verbally; to collect their task outcomes in their folders; to write their reflective writing in their paper-based journals and collect them in portfolios; and, to have discussion with teacher face-to-face when they had problems related to the course.

8.3 English language achievement

The English language achievement refers to an ability of students, after receiving instructions in the English for Mass Media course for a period of 14 weeks, to answer questions taken from news and commentary articles in English newspapers correctly. English language achievement is measured by an achievement test, constructed by the researcher. The test took place in the English for Mass Media course final examination. Students in this research were required to have this test at

the end of the semester. The test was constructed in a form of objective multiplechoice test. The questions were divided into three parts to assess students' knowledge related to syntactic and lexical features frequently found in print mass media, as well as their reading comprehension ability. There were 20 items in each part and each item had four options with three distracters and one correct answer.

8.4 Student engagement

Student engagement refers to students' affective, behavioral, and cognitive aspects when they are engaged in specific learning tasks. When students are engaged, they read more, write more and interact more in positive ways with their teachers and peers. They also gain more essential skills and competency, such as critical thinking, problem solving, and effective communication. Student engagement in this study was categorized into three aspects: affective, behavioral, and cognitive engagement, the definitions of which are provided below.

8.4.1 Affective engagement

Affective engagement refers to students' emotions, attitudes, and values toward course elements, namely tasks, content, teaching methods, instructors, peers, and the classroom environment. Students affective engagement was assessed by five biweekly self-evaluated rating scale questionnaires and semi-structured interviews

8.4.2 Behavioral engagement

Behavioral engagement refers to students' behavior toward academic related activities, namely class attendance, preparation, attention, asking questions, contributions, and effort. The students' behavior were assessed through five biweekly self-evaluated rating scale questionnaires and semi-structured interviews.

8.4.3 Cognitive engagement

Cognitive engagement refers to the complexity of cognitive processes students applied to complete tasks. Cognitive engagement is divided into six levels, including remembering, understanding, applying, analyzing, evaluating, and creating, ordered from simple to complex. The students' cognitive engagement was assessed through five biweekly guiding questions and semi-structured interviews.

8.5 The English for Mass Media course

The English for Mass Media course is a required course that all SDRU Business English program students have to enroll in. Different from the traditional course objectives which is based on the Office of Rajabhat Institutes Council (ORIC) course description and focuses exclusively on syntactic and lexical features in print media such as newspapers, the newly-revised course objectives implemented in this study focuses on students' language proficiency in all four skills, their higher-order cognitive processes, exercising collaboratively in groups and meaningfully with the current local and world affairs, yet, grammar structures were still emphasized.

The course conducted by the researcher under CTBA with NBLT in the control group and under CTBA without NBLT in the experimental group. The content includes parts of newspapers, news definition, types of news, news values, news writing styles, headlines structures, abbreviations, acronyms and vocabulary in headlines, noun phrases in headlines, 5Ws 1H questions in leads, headline and lead writing, direct and indirect quotes, validity and reliability, and news writing. Activities include reading comprehension exercises, news summary, news reports, news reviews and news writing.

8.6 Students

Students refer to third-year SDRU Business English program students who participated in the research reported in this dissertation. Students are purposively selected and randomly distributed into the control and the experimental group. Their limited English proficiency, digital literacy and learning habits of students in the both groups are insignificantly different.

9. Significance of the Study

This study had significance in relation to various groups of people: learners, faculty members and researchers, regardless of whether the hypotheses in this study were accepted or rejected.

9.1 If the hypotheses were accepted

In case that some, or all, hypotheses in this study were accepted, the significance of the study is as follows:

Theoretically, the study adds further evidence of the positive effects of NBLT on student engagement. The study investigated language learning from another perspective. The inner process (affective and cognitive engagement) and behavior (behavioral engagement) which were enhanced by NBLT whilst the subjects were actively constructing knowledge was studied together as a whole, adding more insight to the fields of student engagement and NBLT.

Pedagogically, the implementation of CLL and TBLT in the context of NBLT was beneficial for involved faculty members and educational personnel in relation to pedagogical design. SDRU has invested a lot of time, money, and effort in ICT: the devices, the conduits, and content. An ICT-based English course, in which language and higher-order thinking processes are both enhanced, would set a benchmark for other courses to follow.

Practically, under this NBLT, learners are more engaged, affectively, behaviorally, and cognitively. As a result, they have:

- 1. better learned English language within context, which is up to date and relevant to their language proficiency, interests, and needs; and
- 2. better learned the English language through authentic communication and collaboration with peers and instructors while their experiential knowledge is shared and valued.

9.2 If the hypotheses were rejected

Provided that some or all hypotheses in this study were rejected, the significance of the study was still as follows.

Theoretically, the study added further evidence of the positive effects of NBLT on English language achievement. The study also gave more insight to the field of student engagement. Firstly, this study assessed three types of engagement which are affective, behavioral, and cognitive engagement, simultaneously. Secondly, this study examined the effects of NBLT on student engagement in a specific classroom context in which the English language was learned through collaborative tasks (CLL with TBLT). These two issued have rarely been investigated before (Fredricks, Blumenfeld, & Paris, 2004).

Pedagogically, the faculty members of Suan Dusit Rajabhat University and other universities could use the teaching approach in this study as a guideline in implementing ICT in other courses. Moreover, the study gave more insight into NBLT in a Thai context. Any strengths, weaknesses, opportunities, and threats found in the study are valuable for the improvement of studies in the future.

Practically, students were expected to gain literacy and positive learning experience so that they could learn throughout life. The literacy and learning experience they should gain are as follows:

- digital literacy that they were able to use ICT to retrieve information from various sources;
- 2. higher-order thinking skills in order to compare, share, interpret, criticize, and judge the reliability, validity, and authenticity of information;
- 3. learning dependency so they could learn at any time and in any place by themselves; and
- 4. positive learning experience in which the English language was learned meaningfully with authentic texts, authentic tasks, and in authentic contexts.

10. Overviews of the Dissertation

In this dissertation, the review of related literature, namely the national Education Act of 1999, constructivism, Second Language Acquisition theories (SLA), CLL, TBLT, student engagement, CTBA, and NBLT is available in Chapter II. In Chapter III, the research methodology is described in detail including the information related to research design, population and subject selection, setting and timing, instructional instrument, steps of treatment, research instruments, data collection, and data analysis. The research findings, specifically the effects of CTBA with, and without, NBLT on English language achievement and student engagement, the development of the effects, the size of the effects, as well as relationships between English language achievement and student engagement are available in Chapter IV. Possible factors in insignificant differences in English language achievement test scores and appropriate teaching approach for the English for Mass Media course are discussed, as well as the recommendations for research consumers, and researchers who are interested in studying further, are presented in Chapter V.

Educational reform takes time in planning and implementing. Section 30 of the Act states that "Educational institutions shall develop effective learning processes. In so doing, they shall also encourage instructors to carry out research for developing suitable learning for learners at different levels of education," (ONEC, 1999). With such notions, the study of the effects of CTBA with NBLT in English for Mass Media course is another valuable step in developing learning theories into teaching practice, which are appropriate and practical to Thai learning contexts. It is a necessity to move forward for better education of Thais.

CHAPTER II LITERATURE REVIEW

As mentioned in Chapter I, ICT was selected as a key medium to assist educational reform in Thailand by developing Thai young generation to be active, autonomous, lifelong learners. In the research reported in this dissertation, ICT was implemented in an English course with an objective to bridge a gap between the objectives in the Act and the needs for improvement in an English course. In this chapter, the National Education Act, especially in section, 22, 23 and 24, which directly relate to learners, integration of knowledge and learning process, respectively is reviewed in section 1. Cognitive constructivism, and social constructivism, two learning theories supported by the Act are reviewed in section 2. The Second Language Acquisition (SLA) theories, and different perspectives on how language is learned, are reviewed in section 3. Collaborative Language Learning (CLL) and Task-Based Language Teaching (TBLT), two English language teaching approaches that support the notion of language acquisition through interaction and negotiation of meanings, were selected to be the model frameworks in this study. Similarities and differences of CLL, compared to Cooperative Language Learning in aspects of goals, content, class organization, tasks, learners' roles, teacher's roles, strengths and weaknesses, as well as rational for integration in this study are reviewed in section 4. In section 5, the detailed description of TBLT, particularly rationale for implementation in this study, types of tasks, task design, task implementation, learners' roles, as well as teacher's roles are reviewed. Student engagement, particularly types of student engagement, rationale for assessing student engagement and suggestions of how to create engagement in classrooms, are reviewed in section 6. In section 7, Collaborative Task-Based Approach (CTBA), an approach created from an integration of CLL and TBLT, for research reported in this dissertation is reviewed. Relationship background between language teaching and technology, as well as the detailed description of Network-Based Language Teaching (NBLT), particularly elements in NBLT, the relationship between NBLT and English language

achievement, student engagement, as well as suggestions and precaution for NBLT implementation are presented in section 8.

1. The National Education Act (1999)

As mentioned in the first chapter, with the ultimate goal to reform Thai education, the Act, which is considered a flagship for educational reform, gives emphases on three important aspects that are the learners (section 22), the integration of knowledge (section 23) and the learning process (section 24). With the ultimate goal to reform education in Thailand by creating "Lifelong education for all" and "Continuous development of the bodies of knowledge and learning processes," (ONEC, 1999), the learners became the focus of education.

The learner-centeredness refers to "the individual need of learners: the role of individual experience and the need to develop awareness, self-reflection, critical thinking, learner strategies and other qualities and skills that are believed to be important for learners to develop" (Richard, 2001:117). According to Clark (1987:49 cited in Richard 2001), to provide education is to provide learners with "learning experiences from which they can learn by their own efforts". Thus, teacher-centered approach and rote learning were considered obsolete and not suited for intelligence development. Teachers should change their role from being the main authority in the classroom into a facilitator, thereby helping learners to learn by giving them assistance and guiding them how to learn, where to obtain information and how to make use of it. Learners' roles should also be changed from being passive receivers who learn by rote, into learners who actively participate in learning tasks, collaboratively interact with peers and teachers, and experiment with learning. Learners should critically analyze and evaluate the contents as well as creatively construct work to reflect their true understanding (Kaewdang, 1999). Even though the term constructivism is not clearly stated in the Act, the notions of studentcenteredness, active learning, life-long learning, and collaborative learning, which are frequently mentioned in the Act, are common characteristics of constructivism. Thus, it is sensible to conclude that constructivist theories are preferred theoretical

framework for Thailand's educational reform. The prominent theories are discussed in the next section.

2. Constructivism

Constructivism is opposite to the traditional education, such as rote learning and the grammar-translation method in many aspects. Bruner (1996) criticized traditional education in saying that learning must occur only in schools, while textbooks and teachers are considered the most important factors in knowledge transferring process. From the perspective of traditional education, knowledge is objective facts that can be transferred from one to another.

On the contrary, constructivists view knowledge as subjective facts in that each person views the world with different perspectives. Knowledge is constructed by, and within, an individual based on his/her interpretation and previous experience. Learning is viewed as an active, constructive and cumulative process. To learn, one does not only remember information. Based on newly-received information and previous experience, they have to select and transform information, construct hypotheses and then prove them before making further decisions (Veldhuis-Dirmanse, 2002). This learning process allows learners to go beyond the given information; they can apply, analyze, evaluate and create new knowledge. Even though it is very difficult to mark clear differences among many distinguished trends in constructivism learning theories, two theories usually mentioned in literatures are cognitive constructivism and social constructivism (Veldhuis-Dirmanse, 2002; Chen, 2006a; Chen, 2006b). These are discussed in detail below.

2.1 Cognitive Constructivism

Cognitive constructivism is based on the work of Swiss developmental psychologist, Jean Piaget. Piaget's theory comes with two major parts: the developmental stage and the. The notion of the developmental stage predicts children's physical and mental development at different ages (Chen, 2006a) while the theory of development explains the process of cognitive development in children

(Chen, 2006a). Three aspects of Piaget's theory of cognitive development are as follows (Darling-Hammond, Orcutt, and Cheung, 2003).

- 1. Children's intelligence develops through stages. When children develop past a specific stage their ways of thinking and acting change.
- 2. Children develop "mental pictures" or "schemata" when they are developing through stages.
- 3. Children's mental pictures, or schemata, are formed when children interact with objects and people around them.

According to Piaget, knowledge is subjective fact. It is impossible to transfer information to children and then expect them to understand and use such information immediately. Children must construct their own knowledge by creating inner pictures that reflect their perspectives toward the outer real world. The new pictures would be integrated with pictures that already exist in their mind (Doolittle, 1999). Both new pictures and existing pictures must be adapted, expanded, changed, developed or even abandoned before they are properly combined together through two complementary processes known as "assimilation" and "accommodation" (Chen, 2006a). Therefore, the cognitive process plays a vital role in helping children explore and understand their worlds. Children must be the persons who construct the knowledge themselves. Knowledge cannot be transferred from one to another.

Children themselves are the key participants in their learning. They learn through having direct experience, making errors, and finding solutions. In addition, they tend to learn if they engage in authentic, interesting and meaningful activities because knowledge is constructed better when children interact in meaningful way with the world. The role of societies in Piagetian theory is minimal, and is primarily facilitative. Parents or teachers are actors whose role is merely to provide a rich environment for children to explore spontaneously. In a classroom, a teacher should place less emphasis on teaching specific skills or grammatical features but should place strong emphases on meaningful contextual learning. Technology, especially multimedia, plays a vital role by providing content, contexts and activities which are attractive, interesting and authentic. These features help expand learners' schemata, mental pictures, and, as a result, knowledge is constructed (Chen, 2006a).

2.2 Social Constructivism

The other well-known branch of constructivism is social constructivism. which is mainly based on the work of a Soviet cognitive psychologist, Lev Vygotsky. Though many aspects of Vygotsky's social constructivism overlap with Piaget's notions about how children learn, Vygotsky emphasized much more the effects of the social context on learning. In Piaget's cognitive constructivism, parents and teachers have a limited role while in Vygotsky's social constructivism, people including parents, teachers, other adults or even more experienced peers, share important roles in learning (Chen, 2006b). Learning is a result of interaction between the cognitive process and environment. However, differing from Pieget's cognitive constructivism, environment is not viewed simply as the physical world surrounding children, but also includes societal aspects, such as people, culture and language. In short, in Vygotsky's view, learning processes happen in cultural contexts and involve social interactions (Darling-Hammond, Rosso, Austin, Orcutt, & Martin, 2003).

According to Vygotsky, language has a vital role in learning. It is considered both a product and a tool which children acquire through interaction with people in the society and within societal context. The two notions of Vygotsky which explain the human mental development are social learning and mediation (Warschauer, 2005), as are addressed in the following section.

1. Social leaning

For social learning, Vygotsky explained that, every function in a child's cultural development happens twice: first on the social level while a child interacts with others (interpsychological) and later, on the individual level which happens inside the child mind (intrapsychological), (Warschauer, 2005). Vygotsky believed that learning takes place through a form of apprenticeship. Individual development occurs in a contextual moment of activities assisted by the more skilled person, such

as the interaction between a child and parents, or learners and a teacher. This type of interaction allows the less skilled person to advance through the "Zone of Proximal Development" or ZPD. Simply speaking, ZPD is the set of knowledge that the learners have the ability to learn currently, but does not yet possess (Darling-Hammond, Austin, Orcutt, & Martin, 2003). It is a teacher's responsibility to assess learners' understanding and to locate the point where learners need assistance in the ZPD. The teacher can help such learners to progress through ZPD through "scaffolding".

The term scaffolding was introduced by Wood, Bruner, and Ross (1976 cited in Cheyne & Tarulli, 1999) and they described it as a process that enables one to solve a problem, carry out a task, or achieve a goal that would be beyond their efforts without assistance. Mercer and Fisher (1993 cited in Verenikina, 2003) suggested that the major goal of scaffolding in teaching is transferring responsibility for the tasks to the learners. Depending on the collaboration between teacher and learners in constructing knowledge and skills, the scaffolding tasks would encourage learners to complete tasks which they would not have completed on their own; bring the learners to a state of competence which will enable them to complete such a task on their own; and give products as evidence in showing that learners have achieved higher competence. Scaffolding can be regarded as adult support in various forms, such as modeling, giving guidelines, providing samples, keeping attention focused, asking questions and dividing a large complex task into smaller and simpler ones (Verenikina, 2003). However, despite this support, it is still learners themselves who actually construct the knowledge.

2. Mediation

According to Vygotsky, human activities are mediated by tools or signs. Tools or "mediation means" do not simply facilitate action, but rather integrate with the behavior of the users and change the ways and structure of their thinking (Warschauer, 2005). The tools which the society provides to children include cultural history, social context, and language (Chen, 2006b). Adults, such as parents and teachers, pass the tools to children through interaction, either speech or action.

Vygotsky proposed that language is a vital tool for human mental development. Children solve their problems through speech. When children are thinking to solve a problem, they say their thought out loud. When they grow up, the private talk still exists but it is internalized into their mind. Language, therefore, plays a vital role in learning because it helps promote thinking, develop reasoning and support cultural activities (Darling-Hammond, Austin et al., 2003).

To conclude, from both significant perspectives on constructivism, learning should be an active, creative, and socially interactive process. Learners must be allowed to access to resources and acquire knowledge rather than be forced to function as passive recipients of instructions. Therefore, according to constructivism, learning is viewed as:

- 1. an active and collaborative process of knowledge construction;
- 2. an autonomous process, driven by the learners' expectations, goals, existing schema and intentions;
- a process of experimentation based on previous knowledge and experience;
- 4. a process of socially negotiated construction of meaning; and
- 5. a process which must be supported by a rich learning environment of in real life and authentic situations.

In this section, two major constructivist theories have been reviewed. However, constructivism is a theory which helps explain human leaning process in general. In order to understand the second language acquisition process, as is relevant to Thailand, the theories of second language acquisition are reviewed in the next section.

3. Second Language Acquisition

Though both cognitive constructivism and social constructivism have no direct link with Second Language Acquisition (SLA) theories, the notions in constructivism, such as the roles of cognitive process, of language as a tool and product, and of social interaction, seem to share the key factors with the theories. In this section, some major perspectives on SLA theories are presented, particularly those that are structural, cognitive and socio-cognitive perspectives.

3.1 Language acquisition through structural perspective

Through the developmental path of SLA theories, many notions have been accepted, revised, adapted and even rejected. Behaviorism was no longer popularly accepted due to the fact that human beings do not acquire language through a process of stimulus, response and reinforcement. The theory was badly attacked on its inability to explain a phenomenon that children can understand and produce sentences which adults have not taught them before. This fact rejects the idea that language is learned through imitation and habit formation (Lightbrown & Spada, 1996).

3.2 Language acquisition through cognitive perspective

The next notion that influenced SLA theories is Noam Chomsky's innatist theory and Stephen Krashen's monitor model. Chomsky's innatist theory and his notions of Language Acquisition Device (LAD) and Universal Grammar (UG) are attempts to explain why children can produce unlimited linguistic outputs from limited input they receive. Chomsky claims that all children's language development is biologically programmed by a device called Language Acquisition Device (LAD), which is later mentioned as Universal Grammar (UG). The LAD and UG are considered to consist of a set of basic linguistic structures which are common to all human languages. Similarly to other physical and mental development, children automatically develop their language ability when they reach appropriate developmental stage. The society, such as parents, has only a limited role by to providing linguistic samples to trigger children's UG. The development mostly depends on children's cognitive process in order to assimilate and accommodate the basic structure in their brain with structure of the language they hear in the outer environment (Lightbrown & Spada, 1996). Though Chomsky's innatist theory is not a SLA theory, his notions are similar to the creative construction theory of SLA. The most influential and well known creative construction theory was presented by Stephen Krashen and was called the "monitor model" (Krashen, 1982). The main idea of this model is that language acquisition cannot be acquired through teaching-learning process. Language learners acquire language only by subconsciously receiving comprehensible inputs, which are messages that they can understand, but cannot produce, when they engage in meaningful interaction in the second language. Productive skills, such as speaking or writing are not considered important for language acquisition in Krashen's model. They are considered results of the learning- acquisition process, rather than causes or stages necessary for learning and acquisition (Lightbrown & Spada, 1996).

3.3 Language acquisition through socio-cognitive perspective

Both the notions belonging to Chomsky and Krashen were criticized. Chomsky's focus mainly on linguistic competence was disputed by Dell Hymes' notion of communicative competence. Hymes pointed out that only linguistic competence is not enough (Hymes, 1974). In order to understand and speak a language correctly, knowledge of vocabulary and grammar is not enough; the appropriateness in using such words and grammars in specific contexts is necessarily required as he presented in his SPEAKING model. For Hymes, society functions as a container, and culture, its contents (Matsuoka & Evans, 2004). The SPEAKING model, as used to assess the appropriateness of conversation is comprised of eight factors that are Setting and Scene, Participants, Ends, Act Sequence, Key, Instrumentalities, Norms, as well as Genre. Moreover, in 1980, Canale and Swain suggested that in order to communicate effectively and efficiently, one must acquire communicative competence (Warschauer, 2005). The communicative competence is comprised of four types of competence that are grammatical, sociolinguistic, discourse, and strategic competence (Richards & Schmidt, 2002).

In addition, Krashen's idea that only comprehensible input will enable learners to produce grammatical output was also rejected by Merrill Swain in 1985 (Swain, 1985; Nunan, 2004). Language production needs cognitive processes which are different and more complex from one for comprehension. It is possible that learners understand the meaning from other factors, such as tones, gestures or context by overlooking the grammatical accuracy. Therefore, Swain suggested that to acquire language, learners must have chance to produce target language. From a similar perspective supporting a significant role of output in language acquisition, Michael Long proposes that linguistic conversation adjustment, as known as negotiation of meaning, promotes comprehensible input and later comprehensible input activates language acquisition (Long, 1985; Nunan, 2004). Negotiation of meaning is a process that interlocutors are trying to reach the mutual understanding between or among them. Some samples of negotiation of meaning are comprehension check, clarification request, self-repetition and paraphrase (Lightbrown & Spada, 1996).

In conclusion, language acquisition theories have changed dramatically from the early 20th century to the 21st century. From the structural perspective to both the cognitive perspective and the socio-cognitive perspective, language is currently accepted as a social and cognitive phenomenon and is developed through social interaction and assimilation of others' speech. From the changing perspectives of how language is learned, language instruction approaches must also change. According to Kern and Warschauer (2004), language teaching is not viewed as simply providing stimulus-response-reinforcement or comprehensible inputs but rather providing:

- 1. authentic situations where social discourse exist; and,
- 2. activities which learners could adapt to situations which they might later encounter outside the classroom.

It should be borne in mind that constructivism and SLA are, simply, theories of knowledge and language acquisition, and not pedagogical approaches (Doolittle, 1999). The theories, simply, help explain how people learn. It is necessary that teachers should know the theories and then encourage learners to engage in knowledge construction. Therefore, a teacher's main instructional responsibilities are creating activities and environments that provide learners opportunities to engage in learning (Darling-Hammond, Rosso et al., 2003; Kern & Warschauer, 2004; ONEC, 1999). Based on constructivism, Darling-Hammond and her colleagues (2003) have

given a guideline for teachers to organize environment, knowledge, information, activities, as well as learners, as follows:

1. To organize environment

Teachers should set up learning environments in which various learning materials, authentic tasks and an authentic audience are integrated together. Firstly, rich and various learning materials will provide learners the opportunity to have hands-on experience with the world around them. Secondly, authentic tasks will engage learners in active and complex cognitive activities such as writing and talking about ideas, creating demonstrations, solving complex problems and creating projects that require knowledge integration. Thirdly, the authentic audience will give learners the chance to discuss their ideas, share their experiences, and reflect on their learning, as well as become a source of knowledge for other learners.

2. To organize knowledge, information, activities

Information provided in classrooms should be meaningful and relevant to learners' experience and prior knowledge. Understanding is highly possible if learners are able to see the links between concepts. Thus, teachers can assist them in many ways, such as by providing scaffolding instructions, meaningful samples, or constructive feedback which enables learners to revise and improve their work. Tasks should be appropriate to learners' levels and, at the same time, learners should be taught how to plan and monitor their learning when they encounter with complex tasks. Moreover, to be specific, tasks should be open-ended, intrinsically motivating, challenging, and requiring a range of skills and abilities to complete.

3. To organize people

As mentioned, learning occurs in cultural contexts and with social interaction. Learners learn in groups and learn from others, either peers, teachers, or people outside the classroom. Effective teachers should set up environments which are emotionally safe, productive and collaborative. Tasks should be done collaboratively in groups, and each member of the group should be encouraged to share their ideas in order to produce the output required by the tasks. Moreover, teachers should encourage participation of the entire group by distinguishing differences in learners' competencies and provide differing roles according to their strengths. This will help learners, such as those whose academic and social status is lower than others, feel more comfortable so that they are more willing to contribute ideas and participate in learning.

From the literature review of the learning theories in Constructivism, SLA theories and guidelines for pedagogical practice, therefore, Collaborative Language Learning (CLL) and Task-Based Language Teaching (TBLT) were chosen to be implemented in this study as promising pedagogical approaches to engage students. Both approaches are reviewed in the following sections, respectively.

4. Collaborative Language Learning

The Longman Dictionary of Language Teaching and Applied Linguistics defines the term Cooperative Language Learning (CLL) as language teaching in which cooperative learning principles are integrated (Richards & Schmidt, 2002). However, in the same book, the term Collaborative Language Learning is left undefined. In another book dedicated to Collaborative Language Learning entitled Collaborative Language Learning and Teaching, edited by David Nunan, the term is again undefined explicitly (Nunan, 1992b). Therefore, in order to reach a mutual understanding in this study, the term Collaborative Language Learning is a language teaching approach in which collaborative learning principles are applied while CLL stands for Collaborative Language Learning.

The term "cooperative" learning and "collaborative" learning are sometimes used interchangeably by involved educational personnel due to the fact that both pedagogical approaches are based on constructivism theory (Panitz, 1997). The constructivism theory suggests that knowledge could not be transferred from a teacher to passive learners. Instead, it must be discovered, transformed and constructed actively by learners themselves. The responsibilities of educational personnel are to create conditions in which cooperative/collaborative contexts and engaging tasks facilitate learners to construct their own understanding through active cognitive processes (ONEC, 1999; Darling-Hammond, Rosso et al., 2003; Kern & Warschauer, 2004). Both cooperative and collaborative learning favors active learners working together in pairs or groups in order to complete a specific task. These shared characteristics make cooperative and collaborative learning, at first glance, look similar.

However, many scholars point out that these two approaches are different in many aspects (Bruffee, 1995; Rockwood, 1995; Panitz, 1997). McInerney and Roberts (2002) defines "collaboration" as working in a group to achieve a common goal while contribution of each individual to the whole is respected. On the other hand, Olsen and Kagan (1992) define "cooperative" learning as group learning activities in which learning is dependent on social exchange of information between members in groups and in which each member must be responsible to his/her own learning, while at the same time increasing the learning of others.

In addition, Ted Panitz (1997) suggests definitions for the terms cooperation and collaboration as follows. Cooperation is defined as "a structure of interaction designed to facilitate the accomplishment of a specific end product or goal through people working together in groups". On the contrary, collaboration is "a philosophy of interaction and personal life style where individuals are responsible for their actions, including learning and respect the abilities and contributions of their peers." Panitz (1997) clarifies his definition that people with a collaborative philosophy will deal with other people with respect of their individual abilities and contributions. This philosophy can be applied into other contexts outside classrooms, such as business meetings, local communities and even families. On the other hand, cooperative learning is, simply, a set of processes which help people to work together in order to accomplish a specific task. Without emphasis on the contributions from different perspectives, and expertise of individuals, learners in cooperative learning work together as single person just to achieve a common goal (Panitz, 1997).

4.1 Comparison of cooperative and collaborative learning

Cooperative and collaborative learning have both strengths and weaknesses. In order to clarify the rationale of integrating collaborative learning in this study, but not the cooperative learning, it is necessary to understand the similarities and differences of the two approaches. The aspects of the two approaches will be discussed and compared in detail, starting from goals, content, tasks, learners, teacher, strengths and weaknesses, respectively.

4.1.1 Goals

According to Johnson, Johnson, and Holubec (1994:2 cited in Richards & Rodgers, 2001), the goals of cooperative learning are:

- 1. to raise the achievement of all learners;
- 2. to build positive relationship among learners;
- 3. to provide learners positive experience necessary for social, psychological and cognitive development; and
- 4. to replace competitive environment in schools with cooperative one.

Moreover, because the target group of cooperative learning is primary and secondary students, another important goal of the approach is to provide opportunities for them to work together successfully on fundamental knowledge that they are supposed to master. On the other hand, collaborative learning is aimed for college or university students. Though the goal of the approach is also to help students to work together on important issues, collaborative learning focuses more on nonfundamental knowledge which requires higher level and more complex cognitive processes for conceptual rethinking which are necessarily required in higher education (Bruffee, 1995).

4.1.2 Content

Based on Constructivism theory, learning occurs through both passive acceptance of knowledge from experts, and active cognitive process within learners. Thus, in schools, knowledge is a result of interactive communication among learners, and between learners and experts in cooperative/collaborative environment (Panitz, 1997). However, knowledge learned in cooperative and collaborative learning is different types of knowledge. Knowledge suitable for cooperative learning is fundamental knowledge, while for collaborative learning it is non-fundamental knowledge. Fundamental knowledge is knowledge socially judged that it is factual or true. On the contrary, the non-fundamental knowledge has dubious, or ambiguous, answers which require concrete reasoning, complex cognitive processes and welldeveloped judgment to arrive at an endpoint (Bruffee, 1995). In short, answers for questions of fundamental knowledge are likely to be more controversial and openended.

4.1.3 Class organization and tasks

The success of cooperative learning depends, essentially, on the organization of pedagogical conditions. A cooperative class should be carefully planned and structured so that it could motivate learners to interact with each other and facilitate learning (Richards & Rodgers, 2001). Olsen and Kagan (1992) suggest five conditions which are essential for group learning in cooperative classroom that are positive independence, group formation, individual accountability, social skills and structuring and structures. The details of each condition are as follows:

- 1. Positive independence refers to the feeling of involvement within the group;
- Group formation refers to factors involving with group setting such as the size of the group, assigning learners to groups, and assigning roles to each learner in groups;

- 3. Individual accountability refers to responsibility that each individual has towards groups;
- Social skills refer to skills needed for interacting with other members in the group. Sometimes, explicit instructions for social skills might need for effective outcome of cooperation; and
- 5. Structuring and structures refer to the way tasks are set up to maximize interactions within groups.

Many types of tasks designed for cooperative learning are based on the mentioned conditions such as Three-Step Interview, Roundtable, Think-Pair-Share, Solve-Pair-Share, and Numbered Heads (Olsen & Kagan, 1992). Coelho (1992 cited in Richards & Rogers, 2001) classifies tasks in the order of authority assigned to learners and the cognitive process required. Coelho postulates three types of task: 1) Team practice from common inputs 2) Jigsaw task from different but predetermined inputs and 3) Cooperative projects: topics/resources selected by learners. From the conditions required, and the samples of tasks above, it can be concluded that tasks and activities in cooperative learning are rigidly structured. Moreover, due to the nature of fundamental knowledge, activities and tasks in cooperative learning are more close-ended and likely to already have mutually agreed answers.

On the contrary, because tasks and activities in collaborative learning are designed with a goal for non-fundamental knowledge achievement, they are more loosely structured. It is not only the class management and the learning outcome that differentiate cooperative learning from collaborative learning, Dillenbourg, Baker, Blaye, & O'Malley, 1995) further adds that the difference between collaboration and cooperation depends on the ways the tasks are divided, In cooperation, the task is clearly divided into independent subtasks and cooperation is only required when partial sub-tasks are put together. Members in groups have no necessity to communicate with each other until their shares are merged. On the other hand, in collaboration, the tasks must be solved together by the members who share a similar problem. Contribution of knowledge from each member, and communication between them are crucial in order to solve such the problem. An example of collaboration is a differential diagnostic whereby a group of physicians work together in order to diagnose a patient's unsolved disease. The diagnosis to solve the disease is counted as non-fundamental knowledge and the physicians would solve the case with difficulty if they did not contribute their knowledge collaboratively.

4.1.4 Learner roles

The main role of a learner in cooperative and collaborative learning is to be a member of a group who must actively work together with other members on assigned tasks. Learners are required to work in teams and at the same time supervise their own learning (Richards & Rodgers, 2001). However, learners in cooperative learning are assigned roles more strictly by the teacher, such as tutors, checkers, recorders and information sharers, while in collaborative learning the role assignment depends mainly on the groups' decisions. Moreover, Bruffee (1995) suggested that, due to the nature of higher education and the non-fundamental knowledge, learners in collaborative learning are supposed not to be passive by accepting the authority of teachers and what the teachers teach without thinking about it carefully. Panitz (1997) claims that the undergraduate students should doubt everything happening in learning from the answers, to the ways to reach the answers, the questions asked, and even the instructors who transfer that knowledge. In addition, while cooperative learning aims to reduce competition among learners by implementing group work, collaborative learning shifts competition informally from *between* individuals to *among* groups.

4.1.5 Teacher roles

In cooperative learning, the teacher is considered the main authority in the classroom, while the teacher in collaborative learning distributes more authority and decision to learners in groups (Rockwood, 1995). Before the course starts, teachers in a cooperative class have to plan, prepare and create everything well in advance, namely the environment, classroom physical arrangement, learning goals, teaching plans, tasks, materials and time, as well as the plan to assign learners into groups and the roles of them (Johnson, Johnson & Holubec, 1994). Bruffee (1995) describes the activities of teachers in cooperative classrooms as follows:

- Teachers assign social roles to learners working in small groups. They intervene frequently and randomly while learners are working in groups;
- 2. They test learners at the end of group activities; and
- 3. They grade learners in groups as a whole for the correctness of assigned tasks.

Sometimes such teachers observe how frequently individuals participate in each group and choose learners randomly, quiz them, and assign their quiz grade to the whole group.

While teachers in cooperative classrooms try to make sure that learners participate equally, and fully, and the tasks are processed in the ways they want, teachers in collaborative learning let groups assign roles to their members and take more authority in their learning. Therefore, the roles of teachers in collaborative learning are additionally different from ones of cooperative learning as follows:

- 1. Teachers rarely intervene in working groups; and
- 2. Teachers grade learners individually from the product learners have learned collaboratively.

4.1.6 Strengths and weaknesses

Cooperative and collaborative learning have both strengths and weaknesses and could be considered as two farthest ends of the same continuum. The main strength of cooperative learning is that it can guarantee accountability of learners and the learning process due to rigid management and supervision. Learners and their learning are well and closely supervised, while the learning environment and tasks are well prepared and controlled. These strengths lead to its weaknesses in that most decision making is teacher-centered similar to traditional education. The controls in cooperative learning are more appropriate for primary or secondary school students, but might frustrate and discourage college and university students from learning. On the contrary, the strength of collaborative learning is it helps develop learners to be more autonomous, and articulate, as well as socially and intellectually mature. It, as well, helps students to actively construct their own non-fundamental knowledge through the process of inquiry, interaction and contribution. However, the weakness of collaborative learning is that it trades guaranteed accountability for learning autonomy.

To sum up, according to the review above, cooperative and collaborative learning are two different teaching approaches which are based on the similar notions of social constructivist theory. For cooperative learning, teachers are the main authority; learners are extrinsically motivated; knowledge is transmitted; and learning is tightly structured. In contrast, for collaborative learning, learners gain more authority and are intrinsically motivated; knowledge is constructed and learning is flexibly structured. The completed comparison is illustrated in the Table 1.

	Cooperative Learning	Collaborative Learning
Definitions	A structure of interaction	A philosophy of interaction and
	designed to facilitate the	personal life style where
	accomplishment of a goal	individuals are responsible for
	through people working together	their actions, including learning
	in groups	and respect the abilities and
		contributions of their peers
Theoretical	Cognitive and Social	Cognitive and Social
framework	Constructivism	Constructivism
Focus	Working together to learn	Working together to learn
Goals	To raise the achievement of all	Quite similar to ones of
	learners, who are either	cooperative learning except the
	academically strong or weak	collaborative learning focuses
		more on non-fundamental
	To build positive relationship	knowledge which requires
	among learners	higher and more complex
		cognitive process for conceptual

Table 1: Comparison of Cooperative and Collaborative Learning

	Cooperative Learning	Collaborative Learning
	To provide them the positive	rethinking which are required in
	experience necessary for social,	higher education
	psychological and cognitive	
	development	To increase collaboration
	To replace competitive	between groups members but at
	environment in schools with	the same time encourage
	cooperative one.	competition between groups
Content	Fundamental knowledge	Non-fundamental knowledge
Tasks/activities	More rigidly structured	Less structured than cooperative
	More close-ended and likely to	More open-ended and specific
	already have specific answers.	answers are not required
Learners	A member of a group	A member of a group
	actively works together with	actively works together with
	other members on assigned tasks	other members on assigned tasks
	Group roles are assigned more	Group roles are assigned less
	strictly by the teacher	strictly by the teacher
	Primary or secondary school	College or university students
	students	
Teachers	Teachers are the main authorities	Teacher role as the main
	who are able to organizing,	authority is diminished. Decisior
	supervise, observe, intervene,	making, responsibility, authority
	grade in order to make sure that	are distributed to learners.
	all learners perform as planned.	Teachers rarely intervene when
		they engage in activities.
Strengths	Accountability of learners and	Learners are to be more
	learning process are guaranteed	autonomous, articulate, and
	by teacher control.	socially and intellectually
		mature.
		Learners are to actively
		construct their own non-

	Cooperative Learning	Collaborative Learning
		fundamental knowledge.
Weaknesses	Rigid control might frustrate and	Guaranteed accountability is
	discourage learning of college	traded for learning autonomy
	and university students.	and social and intellectual
		maturity.

Integration of cooperative or collaborative learning into classroom practice depends on many factors such as learners' levels, learners' readiness, course content and social context. It might be appropriate to have learners learn fundamental knowledge and basic social skills through cooperative learning in primary schools but develop their critical thinking, reasoning skill, and liberal mind for diversity acceptance through collaborative learning in universities (Bruffee, 1995). Moreover, either cooperative or collaborative is selected, it should be borne in mind that it is not necessary to apply each approach as if it is at the farthest end of the continuum. Teachers should balance both approaches to suit best their contexts (Lee, 1997, cited in Panitz 1997).

4.2 Rationale for collaborative language learning

Cooperative and collaborative language learning provide many advantages to both general education and second/foreign language teaching, as are discussed in detail in the following sections.

4.2.1 General education field

Ted Panitz has listed total 59 benefits of cooperative/collaborative learning and categorized them into three fields: academic, social and psychological benefits (Panitz, 2001). The details of the advantages in these three fields are discussed as follows.

1. Academic advantages

With cooperation/collaboration, learners have chance to clarify their ideas through conversation, discussion and debate. These processes improve learners' critical thinking and communicative skills. The content knowledge is also detained longer through discussion. Cooperative/collaborative learning also supports learners' active learning. Learners take more responsibility in finding a resolution for the assigned tasks. Teachers are less likely to be considered the main source of knowledge while learners seek help from peers and other sources. Moreover, a study conducted by Slavin (1996, cited in McInerney & Roberts, 2002) presented that when learners worked in teams, they were more engaged; as a result, high-order thinking and critical reflections increase. In addition, cooperative/collaborative learning results in positive outcomes over competitive and individualistic learning (Johnson & Johnson, 1989). In an online context, cooperative/collaborative learning has advantages over individual learning due to the fact that individual learning isolates learners and at the same time it increases the costs for resources and technology (McInerney & Roberts, 2002).

2. Social advantages

Cooperative/collaborative learning helps create social support system for learners. By working together, learners are able to develop social interaction skills, foster a positive view about problems, and facilitate responsibility to themselves and the group. Collaborative learning, as well, builds an understanding of the diversity amongst peers. Learners learn to accept different ideas and learn from the different perspectives others. All both learn to lead and follow, while at the same time, trust is built and maintained. Cooperative/collaborative learning is also a method in which people of differences can work together, such as those from different ethnic groups, or genders (Johnson & Johnson, 1989; Panitz, 2001).

3. Psychological advantages

Collaborative learning can increase learners' self esteem. Working together can lower learners' anxiety and can enhance learners' satisfaction in the learning experience. Learners gain more personal ego-strength, self-confidence, independence, and autonomy (Johnson & Norem-Hebeisen, 1981 cited in Ng and Ma, 2002; Panitz, 2001).

4.2.2 Language teaching field

In the field of second and foreign language teaching, cooperative/collaborative language learning is viewed as a student-centered approach, which is an extension of the Communicative Language Teaching (CLT) principles. According to Richards and Rodgers (2001), the goals of cooperative language learning are as follows:

- 1. to provide learners opportunities to acquire second/foreign language naturally through interaction in pair/group activities;
- 2. to provide learners opportunities to develop learning and communication strategies through learning tasks; and
- to create emotionally safe classroom atmosphere in which learners' motivation is enhanced while their anxiety is lowered.

For language instructors, the cooperative/collaborative language learning provides many advantages, as follows:

- It is a flexible approach; teachers can implement the approach with various types of syllabus such as English for Specific Purposes, four skills, grammar-based, pronunciation and vocabulary;
- Variety of learning activities from other pedagogical approaches and tasks can be integrated conveniently with collaborative language learning approaches;

3. The activities can be customized in order to emphasize a particular linguistic feature namely lexical items, grammatical structures and language functions.

However, there are some disadvantages of CLL about which teachers should be aware of. CLL is setting learners to work together in groups, and there is a possibility that these problems might occur, such as: (Middlecamp, 2007).

- 1. Weak learners cannot follow the groups;
- 2. Strong learners dominate the group;
- 3. Passive and introverted learners feel uncomfortable in contributing their ideas;
- 4. Less motivated learners do not join group work; and
- 5. Hard-working learners think it is unfair that they have to take responsibility for all work while other less motivated learners get the same grade.

As discussed previously about the strengths and weakness of CLL, the weakness of CLL mentioned by Middlecamp (2007) is an exchange of accountability of learners and learning process for an opportunity to develop autonomous, articulate, and socially and intellectually mature learners. Teachers possibly lessen theses flaws with awareness and planning, though the intervention might contradict to the notions of CLL.

In this section, definitions, similarities and differences, and rationales, as well as advantages/disadvantages of cooperative/collaborative language learning were reviewed. Clearly, cooperative/collaborative learning is designed to encourage collaboration rather than competition, to develop high-level cognitive process, as well as to develop communicative competence through social interaction activities.

Cooperative learning and collaborative learning are two different teaching approaches; both of them are on the same continuum and share many similar characteristics, including advantages and disadvantages. It is the instructors' responsibility to balance the two approaches and apply them appropriately to their individual teaching/ learning context. However, collaboratively language learning was selected for this doctoral study, rather than the cooperative language learning, because collaborative language learning is more appropriate for learners in higher education, for whom non-fundamental knowledge and critical thinking skill are encouraged.

5. Task-Based Language Teaching

Based on constructivism and language acquisition theories already reviewed, it is generally accepted that the best way to learn any language is to use that language for communication. Task-Based Language Teaching (TBLT) is a teaching approach that supports and encourages learners to use a target language, communicatively, collaboratively, meaningfully and constructively. Therefore, TBLT was chosen to be another crucial pedagogical approach in this study.

According to Collins COBUILD Dictionary (2001), a task is an activity or piece of work which one has to do, usually as part of a larger project. In general, tasks are things people do in everyday life, such as painting a fence, dressing a child, filling out a form, or typing a letter (Long, 1985). However, tasks in language classrooms are defined differently. A teaching approach in which communicative and interactive tasks are implemented as the core for pedagogical planning and delivery is well known as TBLT (Richards & Schmidt, 2002). The tasks in TBLT classrooms are specifically called pedagogical tasks.

Such pedagogical tasks are "...activities where target language is used by the learners for a communicative purpose (goal) in order to achieve an outcome" (Willis, 1996: 23). Nunan (2004:4) added a definition to learning task that "... a pedagogical task is a piece of classroom work that involves learners in comprehending, manipulating, producing or interacting in the target language while their attention is focused on mobilizing their grammatical knowledge in order to express meaning, and in which the intention is to convey meaning rather than to manipulate form." Though the term "pedagogical task" (hereafter task) has been defined differently, there is mutual understanding that a task is an activity or goal which is completed by using language (Richards & Rodgers, 2001). From the definitions presented above, in

TBLT, learners are required to use the target language communicatively and/or collaboratively in order to complete tasks. The target language is mainly used as a tool for communication, not a subject in which grammar structures are solely studied.

5.1 Rationales of integrating TBLT in this study

Many advantages of task-based syllabus are found pedagogically when it is compared with other language syllabuses. Particularly:

- 1. When compared to the grammar-based syllabus, task-based syllabus focuses more on meaning and language usage rather than linguistic features (Nunan, 2004); and
- 2. When compared to the functional syllabus in which language is focused separately from context, learners with task-based syllabus have more chance to use language both functions and grammars in context for communicative purposes (Willis, 1996; Nunan, 2004).

Nunan (2004) also added some characteristics that explain why tasks are widely accepted and, thus, can be integrated in other teaching principles and practices. Specifically:

- 1. Tasks support learning to communicate through interaction in target language;
- 2. Tasks support using authentic materials in learning situations;
- 3. Tasks support the learners focus on the learning process;
- 4. Tasks support the integration of learners' experience with others' and with learning tasks; and
- 5. Tasks support linking with language used outside classroom.

However, it is worth mentioning that TBLT also has some disadvantages. TBLT is criticized in that it is not appropriate for beginning learners for many reasons, such as:

- 1. Learners might focus on and only learnt words or phrase rather than grammatical sentences (Willis 1996: 55). Some learners might use their first language when they experience some difficulty, or when the group feels impatient. Some learners might develop communication strategies, such as miming and using gestures. Achieving fluency at the expense of accuracy is a risk because the strategies may make learners fossilized before they can achieve the target language (Hatip, 2005);
- 2. TBLT is not what many learners expect and want from a language class. They might resist or object to this type of instruction (Hatip, 2005); and
- 3. The evaluation of TBLT can be very difficult due to the nature of TBLT in that prevents it from being measured by traditional and objective tests (Krahne 1987).

5.2 Types of tasks

SLA refers to the study of the processes through which learners acquire a new language. However, there are many hypotheses about how such acquisition occurs, and which are still being debated intensely by some researchers (Beatty, 2003). From the cognitive and socio-cognitive perspective, there are many hypotheses on factors that might affect language acquisition, such as Krashen's comprehensible input (1982), Swain's comprehensible output (1985), and Long's negotiation of meaning (1985), as already reviewed earlier in this chapter. Though the conclusion for these arguments appears far from being reached, TBLT is a promising teaching approach which encourages the use of all those language acquisition factors. However, the experts are still discussing what characteristics in tasks would effectively, and efficiently, support language acquisition the most. Of course, the different characteristics in tasks results in different types of tasks.

In this regard, Pica, Kanagy and Falodun (1993) categorized tasks into five types, that are jigsaw, information gap, problem-solving, decision making and opinion exchange. The details of these are as follows:

- 1. Jigsaw tasks refer to activities in which each learner will get different piece of information which is required to form a whole with others;
- Information gap tasks refer to activities which are usually done in pairs. Each member is required to find out the other's information to complete his/her own;
- 3. Problem-solving tasks refer to pair or group activities in which learners are required to find one possible resolution for a problem;
- 4. Decision making tasks refer to pair or group activities in which learners are required to find many possible resolutions for a particular problem; and
- 5. Opinion exchange tasks refer to pair or group activities in which learners are required to have discussion to exchange their idea and opinion. Most opinion exchange tasks are open-ended and the most correct answer is not required.

Pica, Kanagy and Falodun (1993) also proposed four conditions that maximize negotiation of meaning. The more these conditions are achieved, the more the negotiations of meaning increase. The conditions are as follows:

- 1. Participants have different kind of information.
- 2. Information exchange is a key in task success.
- 3. Goal is convergent.
- 4. There is only one acceptable outcome.

Based on these four conditions that maximize the negotiation of meaning, Pica and colleagues concluded that the jigsaw task creates a higher level of negotiation of meaning, while an opinion exchange creates the lower level of negotiation.

From a different perspective, Robinson (2001 cited in Nunan, 2004) related a cognitive demand framework with negotiation of meaning, claiming that the more that higher-order cognitive processes are required in tasks, the higher numbers of negotiation of meaning are produced. To measure cognitive demands, Martyn (2001 cited in Nunan, 2004) provided four key conditions, as follows:

- 1. Contextual support (Is the context embedded, reduced, and remote?);
- 2. Reasoning demand (Is it high or low?);
- 3. Degree of task structure (Is it high or low?); and
- 4. Availability of knowledge (Is the knowledge provided or is it background knowledge?)

With these four conditions, Martyn concluded that opinion exchange tasks, of which contextual support is remote, reasoning demand is high, degree of task structure is low, and when knowledge is variable or not provided, would result in the highest degree of negotiation of meaning. On the other hand, jigsaw tasks, of which contextual support is embedded, as well as reasoning is not demanded, task structure is high, and knowledge is provided, then these would produce the lowest degree of negotiation of meaning.

Table 2 illustrates that researchers had different opinions on characteristics in tasks that foster negotiation of meaning. Though the consensus of tasks that best foster the negotiation of meaning and language acquisition has not been reached, it could be concluded that each type of task in TBLT provides learners with comprehensible inputs, as well as encourages learners to use language for negotiation of meaning to some extents.

Table 2: Different Perspectives on	Tasks and	Levels	of Negotiation	of Meaning
(Adapted from Nunan, 2004)				

Researchers	Task that produce lowest	Task that produce highest	
	negotiation of meaning	negotiation of meaning	
Pica, Kanagy and Falodun	Opinion exchange tasks	Jigsaw tasks	
Martyn	Jigsaw tasks	Opinion exchange tasks	

Beyond the five types of tasks suggested by Pica and colleagues, tasks can be categorized into other types, depending on the criteria employed. Willis (1996: 149-154) categorizes tasks in her framework into six types as follows:

- 1. Listing;
- Ordering and sorting such as sequencing, ranking, categorizing and classifying;
- 3. Comparing such as matching, finding similarities and finding differences;
- 4. Problem solving such as logic problems, real-life problems and case study;
- 5. Sharing personal experience such as sharing attitudes, experience, and opinion; and,
- 6. Creative tasks such as creative writing, investigation, role play and project.

Another expert in this field, David Nunan (2004) divides tasks into two main types which are real world tasks and pedagogical tasks, where:

- 1. Real world tasks, or target tasks, refer to those which require learners to use the target language in the real world beyond the classroom; and,
- 2. Pedagogical tasks refer to those which require learners to use the target language in the classroom.

The latter of these is then categorized into rehearsal tasks and activation tasks, where:

- 1. Rehearsal tasks refer to those that are conducted in the classroom, but are similar to real world tasks, such as reading newspapers, or writing resumes.
- 2. Activation tasks refer to those that encourage learners to use language functions and structures. Examples of this are information gap activities, or simulated situations.

Both of these tasks do not focus on linguistic correctness, but on communication success. However, Nunan considered focus-on-form is still important for language learning. Particularly, learners in early stages of learning should be exposed deductively to some language elements before they are expected to produce them. Moreover, learners should have chances to practice some linguistic elements which are not possible outside classroom. According to Nunan's framework, form focuses are called enable skills. These help develop learners' knowledge and skills needed for authentic communication. Enable skills are divided into language exercises and communicative activities, where:

- 1. Language exercises refer to those which focus on separated linguistic items, such as lexical, grammatical and phonological items. Learners are expected to practice and produce these items correctly. Language exercises have no element of authentic communication; and
- 2. Communicative activities are an integration of language exercises and pedagogical tasks. Learners are provided a set of restricted language forms to perform meaningful communication activities. Although the activities are pre-designed and limited by language elements given, the communicative responses from interlocutors are not possible to predict.

To sum up, the major difference between pedagogical tasks and enable skills is pedagogical tasks focus on the success of the communication outcome. In contrast, enable skills focus on the correctness of linguistic elements. The completed Nunan's framework of NBLT is illustrated in Figure 2 below.

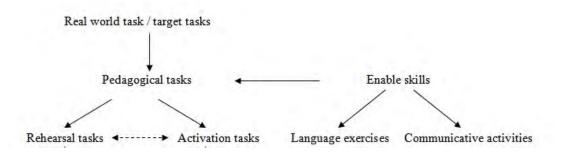


Figure 2: Nunan's framework for TBLT (Nunan, 2004:25)

In this section, different types of tasks distinguished by Willis, Nunan and Richard were reviewed. These tasks were differentiated based on criteria applied to them, though some characteristics in these tasks could be similar. In the next section, the design, organization and framework of TBLT are reviewed in order to find efficient and effective ways for implementing tasks into a language classroom.

5.3 Task design and implementation

With well designed tasks, learners are exposed to language and motivated to use it. They would gain more confidence, and have chances to practice natural interaction, negotiation, turn taking, and all other authentic and spontaneous language use that is hardly found in traditional teacher-centered classrooms (Willis, 1996). All these lead to successful language learning. According to Willis (1996), conditions that facilitate language learning are exposure, use, motivation and instruction. The first three conditions are essential, while the last one is optional but desirable. Particularly:

- 1. Exposure refers to the condition in which learners are exposed to a rich and comprehensible input of real spoken and written language in use;
- 2. Use refers to the condition in which learners use language to do things such as reading or discussing;
- 3. Motivation refers to condition in which learners are motivated to use all four receptive and productive skills namely listening, speaking, reading and writing; and,
- 4. The last condition is instruction or form focusing.

Therefore, in order to maximize the conditions that foster language learning, Willis proposed a TBLT framework. The framework consists of three steps: pre-task, task cycle and language focus is shown in Figure 3.

TEP 1:	STEP 2:	STEP 3:
re-tasks	Task-cycle	Language focus
Teacher stimulates students' background knowledge of topic or task and gives clear instructions of the task. Six possible activities in this step are • 1) personal knowledge and experience, • 2) problems, • 3) visual stimuli, • 4) spoken and written text, • 5) children activities such as drawing or coloring, and	 Task: a process in which students do the task in pair or in groups Planning : a process in which students prepare for class report Report: a process in which students report findings 	 Teacher lets students analyze the language features and gives explicit explanation if students need before let students practice such language features.

Figure 3: Willis's TBLT framework (Adapted from Willis, 1996: 155)

In step 1, pre-task, teacher prepares learners for tasks by stimulating their background knowledge and giving clear instructions of the task. In step 2, task-cycle, learners complete tasks, prepare the presentation for task outcomes, and present the outcomes to class. In the last step, language focus, teacher lets learners analyze the language features, gives explicit explanation if needed, and have learners practice such language features.

Nunan (2004) also designed his own framework which consists of six steps of which the major objective is to prepare learners for pedagogical tasks as illustrated in Figure 4 below.

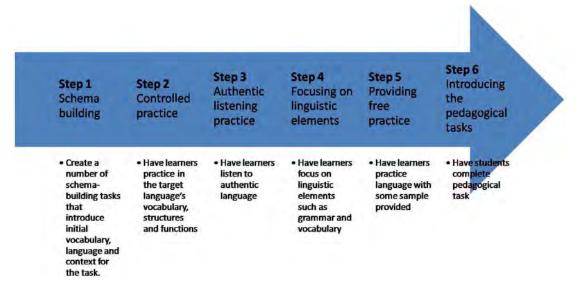


Figure 4: A pedagogical sequence for introducing tasks (Adapted from Nunan 2004: 34-35)

According to Nunan (2004), before learners are to complete the pedagogical tasks, they must be prepared through these six steps, as presented in detail below:

- 1. In the first step, schema building, a teacher tries to link learners' existing experience with the new learning topic by introducing some vocabulary, language and context;
- 2. In the second step, controlled practice, learners practice a target language's vocabulary, grammar structure and functions. The outcomes for these activities are close-ended;
- 3. Authentic listening practice, the third step, has learners listen to the target language happening in authentic situations;
- 4. In the fourth step, focusing on linguistic elements, learners are to focus on one or two specific linguistic element;
- 5. In the fifth step, providing free practice, provided with the dialogue samples, learners are assigned roles to produce target language which is similar to the real world;
- 6. In the last step, introducing the pedagogical tasks is activities in which learners perform pedagogical tasks which are similar to the real world

tasks. The success of task outcome is emphasized, not the linguistic outcome.

Though the specific details and organization of the two frameworks of Willis and Nunan are not exactly similar, it is clear that both of them emphasize the importance of schema building and form focusing. Schema building is a process which connects learners' background knowledge with new ones in the tasks. Materials which are appropriate for this starting process are personal knowledge and experience, problems, visuals, spoken and written text (Willis, 1996). Learners might be introduced to vocabulary, expressions or contexts in the coming tasks, as well as have chances to listen to target language in authentic situations (Nunan, 2004).

As for form focus, both Willis and Nunan agree that linguistic features should be explicitly taught to the second or foreign language learners. However, both of them are different in the order of form focus in the instructional procedure. Nunan suggests that forms should be focused after learners are exposed to the target language, such as in reading or listening, but before they work with tasks. This way learners have chances to connect language rules with language they hear in the authentic situations. On the other hand, Willis suggested that form focus should be introduced after learners have done the tasks. Learners should have chances to experiment with the language. They should firstly use language for authentic communication without explicit rules which, possibly, will force them to imitate it. It is after the tasks that linguistic exercises and explanations should be given to learners.

However, the important issue is how to set the difficulty levels in tasks to appropriately match learners' levels of proficiency. From the frameworks of Nunan (2004) and Willis (1996), both of them try to prepare learners for the tasks, either by schema building, exposing learners to the target language, focusing on grammar or providing free practice. Nunan (2004) suggests that the level of difficulty should be appropriate to learners. Otherwise, it possibly results in fossilization, instead of acquisition. He then proposes seven principles that should be kept in mind when applying the TBLT approach. The seven principles are scaffolding, task dependency, recycling, active learning, integration, reproduction to creation, and reflection. The details of each principle are as follows:

- 1. Scaffolding refers to teachers' assistance such as providing background knowledge to help learners become ready for tasks;
- 2. Task dependency refers to the relevance of new tasks to the old tasks;
- 3. Recycling refers to teaching and practicing linguistic features and functions more than one time, and not in a linear fashion;
- 4. Active learning refers to learners' active language use;
- 5. Integration refers to activities in which linguistic forms, functions and semantic meanings are taught and learned together;
- 6. Reproduction to creation refers to activities in which learners are encouraged to use language creatively and constructively; and,
- 7. Reflection refers to activities in which learners are encouraged to reflect on what they have learned and how they learned.

These principles, as well as the TBLT frameworks of Nunan (2004) and Willis (1996) were put into consideration and were applied in the design of lesson plans.

5.4 Roles of learners and teachers

Richards and Rodgers (2001) have summarized the roles of learners and teachers in TBLT. They suggest that learners in TBLT are group participants, monitors and risk takers. Firstly, because most tasks are conducted in pairs or groups, learners should be active participants. Secondly, in TBLT tasks are not the main content that learners must acquire, but they are tools which facilitate language use and language learning. Learners should act as monitors who are able to distinguish language forms out of tasks. Thirdly, some tasks require learners to be risk taking language users. They are asked to read, or produce, language elements which are beyond their proficiency. With this technique, learners are given the opportunity to use their experience and learning strategies, such as paraphrasing, restating, body language and so on in order to complete the tasks.

Similar to other teachers under other CLT approaches, the main role of teachers in TBLT is a facilitator. They must select and arrange the sequence of tasks to match learners' levels of language proficiency, needs and interests. Moreover, they have to introduce learners to tasks by relating them to learners' background knowledge, as well as to help learners to notice, consciously, the language elements within tasks.

In this section, the definitions, advantages/disadvantages, types of tasks, relevance of tasks and language acquisition, task design and implementation and the roles of teachers/learners were reviewed. What should be pointed out again is that tasks are relevant to negotiation of meaning which, in turn, is relevant to language acquisition. Based on cognitive constructivism and social constructivism, which are theoretical frameworks in this study, it was highly likely that learners who collaboratively worked with meaningful and well designed tasks would be more engaged. The more engaged learners would achieve more success in language learning. Student engagement is discussed in the next section.

6. Student Engagement

According to Collins Cobuild Dictionary, if a person engages in an activity, that person is actively involved with it. If something engages a person, it keeps that person interested in it, and thinking about it. In general, engagement is defined as "what happens when we are able to give ourselves over to a representational action, comfortably and unambiguously" (Laurel, 1993 cited in Herrington, Oliver & Reeves 2002). Chen and McGrath (2003:404) defined engagement as "an enjoyable state of concentration". A picture of teenagers spending days and nights in an Internet cafe, sitting in front of computer screen, playing online game explains well the definition.

In a classroom, a teacher who engages learners tries to arouse learners' interest by using lessons or activities which are amusing, stimulating and challenging (Harmer, 1998). According to the National Survey of Student Engagement (NSSE), when students engage, they "... read more, write more and interact more in positive ways with their teachers and peers, they gain more in terms of essential skills and competencies such as critical thinking, problem solving, effective communication and responsible citizenship," (NSSE, 2000:2).

NSSE has collected data from American college students countrywide. The main objective of the survey was to measure the quality that the educational institutions provided in order to engage learners in a deep and meaningful learning experience. NSSE has set up five benchmarks to judge educational institution quality that is important to foster student engagement. The five benchmarks are as follows:

- 1. The level of academic challenge Schools should provide challenging and complex cognitive tasks that require learner high level thinking skills;
- Active and collaborative learning Learners should involve actively in their learning and have an opportunity to reflect and apply what they are learning. They should have a chance to collaborate with others to solve difficult problems. This approach will prepare them for any problems they might encounter in the college and after college;
- 3. Learner-faculty interaction Learners should have the opportunity to contact their teachers either by having class discussion, working with a professor on a research project or serving with faculty members in school committees or clubs. This will give them chances to encounter problems, and gain first-hand experience of how the experts solve such problems;
- 4. Enriching educational experiences The schools should provide learners with opportunities to learn inside and outside classrooms. Learner should have the chance to make contact with other learners with different ideas and beliefs, from different backgrounds and with different ethnicities. Technology should be used to support this process; and
- 5. A supportive campus environment -The schools should help learners succeed academically, and socially, by providing supportive relations between peers, faculty members and administrative personnel.

NSSE gives clear insight of the educational contexts that influences student engagement. It should be pointed out that the NSSE emphasizes the important roles of challenging, cognitively complex tasks, as well as active, collaborative learning as the factors which form engaging contexts. From NSSE benchmarks, the factors that foster student engagement can be categorized into two levels: the classroom level and the school level. In the classroom level, the factors that help support student engagement are teaching approaches, teacher support, peer support, classroom structure and task characteristics. School level factors are activities and the environment provided by schools that encourage student engagement, such as school policy and management, extra curricula activities, community service, volunteer work, technology, and even school size. However, the scope of this study focused mainly on academic-related student engagement in the English for Mass Media course; student engagement at the school level, as required by NSSE, was beyond the scope of this study.

6.1 Types of student engagement

Student engagement is not a single construct which is easy to measure and evaluate. Instead, it is multi-dimensional, involving three main elements that are learners' affections, behavior, and cognitive investment in learning (Fredricks, Blumenfeld, & Paris, 2004). Fredricks and colleagues (2004) have provided a comprehensive review of studies on engagement, and have categorized engagement into three main types; particularly, the behavioral engagement, the emotional engagement and the cognitive engagement. In this context, the term "affective" engagement is more suitable to "emotional" engagement because, in this study, not only learners' emotions and feelings, but also attitudes and values were assessed. Therefore, in the research reported in this dissertation, student engagement was categorized into three elements that are affective, behavioral and cognitive engagement. The details of each element in student engagement are as follows.

1. The affective engagement

Affective engagement refers to learners' emotional reactions in classroom, such as boredom and happiness (Connell & Wellborn, 1991; Connell et al., 1994), in addition to interest, anxiety and anger (Skinner & Belmont; 1993). Some researchers conceptualize affective engagement as identification with school, which refers to a feeling of being important to others, and an appreciation of success in school-related

outcomes (Finn, 1993). In this study, affective engagement refers to subjects' emotions, attitudes and values toward course elements namely tasks, content, teaching methods, teachers, peers, and the classroom environment.

2. The behavioral engagement

Behavioral engagement refers to positive conducts in classrooms and schools in three aspects. The first aspect involves learners following the classroom rules and norms, such as class attendance, preparation, and punctuality (Finn, 1993; Finn et al., 1995). The second aspect is learners' involvement in learning and academic tasks such as effort, persistence, concentration, attention, asking questions, and contributing to class discussion (Fredricks et al., 2002; Furrer & Skinner, 2003; Kindermann, 1993; Kindermann, McCollam, & Gibson, 1996; Lee & Anderson, 1993; Skinner & Belmont, 1993; Skinner et al., 1990). The third aspect is learners' participation in school-related activities, such as athletics or school governance (Finn, 1993; Finn et al., 1995). In this study, behavioral engagement referred to learners' behaviors toward academic-related activities, namely class attendance, preparation, attention, asking questions, contributions and efforts. Learners' participation in school-related activities, such as sports or community services was not relevant as it was beyond the scope of this study.

3. The cognitive engagement

The cognitive engagement is viewed from two different perspectives. The first one focuses on cognitive investment in learning, while the second one focuses on the meta-cognitive process in learning. Cognitive investment means "effort directed toward learning, understanding, mastering the knowledge, skills or crafts that the academic work is intended to promote" (Newmann, Wehlage, & Lamborn,, 1992:12), and "(students' effort) required to comprehend and master knowledge and skills explicitly taught in schools" (Connell & Wellborn, 1991:17). From another perspective, one that focuses on meta-cognitive strategies, cognitive engagement is defined in terms of being strategic or self-regulating. Engaged learners are able to use learning strategies, such as rehearsal and summarizing, to help them to remember, organize, and understand the materials. They are also able to plan, monitor, and evaluate their cognition when accomplishing tasks. All of these strategies will lead to better understanding of lessons.

In the study reported in this dissertation, cognitive engagement referred to learners' application of cognitive process in order to complete assigned tasks. Which levels of cognitive processes learners applied, and how they applied them, were points of focus in the study of cognitive engagement. Based on Benjamin Bloom's revised taxonomy on cognitive domain (Anderson & Krathwohl, 2001), the cognitive engagement was divided into six levels, that are remembering, understanding, applying, analyzing, evaluating and creating, as in order of increasing complexity processes

Student engagement is multi-dimensional; it comprises a wide variety of constructs. Affective engagement includes emotions attitudes, and values. Behavioral engagement includes doing the work and following the rules, and cognitive engagement includes cognitive effort and strategy use. Student engagement and its complete sub-elements studied in this research are presented in Figure 5. This schematic represents, in diagrammatical form, key points of the preceding text.

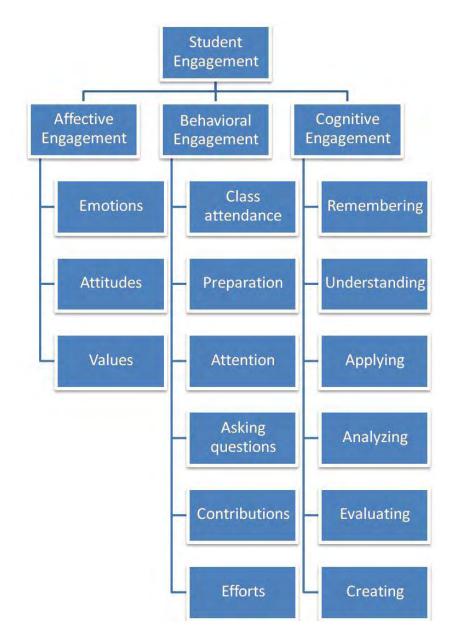


Figure 5: Student engagement and sub-elements in this study

6.2 Rationale for assessing student engagement

It is quite a bold and unhelpful to judge the success of teaching and learning exclusively from learners' examination score alone. This is due to the limitations of the examination (Lally & De Laat, 2002). For instance, an examination:

- does not give a clear and detailed insight into what exactly helped improve teaching and learning. It does not give any details which can be used later to improve teaching;
- 2. does not put learners' different needs into consideration. Thus, it cannot explain why some learners did well in the examination while some did not;
- can measure only the outcome of learning, but fails to measure learning in the sense of processes, happening in time and space, within an individual and within groups; and,
- 4. Examination does not make any obvious connection with learning theories.

Therefore, student engagement became a solution to compensate for the aforementioned weaknesses of examinations, doing so as an attempt to assess learning process, and, at the same time, to gain an insight in order to improve learning and teaching success in a holistic way.

In addition, engagement has gained more and more attention as a solution to improve learner academic achievement, to reduce learner boredom in school and to lower high dropout rates, (National Research Council & Institute of Medicine, 2004). According to the United Kingdom Department of Education and Skills (2004 cited in Barrett, 2005), engagement is one of four important principles in the national educational strategies of that country. When learners engage in meaningful and quality activities, there is potential that they will learn better (Harmer, 1998; Hancock & Betts, 2002 cited in Bowen, 2003). It is also claimed that engaged learners will have better academic performance because they work harder to achieve desired results (Bowen, 2003). They also gain the skills to work with others and know how to transfer knowledge to solve problems creatively. (Jones, Voldez, Nowakowski, & Rasmussen, 1994 cited in Bowen, 2003). Many studies support the importance of student engagement, showing correlations between student engagement, and collaboration, tasks, as well as achievement.

1. Correlations between student engagement and academic achievement

The positive correlation between behavioral engagement and achievement related outcomes such as test score or Grade Point Average (GPA) were found in many studies (Fredricks et al., 2004). In addition, many studies reported the positive correlation between cognitive engagement and achievement. Fincham, Hokoda and Sanders, (1989) reported that learners who contributed effort more than required, and asked meaningful questions with teachers, gained higher achievement. This finding is similar to a study conducted by Nystrand and Gamoran (1991) who reported that learners who engaged cognitively by asking authentic questions and evaluating knowledge they have learned gained higher scores on an achievement test. Studies that counted frequency of meta-cognitive strategy, as a construct for cognitive engagement, reported the positive correlation between learners who used metacognitive strategies and their academic achievement (Zimmerman, 1990). Furthermore, the recent research published by NSSE (Carini, Kuh, & Klein, 2006) reported that there was a correlation between student engagement and student academic achievement. This was measured by several standardized tests, such as the RAND critical thinking test, the new essay prompts on the Graduate Record Examination (GRE), and college GPA.

2. Correlations between student engagement and collaboration

The correlation of classroom collaboration and engagement were supported by many studies. Learners in classrooms, in which support was given by teachers and peers, had higher engagement (Marks, 2000). Cognitive engagement increased when learners actively discussed ideas, and debate, and also gave feedback to each other's work (Guthrie & Wigfield, 2000; Meloth & Deering, 1994; Newmann, 1992). Moreover, in classrooms where teachers created socially supportive environments, pressed learners for understanding, and supported autonomy, learners had higher behavioral and affective engagement (Stipek, 2002).

3. Correlations between student engagement and tasks

Studies reported that when learners were presented with challenging tasks that required complex cognitive process, and, they were assisted by teachers for understanding, their cognitive engagement increased. In math classes, cognitive engagement was more likely to be noticed when learners worked with peers on challenging tasks that were meaningful to them (Helme & Clarke, 2001). In science classes, learners who were assigned complex task reported higher cognitive engagement and affective engagement (Blumenfeld & Meece, 1988).

6.3 How to create engagement in classroom

From research reviews mentioned above, student engagement correlates with some specific teaching techniques, collaborations, teacher and peer supports and also some types of tasks. Thus, to have students engage in learning, willingly, actively and with a good attitude is not an easy process. Keeping learners busy with tasks might be easier, but might not engage them (Bowen, 2003). The success of engagement lays in the "what" and "how" characteristics of tasks learners are required to do. Newmann (Newmann, 1991; Newmann et al., 1992) theorizes that tasks are the key factor for enhancing engagement in classrooms. According to Newmann, the engaging tasks should:

- 1. be authentic;
- 2. provide learners the opportunities to apply, analyze, evaluate and create their own knowledge;
- 3. be done through collaboration;
- 4. be completed by various abilities; and,
- 5. be challenging.

Bowen and colleagues (2003) conducted a study with middle school students to find out the effects of Quality Design Work on student engagement. They integrated Schlechty's framework for "Working on the Work" (WOW) in their courses and studied students' engagement. The result showed that students were more authentically engaged when lessons were connected to a product (Product Focus), when learners were given choices (Choice), when they were given a chance to work with others (Affiliation) and to let others see the results of their work (Affirmation), when the work was real and meaningful (Authentic), and when technology was used in meaningful ways (Novelty and Variety).

Schlechty's "Working on the Work" theory (2001 cited in Bowen et al., 2003) offers the following qualities designed to enhance student engagement:

- Content and Substance: the content should be consistent with standards and benchmarks. It should be agreed upon by teachers, administrators, and the community that it is important for learners to know;
- 2. Organization of Knowledge: learners should have the skills at appropriate levels to do the work assigned;
- 3. Product Focus: the work learners are assigned to do must result in product that is meaningful to them;
- 4. Clear and Compelling Product Standards: learners should be given clear and compelling standards by which the product will be judged;
- 5. Safe Environment: learners should learn in an environment in which learners feel free to take risks, without fear of failure;
- 6. Affirmation of Performance: the product of learners should be verified by people or groups who are significant to them;
- 7. Affiliation: learners should be given a chance to work with others;
- 8. Novelty and Variety: the range of problems, issues, products, performances, and exhibitions should be large and varied, as well as the technologies that learners are encouraged to use;
- 9. Choice: learners should have control over learning to some degree; and,
- 10. Authenticity: tasks should be genuine to the learners.

Schlechty's ten qualities of design work are quite similar to the suggestion of Herrington and his colleagues. They claimed that the authenticity of tasks relate directly to student engagement (Herrington et al., 2002). However, the authenticity in tasks alone could not promote student engagement, the authentic tasks should also:

- 1. have real world relevance;
- 2. allow learners to define their own tasks based on their background knowledge;
- 3. comprise complex tasks that require a period of time to solve;
- 4. open the opportunities for learners to solve in their own ways;
- 5. provide the opportunity to collaborate;
- 6. provide the opportunity to reflect;
- 7. be interdisciplinary;
- 8. be seamlessly integrated with assessment;
- 9. create products; and,
- 10. allow diversity of outcomes.

Tasks that engage learners the most should be authentic, collaborative, productive, reflective, various, novel, open ended, relevant to learner's life, and require higher cognitive process (Herrington et al., 2002; Newmann, 1991; Newmann et al., 1992; Schlechty, 2001 cited in Bowen et al., 2003). Other factors that facilitate learners' engagement, such as authentic environment and support from the instructor, are also important. On the contrary, the activities that learners hate are repetitive ones that require little thought and are forced on them by the others, (Bowen et al., 2003). The comparison of the characteristics of engaging tasks belonging to Schlechty, Newmann and Herrington is presented in Table 3 below.

Schlechty	Newmann	Herrington
Content and substance		
Organization of		
knowledge		
Product focus		Product-oriented
Clear and compelling		
product standards		
Safe environment		
Affirmation of		Opportunity to reflect
performance		
Affiliation	Collaboration	Opportunity to collaborate
Novelty and variety		
Choice		Opportunity for learners to
		solve problems in their
		own ways
		Opportunity to define
		learners' own tasks based
		on their background
		knowledge
Authenticity	Authentic tasks	Real world relevance
	Higher level cognitive	Complex tasks that require
	process	a period of time to solve
	Various abilities required	Diversity of outcome
		Based on their background
		knowledge.
		Seamlessly integrated with
		assessment
		Be interdisciplinary

 Table 3: Tasks Characteristics that Enhance Engagement

These characteristics of engaging tasks were used as a guideline in designing tasks that learners were required to complete, when they studied the English for Mass Media course, under CTBA. The characteristics of tasks in CTBA are described in detail, in instructional instrument section, Chapter III.

Certainly, student engagement is multi-dimensional. The concept that engaged students are ones who participate in routine school activities, such as attending classes, submitting required work, and following teachers' instruction (Blount, Christenson, & Lehr, 2004) does not represent a entire picture of student engagement. Students might be forced to do so because of extrinsic motivations, such as grades, reward, college acceptance, or parental approval. Some students might be emotionally disengaged from learning because they do not understand the tasks, or do not see relevance of the tasks to their lives (Schlechty, 2002 cited in Bowen et al., 2003). Such kinds of students might come to the class regularly, sitting in group passively, but are not at all engaged in learning. Therefore, studies that focus only on one or two sub-elements of engagement such as affective and behavioral would not gain the thorough insight of student engagement. Students who nod might not understand what an instructor is explaining, but do that just to please the teacher, or do so to avoid being called to answer questions. In a study, Peterson, Swing, Stark, and Wass, (1984) found that some learners judged to be engaged by observers reported in following interviews that they were not thinking about the task. On the contrary, learners who were observed as non-engaged were actively thinking about the task and trying to apply the new ideas with their existing knowledge. Therefore, in this study, all-sub elements of student engagement that are affective, behavioral, and cognitive engagement, were assessed in order to obtain the thorough insight of student engagement.

7. Collaborative Task-Based Approach

As student engagement is multi-dimensional, it includes learners' affection, behaviors and cognitive investment in learning. To engage learners with one, and only one, pedagogical approach might not be efficient enough. This was an important reason why Collaborative Task-based Approach (CTBA), which was an integration of Collaborative Language Learning (CLL) and Task-based Language Teaching (TBLT), was implemented in an English course named the English for Mass Media course..

7.1 Rationale for implementing CTBA in English for Mass Media course

As mentioned in the Chapter I, the English for Mass Media course had needs for improvement as follows:

- grammar-focuses syllabus of which real world tasks and authentic contexts were left uncovered;
- 2. technology change; and,
- 3. requirement for critical thinking skill.

The advantages of two pedagogical approaches of CLL and TBLT were already reviewed previously in this chapter. The review presented the theoretical appropriateness in implementing two pedagogical approaches in the English for Mass Media course. The pedagogical appropriateness, as well as the research appropriateness in implementing the two approaches in the English for Mass Media is discussed in this section respectively.

7.1.1 Pedagogical appropriateness

English for Mass Media is a course in which reading newspapers is a major learning activity and newspapers are the main learning material. Newspapers are considered as a vital authentic material which is used in language classrooms, and for a long time because of various advantages (Richards & Rodgers, 2001; Nunan, 2004). Grundy (2001) summarized the advantages of newspapers in English language classroom in that newspapers are cheap and widely available. They are also learning resource containing a variety of text types which give English as a Second language (ESL) and English as a Foreign Language (EFL) learners choices and opportunities in developing second language reading skills. Newspapers are a flexible teaching material which is considered appropriate, not only for language classroom in general, but also for the CLL classroom and the TBLT classroom.

1. Appropriateness for CLL

For the CLL classroom, that the language in newspapers is not graded can be considered as either advantage or disadvantage for language teaching. Learners are faced with lots of difficulties such as obscure headlines, monosyllabic words or jargon in headlines, complex sentence leads, unfamiliar cultural and sporting events, as well as dense column of print. However, Learners can practice reading skills and strategies (Grundy, 2001) and at the same time, collaboration in groups would help them pass through such difficulty. In addition, the nature of newspapers evokes readers' authentic responses that could be appropriately used as a springboard to other collaborative and complex cognitive engagement activities, such as comment writing and discussion.

2. Appropriateness for TBLT

Newspapers are considered a flexible teaching material which is appropriate for task-based learning. Particularly, newspapers can be applied and used in many activities and tasks (Grundy, 2001; Harmer, 1998; Nunan, 2004). For example, English teachers can use materials in newspaper to create language exercises in order to teach linguistic features such as vocabulary, or grammatical structure. Newspapers can be used in rehearsal tasks in which learners are asked to read for the main idea, or to look for a job in classified ads. Newspapers can be adapted for use as activation tasks, such as jigsaw tasks, or information gap tasks. For tasks that requires learners to apply higher-level cognitive and integrated-skill, Warschauer (2001) suggested a project work due to the fact that project provides a meaningful and contextual framework for learning. Under the framework of the project, other tasks, such as language-focused tasks, classroom discussion, and oral presentation, can be included to help develop learners' language proficiency. Learners can use authentic newspapers as a model to create their own newspapers. They can interview people, search for supporting information, write news stories with eye-catching headlines, write commentary article, design the layout and even publish the paper.

7.1.2 Research appropriateness

Another reason why English for Mass Media course was chosen for this study was the parallel that newspaper content provides for both control and experimental groups. In Thailand, there are two main local English newspapers: *The Bangkok Post* and *The Nation*. Both of them publish their content in hardcopy, as well as on their Websites, www.bangkokpost.com and www.nationmultimedia.com, respectively. The contents presented on the Websites and in hardcopy are rather similar. Students could log on to the Internet and read up-to-date news free of charge, while hard copies were available in the university library, or could be purchased at a reasonable price.

7.2 Roles of CLL in CTBA

The philosophy of CLL was applied for the design and organization of contents and tasks in the course. Based on the goal of CLL, which emphasizes achieving non-fundamental knowledge though high-order cognitive processes, content and tasks in CTBA were organized based on the framework of Bloom's revised taxonomy (Anderson & Krathwohl, 2001).

The rationale for applying Bloom's revised taxonomy in designing and organizing content and tasks was based mainly on the definition of education given by the Act. "Education" was defined as "the learning process for personal and social development through imparting of knowledge; practice; training; transmission of culture; enhancement of academic progress; building a body of knowledge by creating a learning environment and learning society and the availability of factors conducive to continuous lifelong learning," (ONEC, 1999:2). Defined by the ONEC, education was seen as a learning process which starts from the lowest level of cognitive process, "remembering of imparted knowledge", to the highest level of cognitive one,

"constructing a body of knowledge". Therefore, applying Bloom's revised taxonomy for lesson planning was appropriate.

Bloom Taxonomy was a first attempt to classify learning behaviors and provide concrete measures for identifying different levels of learning. The taxonomy categorizes the cognitive process into six hierarchical levels, from the simple to more complex ones, being knowledge, comprehension, application, analysis, synthesis and evaluation, respectively (Bloom, Englehart, Furst, Hill, Krathwohl, 1956). However, Bloom's cognitive taxonomy used in this study was a revised version. The categories were rearranged in order of cognitive complexity. Arranged from the least complex to the most complex one, the cognitive activities were remembering, understanding, applying, analyzing, evaluating and creating (Anderson & Krathwohl, 2001). There were two major changes in the revised version; the changes were claimed to help reflect cognitive process more accurately (Pohl, 2001). The first change was the names of six categories which were changed from nouns to verbs. The taxonomy was used to characterize the thinking process and thinking is action. Therefore the use of verbs, instead of nouns, was considered to be more accurate. The second change was the switch of order of the cognitive process. Creating (formerly synthesis) replaced the top position previously owned by evaluating (formerly evaluation). A comparison of Bloom's taxonomy of cognitive domain and the revised version is illustrated in Figure 6.

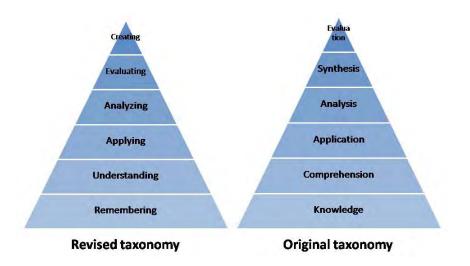


Figure 6: Comparison of original Bloom's taxonomy and the revised version (adapted from Anderson & Krathwohl, 200; Bloom et al., 1956)

The details of six cognitive activities in Bloom's revised taxonomy are as follows (Talinton, 2003):

- 1. The first and lowest stage is remembering, which requires the least complexity of the cognitive process. Learners at on this stage must be able to remember, recall and restate information told to them. Examples of activities that represent remembering process are recognizing, listing, identifying, and finding;
- Understanding is the second stage. At this stage, learners realize the concepts of contents by interpreting and translating what has been learned. Examples of activities that represent the understanding process are paraphrasing, summarizing, and explaining;
- 3. The third stage is applying. Learners are able to apply the contents they have learned in different contexts. An example of an activity that represents the applying process is implementing;
- 4. Analyzing is the fourth stage. At this stage, learners are able to break content they have learned into parts and find the relationships of those parts in order to best understand them. Examples of activities that represent the analyzing process are comparing, organizing and integrating;

- 5. The fifth stage evaluating. Learners must be able to make decisions based on in-depth reflection, criticism and assessment. Checking, judging, testing and monitoring are some examples of activities representing the evaluating process;
- 6. Creating is the top stage of Bloom's revised taxonomy. At this stage, learners are able to create new ideas, or products, based on content previously learned. Examples of activities that represent the creating process are planning, designing and constructing.

Referring to Figure 6, remembering, understanding, and applying are considered lower-order cognitive processes, while analyzing, evaluating and creating are considered higher-order cognitive processes. In addition, learners in the remembering stage are just passive recipients, while learners in the understanding, applying, analyzing, evaluating and creating stages are active participants (Talinton, 2003).

Therefore, based on the goals of CLL and the framework of Bloom's revise taxonomy, the content and tasks in the English for Mass Media course were organized into two orders, particularly the horizontal order of open-endedness and the vertical order of cognitive complexity, as illustrated in the Table 4.

	Simple cognitive process \rightarrow Complex cognitive process			
End of the course \leftarrow Beginning of the course	Remembering	Students read news stories and identify types and values.	Students find news stories with assigned types and values.	
	Understanding	Students read news stories and answer questions.	Students read news stories and summarize the main idea.	
	Applying	Students choose the given headlines/ leads for the news stories.	Students write their own headline/ leads after reading news stories.	
	Analyzing	Students are to distinguish facts out of opinions from assigned news stories.	Students are to distinguish facts out of opinions from news stories of their own interest.	
	Evaluating	Students are to evaluate and judge the validity, reliability and authenticity of news stories from given news stories.	Students are to evaluate and judge the validity, reliability and authenticity of news stories.	
н 	Creating	Students write news stories from given phrases of information.	Students write whole news stories from the primary and secondary sources.	

Table 4: Task Organization in CTBA

The details of CTBA's task organization in the horizontal order of openendedness, and the vertical order of cognitive complexity are as follows:

Order of open-endedness

In each weekly class, the controlled practice came before the tasks in teaching procedure. The controlled practice required close-ended answers, while the Tasks required more open-ended answers.

Order of cognitive complexity

At the beginning of the semester, tasks required only a simple cognitive process in order to be completed, while at the end of the semester, tasks required more complex cognitive processes to be completed, such as term projects.

7.3 Roles of TBLT in CTBA

TBLT was applied for pedagogical procedure in each weekly class. The procedure was adapted from the TBLT framework of Willis (1996) and Nunan (2004) as is illustrated in Figure 7.



Figure 7: CTBA pedagogical procedure

The procedure is comprised of six instructional steps, particularly schemabuilding, controlled practice, language focus, tasks, presentation and wrap-up. Three important notions shared in Nunan and Willis TBLT frameworks, particularly authentic language exposure, authentic language use and focus on forms are included in this CTBA framework. With this framework, students were exposed to rich and comprehensible inputs of real spoken and written language in use, as in Schema building. Students were also given chances to use language to do things actively and constructively, as in Tasks, while the focus on form was not overlooked, as in Language Focus. The details of each step were as follows:

- The first step in instruction was schema building in which students had chance to have firsthand experience with target language in mass media, such as reading authentic news from authentic newspapers, or listening to news stories in the target language;
- 2. The second step was controlled practice, in which students study the contents related to mass media and English language of mass media;
- 3. The third step was language focus. In this step, students received grammatical language exercises and explanations before they dealt with tasks;

- 4. The fourth step was tasks. Task types were various and were done in groups;
- 5. The fifth step was presentation. Students were required to present their work to the class while constructive feedback from the teacher and peers was given after the presentation;
- 6. The last step was wrap-up. In this step, the instructor concluded the content taught in the class, as well as stimulated students to reflect upon their learning. Questions were answered, and take-home tasks were assigned.

7.4 Assessment in CTBA

Under CTBA, students learned language through completing tasks collaboratively. With this approach, the integration of language skills, and time taken to complete the tasks, was necessarily needed, while productive and observable task outcomes were expected. Nunan (2004: 164) suggested that the assessment in task-based approach should assess student performance, be criterion referenced, be formative, and focus on attainment of specific objective, not general proficiency.

With the nature of CTBA, simply using standardized tests was not appropriate because such tests did not measure the actual performance of students when they deal with the assigned tasks. Therefore, an alternative assessment was chosen to assess students' performance in this study. Brown (2004: 255) suggests that performance assessment should be used seriously, and strictly as similar as traditional tests are. Popular instruments to assess students' performance are portfolios, journal writing, and self-peer assessment (Brown, 2004; Nunan, 2004; Gardner & Miller, 1999). It should be noted that the three instruments offer alternative forms of assessment. However, portfolios and journal writing are considered performance assessment, while self and peer assessment can be used either for performance assessment or for traditional objective tests (Brown, 2004). The details of three types of alternative assessment employed in CTBA are reviewed as follows:

1. Portfolios

Rick Stiggin (1994, cited in Barrett 2005) defines portfolio as a purposive collection of learners' work that demonstrates achievement and improvement. Richard and Schmidt (2002) add that a portfolio may include various forms of work, not only text, but also audio recording or video recording. However, electronic media such as animation, audio and video would be stored more easily and conveniently in electronic portfolios which share similar functions with traditional portfolio (Barrett, 2005). Another significant element that should be included in portfolios is evidence of reflective learning, whereby students should have chance to think critically about their strengths and weaknesses as language learners. Reflection is, then, considered the most important part of a portfolio (Nunan, 2004).

2. Journals

A journal is a written record of one's thoughts, feelings, ideas, comment or judgment. Journals are usually written without paying serious attention to grammatical correctness. Brown suggested that learners are motivated to freely contribute their ideas without fearing that those ideas will be judged by teachers later (2004). Writing journal is a considered a technique to prepare learners to be active, lifelong learners. Learners should not know only "what" they learn, but should realize "why," and "how," they have learned it. One way to prepare learners is to support them to engage in learning reflection. By writing down what they learned, and reflecting on it, learners will gain insight about their learning process and their learning style (Garder & Miller, 1999; Reimann, 2001). Moreover, journals can be a personal document, or can be shared between peers, or with a teacher. It can be also included in a portfolio for performance assessment.

3. Self and peer assessment

Self-assessment stems from the fundamental principles of second language acquisition, such as learning autonomy and intrinsic motivation (Brown, 2004). Learners should set their own goal of learning and try hard to achieve that goal in order to succeed in learning. All should be done through their intrinsic motivation of eagerness to learn, not from extrinsic forces, such as punishment or reward. Sharing some principles with self-assessment, the outstanding principle of peer-assessment is collaborative learning in which learners are resources to one another and, thereby, help create deep learning (Ng & Ma, 2002). Many researchers agreed as to the advantages of self and peer assessment. Self and peer assessment engage and motivate learners more because they are responsible for their learning. Autonomy and motivation also increase due to such responsibility (Brown & Hudson, 1998 cited in Brown, 2004). In addition, self and peer assessment helps learners to notice how others work, to accept good practice and to gain learning strategies. Learners also use other's work as a benchmark to judge their own understanding and ability. While assessing works, their critical skill is also improved because they have chance to judge others work from evaluator's perspective (Davies, 2000 cited in Ng & Ma, 2002). Brown (2004: 271) has categorized self and peer assessment into three types, particularly direct assessment of performance, indirect assessment of general competence, and meta-cognitive assessment of setting goals. The details of each types of assessment are as follows.

1. Direct assessment of performance

Direct assessment of performance is an evaluation done by self, or peers, immediately after the performance. Learners might fill in a defined scale checklist to rate oral presentation or role play. For example, in a writing class, learners were required to read, comment and edit their peers' writing (Ferris, 2001).

2. Indirect assessment of general competence

While direct assessment focuses mainly on a short performance and at a specific period of time, indirect assessment of general competence is the evaluation of performance covering a lesson occurring over of several days, or over a learning module or a course running over a whole semester. Minor, or non-repeating, flaws are ignored because the main objective is to evaluate the general ability or performance. The ideal form for any general self-conducted indirect assessment is journal writing in

which learners are engaged with open-ended assessment. For example, in a grammarfocused writing course in which an objective was to correct learners' persistent grammatical errors, learners were required to write about their errors, as found in previous writings. This helped learners to develop strategies in locating and correcting errors (Shih, 2001).

3. Meta-cognitive assessment of setting goals

At the beginning of the course, students were asked to focus on course objectives or set up their own learning goal. Then, when the course is in process, or at the end of the course, students evaluate how, and how well, they achieve the learning goal.

7.5 Reliability and validity of alternative assessment

The alternative assessment used in this study, specifically portfolios, journals, as well as elf and peer assessment, had both strengths and weaknesses. The portfolio approach is low in practicality because teachers would be overloaded with learners' work which needs time and effort to assess thoroughly. However, it is high in face validity, content validity and authenticity due to the fact that a portfolio is able to assess actual learners' performance. It is also high in washback because learners can learn from peers' and teachers' feedback, as well as from their learning process and products collected in portfolio.

It is noteworthy that journals are low in practicality because it takes time and effort to write and to assess them. However, writing a journal is a way to encourage learners to reflect upon their learning process and strategies. This prepares them to be active and lifelong learners later.

Self and peer assessment is also severely criticized for their low reliability due to learners' subjectivity and their lack of assessment knowledge and related skills. However, it is practical in reducing teachers' workload and is also high in content validity, feedback potential, and authenticity. In this study, in which student engagement was assessed, self assessment is considered to be the most valid and popularly used instrument among researchers who studied student engagement (Fredricks et al.; 2004). It was found that even an instrument which was considered more reliable than self assessment such as observation by trained researchers, could not provide a valid result for cognitive engagement (Peterson et al., 1984).

Table 5 below shows that though the alternative assessments come with a cost of low practicality and reliability, its weaknesses can be countered by teachers who understand its nature. For example, the workload of portfolio and journal assessment can be reduced if teachers ask learners to become involve in assessing their own work, and that of their peers. Self and peer assessment might also be considered low in reliability. However, a diligent teacher can avoid this potential flaw by reserving self and peer assessment only for small formative assessment (Born, 2003).

Principles	Portfolio	Journal	Self/Peer assessment
Practicality	Low	Low	Moderate
Reliability	Moderate	Moderate	Low
Face validity	High	Moderate	Moderate
Content validity	High	High	High
Washback	High	High	High
Authenticity	High	High	High

Table 5: Principled Evaluation of Alternatives to Assessment (Adapted fromBrown, 2004: 278)

To sum up, when face validity, content validity, washback and authenticity are the major concern, especially for performance assessment, then portfolios, journals, as well as self and peer assessment are valid tools for evaluating learners' performance. These are also valuable tools for formative assessment in offering learners constructive feedback.

8. Network-based Language Teaching

It cannot be denied that technology has a crucial role in facilitating learning by helping learners to connect with content, context, and the community (Milliron & Miles, 2000). However, technology does not significantly change any essential elements in learning; it just provides a set of tools that simply, facilitates the learning process. What matters is implementing technology into education, and doing so in meaningful ways (Bowen et al., 2003; Chen & McGrath, 2003; Garrett, 1991; Milliron & Miles, 2000; Warschauer, 2005). In this section, the roles of technology in language teaching, Network-based Language Teaching (NBLT), plus the rationale of the implementation of NBLT, as well as strengths and weaknesses of the implementation are reviewed.

8.1 Technology and language teaching

Technology has shared roles in language teaching for a long time. When language perspectives have shifted from structural to cognitive, and later to sociocultural perspective, the roles of Computer-Assisted Language Learning (CALL) has changed accordingly (Kern & Warschauer, 2000). When language learning was viewed as a structural process, language was viewed as objective knowledge that can be developed by transmission from competent users, with habit formation made possible via repetition and corrective feedback. Language classes were conducted under grammar translation and audio-lingual methods. Therein, computers were used to provide drill, practice, tutorial explanations and corrective feedback.

With Noam Chomsky's transformational generative grammar and the notion of LAD and UG, together with Stephen Krashen's Monitor Theory and the notion of comprehensible input, language was then viewed as a constructed mental system. This was developed by the interaction between innate cognition and language input. Under the cognitive perspective, in which computers are used to provide language comprehensible input and analytic and inferential tasks, learners interact with computers and computer programs, trying individually to complete tasks. Yet, they lack the chance to engage in authentic negotiation of meaning with other human beings.

Until recently, language learning was regarded as a socio-cognitive process. Language is developed in cultural contexts through social interactions with assimilation and accommodation of others' speech. With this perspective, language instruction is no longer the procedure of explaining linguistic features, or exclusively providing comprehensible input to learners. It is about engaging learners to use language meaningfully, and appropriately, in authentic social contexts. Methods and techniques for language teaching that support this perspective are Communicative Language Learning (CLT), learner-centered instruction, strategy-based learning, content-based learning, CLL and TBLT.

Similarly to the rational CLL and TBLT were chosen to be promising teaching approaches, the integration and implementation of technology in the study was based on the socio-cognitive perspective. In comparison to the cognitive perspective in which learners exclusively interact with computers, under socio-cognitive perspective, technology, specifically Information and Communication Technology (ICT), is used to connect learners to learning resource, learning contexts and learning communities. The integration and implementation of technology for the English for Mass Media course in this study was conducted under the approach named Network-Based Language Teaching (NBLT)

8.2 Network-Based Language Teaching

NBLT is "language teaching that involves the use of computers connected to one another in either local or global networks," (Kern & Warschauer, 2000:1). Goodyear, Banks, Hodgson and McConnel (2004:1) defined NBLT as "learning in which information and communications technology (ICT) is used to promote connections: between one learner and other learners; between learners and tutors; between a learning community and its learning resources." According to an objective stated in the National ICT Education Masterplan (ONEC, 2002), Thai students are expected to use ICT to investigate, collect and process data from various sources, as well as to create new knowledge. Therefore, ICT becomes a significant medium in NBLT and both of them are inseparable.

The followings are examples of language courses which implemented the notion of NBLT (Warschauer, 2000):

- ESL students at Miller College used Computer Mediated Communication (CMC) to share paragraphs with classmates in order to check the correctness for peer editing. They were also asked to write an essay to long-distant key pals (online pen pals);
- 2. ESL students at the University of Hawaii were required to write e-mail journals for their teacher, and publish their bio-data and copies of their papers on their Web pages; and
- 3. Students of a Hawaiian language course at the University of Hawaii used CMC to discuss various topics related to personal, political and cultural issues. They also created Web sites as a project demonstrating knowledge about Hawaiian life and culture.

Therefore, from the samples above, NBLT does not come in a specific form of teaching. This is to say, it can be used in various ways, as Kern and Warschauer stated, "Network-based language teaching does not represent a particular technique, method, or approach. It is constellation of ways by which students communicate via computer networks and interpret and construct online texts and multimedia documents, all as part of a process steadily increasing engagement in new discourse communities," (2000:17).

8.3 Elements in NBLT

NBLT is composed of two major elements that are the network, and the digital literacy. The details of both elements are presented in the following sections below.

8.3.1 The network

The network is simply a tool. What matters is how the tool is employed. As already reviewed in the previous sections, the theoretical framework preferred by the ONEC for Thai learning reform is constructivism, and language acquisition is viewed as a socio-cognitive process. Under the perspectives of cognitive constructivism and social constructivism, ICT is considered a crucial tool for language teaching and learning due to two functions of ICT that are to provide contents and context for interaction and to provide access to discourse and learning communities. The detailed descriptions of the both functions are presented in the following sections below.

1. Contents and context for interaction

The first important feature of the NBLT and ICT is to provide contents and context mainly through Web sites which are located on a global network, as known as the World Wide Web (WWW). The World Wide Web, also referred to as Web, is a relatively new and revolutionary medium for organizing, linking, presenting and accessing information. According to Shetzer and Warschauer, 2001, the important features of the Web are:

- information is presented in linked nonlinear patterns that are stored electronically;
- integration of text with multimedia, such as graphics, audio and videos;
- 3. rapid global access; and,
- 4. ease and low cost of international publication.

With the Web, learners are able to access the enormous amount of authentic information in authentic languages (Warschauer & Healey, 1998) and are able to publish and distribute their works to an wider groups of audience (Shetzer & Warschauer 2001).

2. Access to discourse and learning communities

The second significant feature of ICT is providing access to discourse and learning communities through CMC. ICT helps connect people from different parts of the world to join together. CMC in the language classroom has many advantages. Most of them stem from features which allow learners to collaboratively learn and work together more conveniently. The advantages of collaborative learning have already been reviewed in section 4, this chapter. For online collaborative learning, Kamhistein (2000) has reviewed the advantages of CMC, as follows.

Firstly, CMC promotes reflection and awareness of how to use language in social discourse. Learners gain more benefit from interaction because the nature of written communication allows them to attend and reflect both on form and content of the communication (Kern & Warschauer, 2000). In a study, it was found that learners used more variety of language functions when they communicated via CMC compared to traditional communication (Chun, 1994; Warschauer, 1996a). It was also found that, via CMC, learners used linguistic features which are lexically and syntactically more complex than they did in face to face communication (Warscheauer, 1996a).

Secondly, CMC helps reduce the limitation of learning in traditional classroom i.e. location, time, audience and interactivity. Kamhistein (2000) found that in an CMC setting, the interaction pattern did not reflect the initiation-response-evaluation (IRE) structure which is usually found in the language classroom. With the IRE pattern, the teacher asks question, learners answer that question and, finally, the teacher evaluates the correctness of the responses. In the traditional language classroom, most exchanges reflect the IRE structure, while most teachers' initiations are to ask questions. The directions of exchange were, mostly, from the teacher to the whole class, and from an individual learner to the teacher. There was no collaboration and no interaction. However, within a CMC setting, many exchanges consisted of learners' initiations and responses which were driven by learners' needs and interests. Ng and Ma (2002) claimed that interaction among learners is fostered because CMC is simple and convenient, and it is also time and space independent when compared to

other means of communication. With electronically stored online messages, learners from different levels of socio-economic or academic status have equal opportunities to share and exchange their ideas, opinions and experience in discretion. They are also able to refer to previous exchanges and keep a record easily. In addition, CMC improves learners' engagement through cultural exchange, such as connecting French language students in America with French students in France (Kern, 1996), and connecting American Spanish language students with people in Latin America (Kendall, 1995).

Thirdly, asynchronous CMC tools allow learners to learn in collaboration with their peers, and teachers. From several empirical studies, researchers suggested that if technology is used to create collaborative learning communities via web-based discussions, learners' cognitive engagement would be enhanced. For example, Benston (2000) studied the effects of a collaborative Webbased course project on learner critical thinking and deep understanding about complex social policy issues. Learners were asked to think critically about the reliability and validity of information on the Web while the instructor and classmates provided weekly feedback in order to expand learners' critical view. Another sample is a study on the interactive Web journal (Reimann, 2001). Each day, after class, learners submitted two important lecture points and one unresolved question via a Web form. Through the Web, learners were given an opportunity to think critically, and reflect upon their questions. The safe environment of the Web promoted discussion and helped increase participation from introverted and reflective learners. The results showed that learners found the Web helpful overall. Web discussion helped improve clarification and feedback on difficult concepts. It facilitated classroom discussion, gave them a voice in class, made it easier to ask questions, and stimulated thinking outside the classroom. The findings in a study conducted by Persell (2004) showed the same result. Persell studied the effects of Web board discussion by having learners join a weekly online seminar in which they were assigned specific questions and discussion roles. The Web discussion could foster introverted learners, who rarely engaged in class, to participate. The finding showed that learners' participation and interaction with the ideas of others increased during the semester, thereby relating to their increasing cognitive engagement. Finally, asynchronous CMC tools allow learners to learn at their own pace while, at the same time, provide them with a sense of community.

8.3.2 Digital literacy

As mentioned that NBLT, which is comprised of the Internet and CMC, is simply a set of tools, what matters is how to apply the tools to complete tasks. The knowledge and skills to retrieve information from the Internet, to have high level thinking process with such information, and to communicate with other members in online communities is called digital literacy. Shetzer and Warschauer (2000) suggested that traditional verbal literacy is no longer enough to tackle the more connected and complex world in the 21st century which is moving faster by technology. Learners should be prepared with digital literacy (which they called electronic literacy). Learners with digital literacy are able to use computers and the Internet to interpret and express meaning. They are able to find, retrieve, organize and make use of the information, as well as to read and write in the new medium. Digital literacy is divided into three broad, overlapping areas that are communication, construction and research. The three areas could be compared to the four communicative skills (listening, speaking, reading and writing). The details of the three areas with a comparison with four skills are as follows:

1. Communication

CMC could be compared to speaking and listening (Shetzer & Warschauer, 2000). Communication through CMC is different from the traditional form in many aspects, such as having its own forms of language, abbreviations and symbols, as well as etiquette (Kung, 2004). Moreover, with CMC, people can communicate both synchronously and asynchronously, with less physical and chronological barriers (Beatty, 2003; Shetzer & Warschauer, 2000.)

2. Construction

Construction in digital literacy could be compared to writing in the traditional way, though there are three important shifts from the traditional writing (including typing), particularly, the shift from essay to hypertext, the shift from words to multimedia and the shift from author to co-constructors. The details of the three shifts are as follows.

- Shift from essay to hypertext

Traditional text is usually written in a linear form. However, hypertext is a feature of the Web changes reading from linear to non-linear pattern. Hypertext enables a single document to link to other documents stored in the same, or different, locations around the world. Readers have more alternatives from which to choose, whether to continue reading the whole article, or to stop reading it and click links to other pages for additional information. Though hypertext is far from replacing traditional print text, it could be regarded as an evolutional way of idea and information presentation.

- Shift from words to multimedia

Another important function of hypertext is multimedia. Not only does this relate the text, but also other media, such as graphics, animation, audio and video can be presented together on hypertext documents.

- Shift from author to co-constructors

Online documents mostly are the work of co-constructors instead of a sole writer, as in the traditional way. Web sites, usually are creation of a team of people, rather than just one person. Moreover, most Web sites have links to other Web sites in which the work of other authors exist. Even in a single reading session, readers could possibly read a topic written by many authors from many sources.

3. Research

Due to the increasing amount of available information on the Internet, the ability to navigate the Internet, search for information and critically evaluate what is found before it is put it into use, could be considered the most important skill of digital literacy. For learners who are looking for information on the Internet, they need both reading and researching skills. Learners must know how to use search engines, to scan and to skim Web pages to look for the information they want, as well as to judge the validity, reliability and accuracy of information they find (Stapleton, 2005). These activities cannot be completed with low-level cognitive processes alone.

As mentioned, ICT are considered vital tools for 21st century that all must master as either literacy per se or tools to promote other literacy (AASL & AECT, 1997; ITEA, 1996; ONEC, 2002; Shetzer & Warschauer, 2000; UNESCO, 2006). To be successful in the age of information, learners should be flexible, autonomous, and lifelong learners (Reich, 1991 cited in Shetzer & Warschauer, 2000; Rifkin, 1995 cited in Shetzer & Warschauer, 2000). To develop autonomous learners, it is crucial to cultivate digital literacy in learners (ONEC, 2002). Furthermore, from many studies related to implementation of NBLT in the classroom, the findings showed that the implementation resulted in higher learning achievement and student engagement.

8.4 NBLT and student engagement

The positive findings, related to the correlation between NBLT and student engagement, as well as the effects of NBLT on student engagement, were found in many studies. The detailed descriptions of the findings related to NBLT, student engagement, and its sub-elements, specifically, affective, behavioral and cognitive engagement are presented below.

8.4.1 NBLT and affective engagement

Many scholars worry that working with computers might isolate learners socially. However, Crook (1994 cited in Beatty, 2003) says that computers

facilitate socially organized learning in the classroom rather than inhibits it. It was found that learners prefer to work together at a computer though there were other computers available for working individually (Beatty, 2003). They also enjoyed having peer assessment as it was more objective and they were able to gather more opinions (Ng, 2002b). Learners were motivated, had good attitudes and realized the values of computers and ICT (Reimann, 2001; Shetzer & Warschauer, 2001; Suanpang, and Petocz (2006); Warschauer, Grant, Real & Rousseau, 2004; Warschauer & Grimes, 2005). Moreover, learners also valued digital literacy they earned as a necessity for them after graduation (Kantos, 2002; Williams & Roberts, 2002; Warschauer, 1996b).

8.4.2 NBLT and behavioral engagement

With computers, learners can acquire language through collaboration and negotiation of meaning. When two or more learners sit together at computers and have discussion on learning process and content in the target language, they often engage in scaffolded learning by helping each other improve their language (Beatty, 2003). Moreover, with CMC, learners, especially the introvert and weak ones, felt more comfortable to involve in collaborative learning, doing so their participation and interaction increased (Reimann, 2001; Persell, 2004). By doing so, the language was used authentically, without the restriction of IRE structure usually found in traditional classroom (Kamhistein, 2000).

The negotiation of meaning and collaboration occurs regardless of the computer programs used in language classrooms. Some computer programs are not intentionally designed for teaching language such as simulations, designing programs or word processing programs. Yet these can stimulate a great amount of interactive discussion if learners are given opportunities of working the programs in pairs, or in groups rather than individually (Nunan and Lamb, 1996a, cited in Beatty, 2003). In addition, with CMC, learners are able to learn in their own time and at their own pace (Ng and Ma, 2002), doing so with lower cultural and linguistic barriers (Kamhistein, 2000).

8.4.3 NBLT and cognitive engagement

Learners agreed that they learned effectively through online multimedia-based contents, while communication and collaboration among learners and faculty members improved their understanding and other higher level cognitive process (Benston, 2000; Rersell, 2004; Reimann, 2001; Thomas, 2005) and learning, thereby, became active and meaningful (Sterling, 2004). This is due to the fact that the Web opens opportunities for learners to work in order to produce products which can be achieved by having higher-level thinking skills developed collaboratively. In a study conducted by Chun and Plass (2000), learners were required to engage in productive tasks and activities in a network environment. They were assigned tasks as if they were learners with prospects to study abroad. They had to find out the programs, university, accommodation, budget and other relevant details as if they were actually going there. Learners can also access authentic information, as well as communicate with other people multimodally, such as with texts, sounds or even video, as in a video teleconference. With tools and activities assigned, learners could make decision as to the path they want to take with tools they choose in order to complete the assigned tasks.

In a large scale study of the effects of a computer laptop program in which a thousand of students in three K-12 schools in Orange County, California participated, Mark Warschauer and his team found that computer laptops, which connected wirelessly with the Internet, helped students easily and conveniently access to information. Students used online information in many ways. For example, they used computers to seek information for background class-related knowledge before they came into the classrooms, to seek information to solve "just-in-time" problems appearing in classroom tasks, and to help complete their research projects (Warschauer & Grimes, 2005). In another research project involving a laptop program, Warschauer and his team studied minority students, such as Latino English learners from low income families in California, as well as refugee and immigrant students in Maine. The problem for these students was weakness in academic literacy, such as reading, writing, speaking, listening and thinking skills. Yet, computer availability and Internet access supported these underprivileged students with extensive and independent reading and writing, and assisted with language scaffolding. These students were also provided with opportunities to do authentic research and then pursue publication. The laptop program resulted in many positive outcomes. For example, students were more engaged. The engaged students produced more sophisticated work, which required more cognitive processes to complete. Moreover, when measured with a standardized test, they gained a higher score (Warschauer et al., 2004).

In a large scale research conducted by the Center for Applied Special Technology (CAST, 1996), 500 students from fourth and sixth form elementary and middle schools in America were asked to complete a project relating to civil rights. Students in the experimental group were allowed to access information from the Internet, while ones in control group did not. The result showed that students with online access received higher scores in all nine learning measures, and the scores were statistically significant for five of the nine measures. Moreover, from observations, teachers in the experimental group reported that the students were able to 1) find information quickly, 2) retrieve information from a large number of sources in various formats, 3) deal with information in ways that made the material relevant to their lives, and 4) learn from others, peers, teacher and the community by communication via e-mail and Web boards.

Not only the Web and the CMC facilitate learner learning. Other computer applications also help learners to engage cognitively in learning. Warschauer and Grimes (2005) found that the word processing application encouraged learners to write more than they did by hand. Computers also helped learners to revise and edit their paper easily so they could compare different drafts before submitting the best one for their paper. Moreover, computers applications allow learners to engage in higher level of cognitive activities (Warschauer et al., 2004; Warschauer & Grimes, 2005). For example, in writing classes, learners creatively produced their writing in various formats, such as brochures, posters and newspapers. In a literature class, learners were asked to compose a short musical clip to represent the emotion in the poems that they read. With the Internet and Web browsers, learners downloaded maps, pictures, audio or video clips and placed them in slides for a project presentation. Learners also used computers to organize their learning, such as making flash cards from a presentation program, taking note on a word processing program or managing their schedule by way of a calendar program.

The literature review showed the positive effects of NBLT on student engagement and its sub-elements, as well as the positive relationship between NBLT and student engagement, including its sub-elements, thus the second set of hypotheses related to student engagement were set as alternative one-tailed hypotheses, (the first set of hypotheses are mentioned later), as follows:

- 2. Student engagement of the undergraduate students who were taught using CTBA with NBLT was significantly higher than those who were taught without such an approach.
 - 2.1. Affective engagement of the undergraduate students who were taught using CTBA with NBLT was significantly higher than those who were taught without such an approach.
 - 2.2. Behavioral engagement of the undergraduate students who were taught using CTBA with NBLT was significantly higher than those who were taught without such an approach.
 - 2.3. Cognitive engagement of the undergraduate students who were taught using CTBA with NBLT was significantly higher than those who were taught without such an approach.

8.5 NBLT and achievement

From the literature reviewed above, NBLT had positive effects on affective engagement (Ng, 2002b; Reimann, 2001; Shetzer & Warschauer, 2001; Suanpang, & Petocz, 2006; Warschauer & Grimes, 2005; Warschauer et al, 2004), behavioral engagement (Kamhistein, 2000; Ng and Ma, 2002; Nunan and Lamb, 1996a, cited in Beatty, 2003; Persell, 2004; Reimann, 2001), and cognitive engagement (CAST, 1996; Benston, 2000; Chun and Plass (2000); Reimann, 2001; Rersell, 2004; Sterling,

2004; Thomas, 2005; Warschauer & Grimes, 2005; Warschauer et al., 2004). The relationships between student engagement and achievement were also found in many studies (Carini, et al, 2006; Fincham, et al., 1989; Fredricks et al., 2004; Nystrand & Gamoran, 1991; Zimmerman, 1990).

In Thai contexts, the effectiveness of Web-Based Instruction (WBI) is found to be promising in enhancing learners' learning achievement, particularly in Information technology, Mathematics and Statistics and Science (Apichatibutarapong, Worrachittanon, Tenissara, Vongsirojgul, and Petsuwan, 2008). Even in the context of SDRU, Suanpang, and Petocz (2006) studied the effects of WBI in the Business Statistics course. The results showed that online learners achieved superior learning outcomes in terms of grades and levels of satisfaction with their learning compared to learners in traditionally taught classes. However, what should be pointed out is these WBI courses were designed and constructed, mainly based on structural and cognitive perspectives. These online courses provided learners with content, examples with multimedia, quizzes and tests. The connections to other learning sources, communication to and collaboration with other communities, as well as construction online text and multimedia documents, all which are the main goals of NBLT, were not the main functions in these WBI courses.

A study of Raksasuk (2000) found that Thai students hardly had social interaction in WBI. Her finding, particularly Thai students' online interaction habits agreed with other studies that support the notion that Anglo-Saxon students (from individualist cultures) are more accustomed to student-centered situations whereas Asian students (from collectivist cultures) prefer a teacher-centered approach (Anakwe Kessler, and Christensen ,1999; Chin, Chang and Bauer, 2000)

Chin and colleagues (2000) compared two groups of university students from two different cultural backgrounds, particularly from Anglo-Saxon countries (Australia, England, Northern Ireland, New Zealand and Scotland), and from Asian cultural countries (Singapore, Malaysia, Indonesia, Hong Kong, India, Philippines, Korea, Taiwan, and Thailand).The results showed that Anglo-Saxon students were more confident in using the Web-based materials despite the fact that both groups perceived Web-based learning as an innovative idea to facilitate learning. Moreover, Asian students accessed the materials fewer than Anglo-Saxons did and seemed to have significantly more trouble related to the tasks of Web-based learning than their Anglo-Saxon classmates.

On issue of communication, Anakwe and colleagues (1999) also found that motives and communication patterns of learners from individualist cultures were supported in an online distance learning environment more so than learners from a collectivist culture. For Thais, face-to-face interaction is found to be the preferred method of communication rather than virtual interaction (Tetiwat and Huff, 2003). Many scholars (Raksasuk, 2000; Sanae & Bruekner, 2004; Mustafa, 2005) suggested that cultural factors in terms of interaction and communication should be considered while design and implement WBI because WBI might not increase collaboration for all cultures.

In Thailand, rote learning and learning by example are common ways of learning. From observation, Prapaisit (2003) found that English classes she observed were teacher-centered and most time in classroom was spent for teacher talks. The target language was hardly used in those classes due to the teachers' low English proficiency, teacher's lack of confidence, and learners' low proficiency. Moreover, none of them used group work or pair work, which are is most important feature of Communicative Language Teaching (CLT). Doing so was due to the fact that they were trained to use only drill activities, Total Physical Response (TPR), and singing.

On the contrary, E-learning requires a high level of discipline from the learner while Thai students have less of a sense of participation towards learning (Sanae & Bruekner, 2004). Particularly with NBLT, in which ICT is used to promote:

- 1. collaboration between learners-learners, and learners-instructors;
- 2. communication between learners and learning community;
- connection between learners and learning resources (Goodyear el al., 2004); and

4. constructions of news knowledge in the forms of online multimedia text (Kern & Warschauer, 2000).

Many studies mentioned the passive learning habits of Thai student. Thai students show a significant lack of self-control and independence of learning and of creative and critical thinking (Viartas & Sangkamnee, 2000). Thai university students were knowledge consumers (Sinlarat, 2005). The statements were agreed to by Pragram and Pragram (2006) that Thai students will only study a textbook because the answers for the examinations are in the book, but they rarely apply knowledge learned, such as putting it into use. Thai students still expect a great deal of assistance from teachers even they are in higher education (Pragram and Pragram, 2006). Malaiwong (1997) suggested that Thai students never have been taught to be autonomous learners.

NBLT is an innovative teaching approach and the studies of its effects on language achievement are rarely available, particularly in Thai context. Thai students' passive learning habits possibly obstruct them from active and collaborative learning, and using the target language for those activities. The effects of NBLT, a teaching approach which is based on socio-cognitive, on English language achievement, particularly in Thai context is, then, uncertain. Therefore, from literature review, the first hypothesis in this study was set as a null hypothesis that:

1. The English language achievement of the undergraduate students who were taught using CTBA with NBLT was not significantly different from those who were taught without such an approach.

The uncertainty in a finding related to English language achievement led to the third set of hypotheses that:

3. There was not a significant correlation between the English language achievement and student engagement of the undergraduate students in each group.

- 3.1 There was not a significant correlation between the English language achievement and affective engagement of the undergraduate students in each group.
- 3.2 There was not a significant correlation between the English language achievement and behavioral engagement of the undergraduate students in each group.
- 3.3 There was not a significant correlation between the English language achievement and cognitive engagement of the undergraduate students in each group.

8.7 Suggestions for NBLT implementation

One caution that should be kept in mind when NBLT is integrated and implemented into classrooms is that computers and the Internet do not always engage and motivate learners. Before interested researchers began their research and observations, they expected that learners would be more authentically engaged when using computers in comparison to more traditional methods. Researchers found that learners did like the technology, but authenticity of the lesson and activities relevant and meaningful to learners' lives made the lesson even more engaging than using computers (Bowen et al., 2003). This finding agreed with one from a study of a hypermedia design class (Chen and McGrath, 2003), in which hypertext tools just provided some certain motivational effects for the learners. However, what mattered in sustaining learner effort to complete tasks that demanded high levels of cognitive engagement was motivating context. The motivating context consists of the teacher, the curriculum, the peers, the tools, and the educational institution's attitudes toward technology.

In addition, to facilitate learning, Warschauer (2001) suggests that tasks in an online environment should include the following elements.

1. Interview and surveys: collaboratively, learners work to design, conduct and interpret an interview or survey on a social or cultural issue;

- 2. Online research: collaboratively, learners conduct online research questions assigned by teachers or their own interests;
- Comparative investigations: collaboratively, learners investigate social, cultural, or economic issues in their society and compare the findings online;
- 4. Simulations: collaboratively, learners set up a simulation of a real world problem and try to find out the best solution; and,
- 5. Online publication: collaboratively, learners publish online newsletter, magazine or report.

The characteristics of online tasks suggested by Warschauer (2001) suited well the term project of the English in Mass Media course. The term project required students to write, and to publish new stories, which reflected the current social issues, doing so by having interviews with news sources and conducting research.

In conclusion, to implement NBLT into the language classroom needs thorough planning. Students should be informed in advance what they are required to do, as well as the teacher's expectation, as to outcomes, plus the criteria used to judge them, and the advantages they would gain from learning with NBLT. Some training might be needed in advance to prepare students for the NBLT environment. Moreover, the way that technology is integrated into the lessons is also important; it should not be used just for the sake of being used. It must be connected to the lesson in a constructive way. The Internet is suitable for a well-structured task-based approach which allows students to engage in complex and meaningful tasks throughout the course, doing so in collaboration with peers, teachers, other people or other resources (Warschauer, 2001; Roselli, Faggiano, Plantamura, & Rossano, 2002).

8.8 Precautions for NBLT implementation

However, Williams and Roberts (2002) have concluded that some weaknesses of NBLT might affect learning success, particularly, willingness to contribute, time management, communication skills, and computer skills, details of which follow.

1. Willingness to contribute

Though many studies showed the positive results of online collaboration in which learners had chance to collaboratively work by contributing their ideas and experience, some learners might be unwilling to share. Learners who felt they were more proficient might be less motivated to exchange information if they saw that other members in the group were passive. Some learners might be reluctant to share their ideas because they were not confident in their answers, or they were dominated by other active controlling learners.

2. Time management

NBLT requires collaboration between learners, while CMC allows them to work at any time and in any place. Some learners might feel that they were overloaded with work. Some might be frustrated or bored while they had to wait for feedback from peers or teachers.

3. Communication skills

Some learners might experience difficulties in communicating with people with whom they were not acquainted. The lack of visual contact and body language also affected understanding.

4. Computer skills

As mentioned, NBLT requires digital literacy. Some learners might not possess such literacy, so operating computers and related applications might be obstacles for their learning. In addition, typing skill is a also crucial skill in NBLT. From research, it was found that learners with less proficient typing skill were less productive when they were required to learn in an NBLT context (Warschauer & Grimes, 2005).

5. The Influence of Thai culture

In addition, academics have demonstrated concerns over the contradiction between Thai culture and Thai educational reform. The study reported in this dissertation stemmed from an attempt to develop education in Thailand with the National Education Act of 1999, regarded as a main principle and guideline. The concerns about the influence of Thai culture over learners and learning reform should be considered. Hallinger and Kantamara (2001) viewed that educational reform is possibly unsuccessful because notions in such reform conflicted with traditional Thai culture. That schools and teachers gained more independence and control does not fit with long-practiced norms in which educational policies were centralized. Pagram and Pagram (2006) exhibited anxiety over negative effects from westernized educational reform, claiming that the implementation of Western education, namely e-learning, into Thai contexts without appropriate adaptation or localization might negatively affect the culture and values of Thai youth.

As Hofstede stated, "Culture could be defined as the interactive aggregate of common characteristics that influence a human group's response to its environment. Culture determines the uniqueness of a human group in the same way personality determines the uniqueness of an individual," (2001: 10). The learning preference and learning habits of an individual learner can be considered as a part of his or her personality or habits. However, if learners from a particular country tend to believe and behave in similar ways, then the learning habits of such learners could possibly stem from the culture of the communities to which they belong.

A document distributed to instructors and academic personnel by the Department of Education and Children's Services, the Government of South Australia (2008), characterizes the personality and learning habits of Thai students as follows:

1. Thai students are taught to accept what the instructors say. They are less likely to have argument with the instructors as arguing is considered an inappropriate manner for young people to behave with older people;

- 2. They are generally shy. They are afraid to give wrong answers and to be embarrassed;
- 3. They do not like to be singled out in a classroom, either for praise, blame, or individual response; and
- 4. They are not accustomed to open class discussion.

This document concluded that Thais are passive learners and their passive learning habits stem from a non-confrontational society of Thailand in which traditions and cultures emphasize courtesy, tolerance and mutual respect while dispute or criticism should be avoided. Therefore, it is possible that Thai culture might affect the results in this study. The Cultural Dimensions (Hofstede, 2001) was chosen as a framework to gain insight into Thai culture. The descriptions of Hofstede's Cultural Dimensions are presented in detail below.

Power Distance

Power distance refers to the degree to which people accepted unequally distributed power. Scarborough (1998: 9) characterized people and societies with high power distance as follows:

- People in high power distance society depend on the authority and expect directions from them;
- 2. Subordinates are unwilling to challenge, or approach, anyone with higher authority;
- 3. Children are taught since they were young to obey strict rules and the power of the superiors; and
- 4. Organizations, from the smallest unit in the society are hierarchical and decision making is centralized.

Uncertainty Avoidance

Uncertainty avoidance refers to the degree of tolerance for ambiguity and unfamiliarity. People and societies with high uncertainty avoidance have the following characteristics (Scarborough, 1998:10):

- 1. They do not like change and try to avoid any unfamiliar risks;
- 2. They prefer structured situations, formal rules, and norms; and
- 3. In a workplace, roles are specified; rules and procedures are detailed and enforced; instructions are precise; and conflicts are avoided.

Collectivism

Collectivism is a cultural dimension which is totally opposite to individualism; it refers to the degree to which individuals are integrated into groups. A society with collectivism is associated with agricultural society in which people make a living with farming and live in farms or small towns. The characteristics of people from culture of collectivism are as follows (Scarborough, 1998:10):

- 1. They live within extended families in which their families continue protecting them in exchange for respect and loyalty; and
- 2. It is in contrast with a society with individualism of which people live in smaller or nucleus families in which they are expected to look after themselves.

Femininity

Femininity is a cultural dimension which is opposite to masculinity; people from a society with femininity tended to have such characteristics (Scarborough, 1998:11:

- 1. People in feminine culture are tender, modest, reticent and caring for others;
- 2. They value nurturing and harmony;
- 3. Gender roles are interchangeable;
- 4. Conflicts are settled by negotiations and compromise; and
- 5. The notions of competitiveness, assertiveness, and ambition are discouraged.

Cultural dimensions in Thailand

According to Hofstede's Cultural Dimensions (2001), Thailand is a society which is composed of the following characteristics: high power distance, low individualism, low masculinity, and high uncertainty avoidance. Figure 8 compares the Thailand's cultural dimensions with those of the United States and those of the United Kingdom.

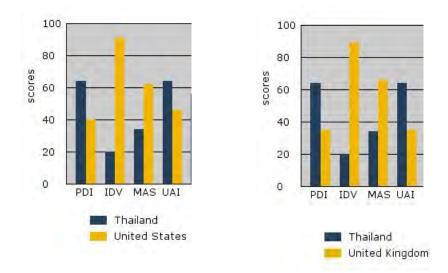


Figure 8: Comparison of Thailand cultural dimensions with US and UK

Adapted from http://www.geert-hofstede.com/hofstede_dimensions.php Notes: Power Distance Index (PDI), Individualism (IDV), Masculinity (MAS) and Uncertainty Avoidance Index (UAI)

Figure 8 shows that the cultural dimensions of English speaking countries, particularly the United States and the United Kingdom correlate, In contrast, the cultural dimensions of Thailand does not correlate with the two countries in all dimensions. In addition, in these three countries, Power Distance Index (PDI) usually correlates with Uncertainty Avoidance Index (UAI), whilst Individualism (IDV) correlates with Masculinity (MAS).

As mentioned, Thai society is high in both power distance and uncertainty avoidance (Hofstede, 2001). Thai children are surrounded with strict rules and norms; they are taught since they were young to show respect to people who are older or are

higher in socio-economic status than them. The evidences can be seen clearly in both Thai language and manners. In a school context, students are not allowed to call their teachers by their names without the title Khun Kru (Mister, Miss Teacher). When they walk through the school entrance and meet a teacher in the morning, they greet them with a "wai", being a slight bow of the head with two palms raising and pressing together in front of the chin, when they walk past a teacher, they bow with their heads and backs; or, when they talk to a teacher who is sitting on a chair, they must kneel because standing over the teacher's head is considered disrespectful. Missing any of these manners could be frowned upon or lead to complaint that such a person is illmannered or even improperly educated.

The influences of collectivism and femininity are also seen in the school and university context. Schools are perceived as the second home and teachers become the second parents. Thai students, therefore, tend to have passive learning habits and still expect a great deal of assistance from teachers even in higher education (Pragram and Pragram, 2006). Malaiwong (1997: 51) suggested that Thai students never have been taught to be autonomous learners. The statements were agreed to by Pragram and Pragram (2006) that Thai students will only study a textbook because the answers for the examinations are in the book, but they rarely apply knowledge learned, such as putting it into use.

8.9 Conclusion

ICT in NBLT was mainly used for two purposes. Firstly it was used to connect students to content and context for interaction. Secondly, it was used to connect students to discourse and learning communities. From reviewed studies, there is considerable evidence showing that when ICT is meaningfully and collaboratively used, it helps enhance student engagement in all aspects.

For affective engagement, learners were motivated, had good attitudes and realized the values of computers and ICT. Learners agreed that they learned effectively through online multimedia-based contents, while communication and collaboration improved learning. Learning was more enjoyable and active when they were more engaged. Moreover, digital literacy was valued as a necessity for them after graduation.

For behavioral and cognitive engagement, the Web allows learners to access to the enormous amount of authentic information in authentic languages, as well as to publish and distribute their work to an international audience. The Web also opens opportunities for learners to work in order to produce more sophisticated products which can be achieved by having collaboration and working with higher-level thinking skills. Learners can communicate with other people through text, voice or video. Multimedia on the Web help enhance language learning by facilitating comprehension in reading and listening while learners also had opportunities to construct knowledge and have negotiation of meaning in speaking and writing.

Despite the positive findings related to ICT implementation in classroom, to implement NBLT into actual Thai classroom contexts must be done with care due to some difficulties, namely a low willingness to contribute, poor time management, inadequate communication and computer skills (Williams and Roberts, 2002) and, especially, Thai culture.

CHAPTER III RESEARCH METHODOLOGY

1. Research Design

1.1 Research design

From the literature review presented in the previous chapter, CTBA is designed with the purpose to enhance language achievement and student engagement. The lesson plans and tasks in CTBA are specifically planned and organized in order to achieve such a purpose. Moreover, many studies have shown the positive effects of ICT implementation in classrooms in that ICT enhances student engagement in all aspects: affective, behavioral, and cognitive. However, ICT is like a coin; it comes with two faces. The advantages of ICT could turn out to be disadvantages, particularly if persons involved are not ready, the implementation is not planned carefully, or it is not put into action properly. Due to these key points, the present study was designed as quasi-experimental research with a non-equivalent group pre-test post-test design. The subjects were purposively selected and randomly distributed into two groups: the control group and the experimental group. The students in both groups studied the English for Mass Media course which was conducted under CTBA. However, only the students in the experimental group were taught with NBLT.

1.2 Rationales for the research design

The researcher was aware of the limitations of non-equivalent group pre-test post-test research design in that the result of the study could not be generalized to other contexts. However, there were many reasons to support the decision in applying such design in this study, such as:

 With the course description, course objectives, content, and needs for improvement of the English for Mass Media course, the implementation of CTBA with, or without NBLT in the course, was appropriate theoretically, pedagogically, and practically, as already mentioned in Chapter II; 2.3 cognitive engagement.

2. Population and Subject Selection

The population in this study comprised 120 third-year Business English students at SDRU who enrolled in the English for Mass Media course, in the academic year 2007. They are Thai, female and male students with age range between 17 to 20 years old.

To select subjects for this study, two out of four sections of students who enrolled in the English for Mass Media course were purposively selected before each section was assigned randomly to the control and the experimental groups. There were 24 subjects in each group. Though both male and female students joined this study, there were only two male subjects in the control group and one male subject in the experimental group. From the initial survey conducted by the researcher before the main study started, the result presented that other characteristics of the subjects in both groups, namely English language proficiency, digital literacy, and study habits were insignificantly different. These three characteristics of the subjects are described in the next section below.

2.1 Subjects' general English language proficiency

Subjects from both groups were asked to take the Chulalongkorn University Test of English Proficiency (CU-TEP), a standardized language proficiency test, (CULI, 2006). Independent-samples t-test was applied to analyze the mean scores.

Groups	Ν	Mean	Std. Dev.	df	t-value
Control	24	39.708	6.695	46	1.000
Experimental	24	39.708	8.564		

Table 6: Comparison of the General English Language Proficiency in Students

2. The English for Mass Media course was a required course for third-year students from the Business English program. Therefore, students who enrolled in this course in the academic year 2007 were, necessarily, required to participate in this study. However, because the third-year students comprised students from four sections, to merge all of them into one group, before distributed them randomly into the control and the experimental groups, therefore, was unlikely. This was due to the fact that the students also enrolled in other courses of which academic schedules were set and planned for a year in advance. Randomizing and distributing them would definitely interfere the planned academic timetable of the Business English program and academic personnel involved;

Therefore, from the rationale mentioned above, to purposively select two of totally four sections of SDRU Business English third-year students, who enrolled in the English for Mass Media course in academic year 2007, as the participants in this study, before to randomly distribute them into the control and the experimental groups was appropriate.

1.3 Variables

The independent variable in this study was:

1. Collaborative Task-based Approach (CTBA) with, and without, Networkbased Language Teaching (NBLT).

The two dependent variables were:

- 1. English language achievement; and
- 2. Student engagement, which was sub-classified into three sub-elements:
 - 2.1 affective engagement,
 - 2.2 behavioral engagement, and,

As illustrated in Table 6, the finding from the test showed that the general English proficiency of the two groups of subjects was insignificantly different, t (46) = 1.000, p > 0.05. Moreover, from the total scores of 120, the average scores of the control group ($\bar{x} = 39.708$, SD = 6.695) was equal to ones of the experimental group $(\bar{x} = 39.708, SD = 8.564)$. The results, when compared with the International English Language Testing System (IELTS) could be interpreted that the subjects in both group were extremely limited to limited English language users (Kendall Academy, 2009). According to the IELTS band score description, the extremely limited users are able to convey and understand only general meanings in very familiar situations, while communication breakdowns frequently occur. For limited users, they have problems in both understanding and expression, as well as with using complex language (IELTS, 2006). However, as third year students, they had already passed fundamental courses, which were considered advantageous for taking the English for Mass Media course, such as Paragraph Reading Strategies, A Discourse Approach in Reading, Controlled and Formulaic Writing, Formal Paragraph Writing, and Forms and Usage in Modern English.

2.2 Subjects' digital literacy

Moreover, the results from the survey conducted by the research prior to the main research started showed that the subjects in both group were quite familiar with computers and application programs such as Microsoft Words and PowerPoint. They also knew how to search and retrieve information from the Internet. The sample of questionnaire used in the survey is available in Appendix 2. Moreover, the subjects had already passed the courses related to ICT and digital literacy, such as the Technology for Life course and the English for Communication and Information Retrieval course, both of which are compulsory for all SDRU freshmen.

2.3 Subjects' study habits

From the same survey mentioned in subject's digital literacy, the subjects in the control and experimental groups were insignificantly different in terms of their study habits. The survey assessed subjects' study habits in seven aspects including motivation, concentration, time management, remembering, listening to lectures and taking notes, studying a chapter, and test taking. The detailed descriptions of each aspect of study habits are presented in the section below.

- Motivation referred to intrinsic motivation, namely effort to finish difficult tasks, effort to achieve a better outcome, learning enjoyment, and extrinsic motivation, such as grades;
- Concentration referred to learning focus and finding a place and time for self learning;
- Time management referred to planning and organizing time for studying, including following the planned schedule;
- 4. Remembering referred to reviewing learned content, and checking text's headings and summary before reading;
- 5. Listening to lectures and taking notes referred to taking notes, determining the important points in lectures, as well as checking and completing missing words in notes;
- Studying a chapter referred to understanding the concepts by reading headings and summary, then summarizing the studied content in their own words, and gaining a better understanding from charts and illustrations; and,
- 7. Test taking referred to predicting what should be included in a test, planning time spent for each test section, organizing ideas before writing an article, and checking mistakes before handing in an answer sheet.

The results from the survey showed that the control group gained average scores higher than the experimental groups only in listening to lectures and taking notes. The experimental group's average scores were higher than the control group's average scores in motivation, concentration, time organization, time management, remembering, studying a chapter, and test taking, as shown in Table 7.

Learning habits	Groups	n	Mean	Std.	df	t-value
				Dev.		
Motivation	Control	24	3.384	0.378	46	-1.233
	Experimental	24	3.510	0.326		
Concentration	Control	24	3.127	0.548	46	-0.474
	Experimental	24	3.194	0.422		
Time management	Control	24	2.804	0.509	46	-0.913
	Experimental	24	2.917	0.334		
Remembering	Control	24	2.744	0.659	38.737	-2.010
	Experimental	24	3.063	0.414		
Listening to	Control	24	2.991	0.401	46	0.290
lectures and taking	Experimental	24	2.959	0.358		
notes						
Studying a chapter	Control	24	2.781	0.476	46	-0.606
	Experimental	24	2.855	0.364		
Test taking	Control	24	2.866	0.412	46	-1.789
	Experimental	24	3.091	0.456		

Table 7: Studying Habits of the Control and Experimental Groups

However, the result from Independent-samples t-test showed that both groups were insignificantly different in all seven aspects of studying habits.

3. Setting and Timing

3.1 Suan Dusit Rajabhat University

The study took place at SDRU, an educational institute which has widely implemented technology for pedagogical and administrative management. At the university, students are able to connect to the Internet from desktop computers in the library, or from computer laptops through the wireless network installed around the university vicinity. Moreover, instructors in the Business English program have extensively integrated ICT in teaching, as well as encouraged students to use ICT for producing and presenting their work, such as through brochures in the English for Marketing course, or a slide presentation in the English for Tourism course. To sum up, the context within SDRU positively supports ICT-enhanced language learning by providing devices and conduits, as well as technical and content support.

3.2 Classrooms for the English for Mass Media course

The control and the experimental groups did not share the similar setting for classrooms due to the extra requirement for ICT in the experimental group. Therefore, the English for Mass Media course was conducted in a traditional classroom and in a computer laboratory, for the control and the experimental group, respectively. The detailed descriptions of the both settings are presented below.

3.2.1. Classroom for the control group (CTBA without NBLT)

Students in the control group studied in a classroom equipped with:

- 1. air conditioners;
- 2. a whiteboard;
- 3. a personal computer, exclusive for the instructor;
- 4. an LCD projector;
- 5. a screen;
- 6. a microphone and speakers; and,
- 7. moveable lecture chairs.

3.2.2 Classroom for the experimental group (CTBA with NBLT)

Students in the experimental group studied in a computer laboratory equipped with:

- 1. air conditioners;
- 2. a whiteboard;
- 3. personal computers ready and available for all subjects;
- 4. an Internet connection;
- 5. an LCD projector;

- 6. screen for LCD projector;
- 7. microphone and speakers; and,
- 8. long tables with moveable chairs.

Both rooms were well-lit and free from any distracting sounds. The images of the traditional classroom and the computer laboratory used in this study are available in Appendix 3. What should be noted is each student in the experimental group was provided computer and the Internet connection, while students in the control group were not.

3.3 Timetable for English for Mass Media Course

Each session of the English for Mass Media course lasted three hours and was held once a week for 15 weeks. Both the control and experimental groups had class on the same day. However, in order to limit any effects caused by difference in class timing, the course schedule for both groups were switched after the 7th week had passed. Details are as follows.

3.3.1 Timetable for the control group

Week 1 - Week 7	the morning session (09:00-12:00)				
Week 8 - Week 15	the afternoon session (13:00-16:00)				
3.3.2 Timetable for the experimental group					
Week 1 - Week 7	the afternoon session (13:00-16:00)				
Week 8 - Week 15	the morning session (09:00-12:00)				

4. Instructional Instrument

The main instructional instrument in this research was the English for Mass Media course in which the CTBA with, and without, NBLT was implemented. The details of the course are as follows.

4.1 Course description

According to the course description written by the Office of Rajabhat Institute Council (ORIC), English for Mass Media is "the study of principle and style in printed media, such as newspapers and magazines, brochures, itineraries, advertisements in newspapers and magazines. Particular attention to syntactic and lexical features, using headlines, promotional literature, articles, newsletters, commercial advertisements and classified advertisements (sic)" (ORIC, 1993). However, according to the agreement among lecturers of the Business English program at SDRU, content related to brochures, itineraries and advertisements were taught in other courses, namely English for Marketing and English for Public Relations. Therefore, content in the English for Mass Media course was limited mainly on grammar structures and vocabulary frequently found in articles in newspapers. In the past, learners were required to read selected news stories simply to identify the grammatical structures in headlines, or to identify subjects, main verbs, heads and modifiers in news leads. While linguistic features were the main focus, their other skills, higher-order cognitive processes, and the knowledge related to domestic and international current situations happening around them were left uninvolved.

4.2 Course objectives

According to the course syllabus distributed to students enrolling in the English for Mass Media course in the first semester of academic year 2006, the objectives of the course were to enable the students:

- to identify parts in newspapers and find specific information in newspapers;
- 2. to identify types and values of news stories;
- to read news headlines and identify basic grammar structures of the headlines;
- 4. to read and answer 5Ws 1H questions (Who, What, When, where, Why and How) from news leads;

- 5. to identify the subjects and main verbs in news leads;
- 6. to summarize and paraphrase the main ideas in news stories by their own words; and
- 7. to write news stories with proper syntactic and lexical features.

However, in order to achieve the goal of educational reform which is to create "lifelong education for all" (ONEC, 1999), Thai learners should be cultivated active learning habits so that they could learn throughout life. Rote learning with traditional grammar-translation method in which language was viewed as a static transferable knowledge and was taught separately out of context would not facilitate active, meaningful, and lifelong learning. With such the goal in mind, the learning objectives of the English for Mass Media course needed to change. With the need for change from grammar-focused syllabus, the change of technology, and the need for critical thinking skill training, the course objectives had shifted the focus from mastery of individual and separated linguistic features to mastery of target language literacy and critical thinking. In this study, the course objectives were revised so that students were able to exercise their language proficiency in all four skills, their higher-order cognitive processes, collaboratively in groups and meaningfully with the current local and world affairs, yet, grammar structures were still emphasized. The objectives of the English for Mass Media course in the research reported in this dissertation were that students are able:

- 1. to identify types and values of the news stories they read;
- 2. to answer 5Ws 1H questions from the news stories they read;
- 3. to summarize the main idea from the news stories they read;
- 4. to write their own headline/ leads after reading news stories;
- 5. to distinguish facts out of opinions from news stories;
- 6. to evaluate and judge the validity, reliability and authenticity of news stories; and,
- 7. to write news stories from the primary and secondary sources.

Table 8 shows how the newly revised course objectives were implemented in the lesson plan.

Mode of communication	Interpretative			Interpersonal	Presentational
Skills focused in each mode	Listening/ Reading			Listening/ Reading Speaking/Writing	Speaking and Writing
Units	Schema building	Controlled practice	Language focus	Tasks	Presentation
1. Parts in newspapers	Parts of Front Pages	Parts of Newspapers (controlled)	Headlines	Parts of Newspapers (free)	Parts of Newspapers
	Introduce parts of newspaper front page Have Ss match names with parts on front page	Introduce parts in newspaper	Punctuations Omission of articles	Have Ss look for each part in the newspaper by giving guiding questions	Presentation

Table 8: Skills and Modes of Communication in Lesson Plan

The sample of lesson plan of Unit 1 presented in Table 8 confirms that the revised course focused on students' modes of communication (interpretative, interpersonal and presentational) in all four skills (listening, reading, speaking, and writing). In Schema building, Controlled practice and Language focus, students have an opportunity to read the textbook, listen to lecture and write their answers to complete language-focused exercises and controlled tasks. In Tasks, students collaboratively work with their peers to complete the tasks. Mostly, answers in Tasks are open-ended but extra research is required to complete the tasks properly. In Tasks, students have chance to practice all skills in interpersonal mode. In Presentation, students have an opportunity to practice writing and speaking skills while they present their findings to class.

4.3 Course content

According to the newly revised course syllabus for this research, content in the English for Mass Media course were as follows:

- Parts of Front Pages: activities in which students identified parts usually found on newspaper front page, such as masthead, ears, kickers, cuts, captions and so on;
- 2. Parts of Newspapers: activities in which students explored various parts in the newspapers;

- 3. News Definition: activities in which students gave definition to news;
- 4. Types of News: activities in which students categorized news stories into types such as home, international, business, sport, and entertainment;
- 5. Types of Newspapers: activities in which students identified different characteristics between quantity and quality newspapers, including categorizing newspapers into such types;
- 6. Parts of News: activities in which students identified main parts in a news story, such as the headline, lead and body;
- News Values: activities in which students identified values in an event that caused it to be publicly reported;
- News Writing Styles: activities in which students identified differences in styles of a news story and a narrative article, including writing news stories in appropriate styles;
- 9. Headlines Structures: activities in which students identified grammatical structures in headlines;
- 10. Abbreviations in Headlines: activities in which students gave the full definitions of abbreviations and acronyms usually found in news headlines;
- 11. Noun Phrases in Headlines: activities in which students shortened a phrase by using noun-modified noun phrases;
- Headline Vocabulary: activities in which students defined words usually found in news headline, including finding and replacing appropriate words for headlines;
- 13. 5Ws 1H Questions: activities in which students identified the important information that the news leads contained namely who, what, when, where, why and how;
- 14. Subject and Main Verbs: activities in which students identified the subject(s) and main verb(s) in complex sentences of news leads;
- 15. Head and Modification: activities in which students identified the subject heads, main verb and modification, as well as to write a sentence with modifiers;

- 16. Headline and Lead Writing: activities in which students wrote news headlines and leads from information given;
- 17. Quotes and Attributions: activities in which student learned of news source and quotes;
- 18. Direct and Indirect Quotes: activities in which students learned the differences of direct and indirect quotes and the ways to write them;
- 19. Validity and Reliability: activities in which students judged the validity and reliability of the news sources and their quotes;
- 20. News writing: activities in which students implemented their learned knowledge and skills to write the news stories.

4.4 Teaching procedures

The CTBA teaching procedures in the class each week were adapted from the TBLT framework of Willis (1996) and Nunan (2004) as is illustrated in Figure 7, in Chapter II. The procedure is comprised of six instructional steps, particularly schemabuilding, controlled practice, language focus, tasks, presentation and wrap-up. With this framework, students were exposed to rich and comprehensible inputs of real spoken and written language in use. Students were also given chances to use language to do things actively and constructively while the focus on form was not abandoned. Teaching procedure in the English for Mass Media course presented in detail is available in Steps of treatment section, in this chapter.

4.5 Content and task organization

As mentioned in Chapter II, content and tasks in CTBA were organized in the horizontal order of open-endedness, and the vertical order of cognitive complexity, as presented in the context of the English for Mass Media course below.

Order of open-endedness

In each weekly class, the controlled practice came before the tasks in teaching procedure. The controlled practice required close-ended answers, while the Tasks required more open-ended answers. For example, in the Unit 2 of the English for Mass Media textbook as shown in Table 9, students were asked to read teacherassigned news stories and identify the news types and news values, in controlled practice section, but in task section, they were asked to find news stories with assigned types and values, as well as to support their answers with reasons.

Mode of communication	Interpretative			Interpersonal	Presentational
Skills focused in each mode	Listening/ Reading			Listening/ Reading Speaking/Writing	Speaking and Writing
Units	Schema building	Controlled practice	Language focus	Tasks	Presentation
2. News stories	News	News (controlled)	Headlines	Types of News (free)	Types of News
	News reading comprehension exercise	Definition of news Types of	Present tense Past Participle	Have students find samples of news stories that match the	Presentation
	Values of news	values of news	Passive voice	assigned news types and news values.	

 Table 9: Unit 2 Lesson Plan

Order of cognitive complexity

At the beginning of the semester, tasks required only a simple cognitive process in order to be completed. While at the end of the semester, tasks required more complex cognitive processes. For example, in the first weeks, students read news stories and then identified the types and values of the stories, as in Table 9, but, they wrote their own news stories at the end of the semester, as lesson plan shown in Table 10.

Mode of communication	Interpretative			Interpersonal	Presentational
Skills focused in each mode	Li	stening/ Reading		Listening/ Reading Speaking/Writing	Speaking and Writing
Units	Schema building	Controlled practice	Language focus	Tasks	Presentation
10. Featured articles	News	Soft news/ Featured stories	Past participle	Soft news/ Featured stories	Soft news/ Featured stories
	Reading comprehension Exercise	Have students compare writing styles of news stories and featured stories.	Have students combine sentences.	Have students write news stories in featured news style	Presentation

 Table 10:
 Unit 10 Lesson Plan

The completed lesson plans for the English for Mass Media Course are available in Appendix 4. A sample of content in the English for Mass Media textbook is available in Appendix 5.

4.6 Types of CTBA tasks

The objectives of the English for Mass Media course were to encourage students to focus on linguistic elements, language skills, critical thinking skills, and world current situations. The course offered the students opportunity to practice rehearsal tasks, being tasks which were similar to real world tasks, so that they were prepared to encounter them after graduation. A rehearsal task in this course was following and reporting world situations reported in newspapers, or news agency Websites. The other opportunity was to write authentic news stories from authentic news sources. Other pedagogical tasks and enable skills in this course were various including types of tasks classified by Willis (1996), Nunan (2004) and Richard (2001) such as listing, matching, problem solving, reading comprehension, paraphrasing, and summarizing.

Tasks in the English for Mass Media course were divided into three main types, specifically, in-class tasks, take-home tasks and a term project, as the comprehensive list of tasks in CTBA is shown in Figure 9.

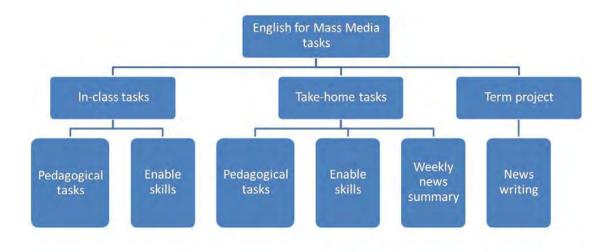


Figure 9: Tasks in English for Mass Media

The detailed descriptions related to each type of tasks in CTBA are presented as follows. As suggested by the names, in-class tasks were task students were required to complete in class hours. They were divided into two sub-types, specifically pedagogical tasks and enable skills.

Pedagogical tasks could be compared to Nunan's rehearsal tasks (Nunan, 2004), which are similar to real world tasks, such as reading and writing news stories and Willis's tasks (Willis, 1996), which encourage learners to comprehend the course content better through tasks, such as matching or fill-in the blank. Enable skills could be compared to Nunan's language exercises, which focus on separated lexical and syntactic features, such as monosyllabic words, and participles.

Take-home tasks were quite similar to in-class tasks, but students were allowed to complete them at homes due to the open-ended nature of tasks, as well as the increasing complexity of the cognitive processes required for completing the tasks. Another type of weekly task was a news summary. Here, students chose interesting news of the week, answered questions related to it, summarized it in their own words, and presented it to the class before collecting it in their groups' portfolios. News summary was a routine, weekly task with the main objective being to encourage students to read news stories and to follow current world situations.

For the term project, students were required to write completed and authentic news stories which consisted of news values (i.e. immediacy, impact, and fame) and of necessary parts (i.e. headlines, leads, news bodies, cuts and captions). The project was not a one-shot project in which students simply submitted news articles at the end of the semester. They, in fact, were required to report their progress regularly. Consultation with the teacher was mandatory. Students had to present types and values of the news stories they were to write, the news sources they planned to use, as well as the first draft and the final draft. All components had to be done before they were allowed to present their final project. The main objective of the term project was to provide a meaningful goal and contextual framework for learning throughout the semester, as well as a chance for students to practice tasks similar to real world tasks.

From the review related to student engagement in Chapter II, tasks that engage students the most should be authentic, collaborative, productive, reflective, various, novel, open ended, relevant to students' lives, and require higher cognitive processes (Herrington et al., 2002; Newmann, 1991; Newmann et al., 1992; Schlechty, 2001 cited in Bowen et al., 2003). It was clear that all desired characteristics in engaging tasks were included in all types of tasks utilized in the English for Mass Media course as is illustrated in Table 11.

	Authentic	Collaborative	High-level thinking process	Novel	Open ended	Productive	Reflective	Relevant	Various
Reading comprehension									
exercises		•						,	,
Language-focused exercises									
In-class and take-home tasks		_				_			
From simple to complex cognitive		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark			
tasks									
News summary									
Following local and world current		\checkmark		\checkmark	\checkmark	\checkmark		\checkmark	
situations from newspapers									
Commentary writing									
commenting on reliability, and								,	,
validity, as well as expressing their		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	
own opinions toward news and									
commentary articles									
News writing									
from authentic sources completed		,		,	,				
with necessary values and parts, as		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	
well as correct lexical and									
syntactical aspects									
Self and Peer Performance									
Assessment									
Through provided rubrics, journal							,		
writing and portfolios									

Table 11: Engaging Tasks in the English for Mass Media Course

4.7 Assessment

With the nature of CTBA, exclusively using standardized tests was not appropriate because such tests did not measure the actual performance of students when they deal with the assigned tasks. Therefore, performance assessment was chosen to assess students' performance in this study, particularly portfolios, journal writing, and self/peer assessment. The details of three types of alternative assessment employed in this study are reviewed as follows:

1. Portfolios

Students collected their work regularly in their groups' portfolio, doing so as evidence of their learning. Students were informed that they had to collect their work, the self/peers assessment of their works and their journal writing in the portfolio. In the first week, students were given a worksheet that provided information necessary for constructing a portfolio. Students in the control group were recommended to find folders for their portfolio while ones in experimental group were given explanation on how to create their groups' Web logs, which they later used as their electronic portfolios.

2. Journals

Students were required to write reflective journals to reflect their learning process and performance, doing so regularly and submitting them to the instructor every two weeks. In the first week, students were given a worksheet of guiding questions which helped them to think reflectively about their learning. Students in the control group kept their journals in paper-based portfolios while students in the experimental group kept them in electronic portfolios.

3. Self and peer assessment

Students were encouraged to assess performance of themselves and their peers by using direct assessment of performance, indirect assessment of general competence and meta-cognitive assessment of setting goals (Brown, 2004: 271). With direct assessment of performance, students assessed the performance of themselves and of others in tasks, such as, the making of a news summary, by using a given rating scale. By indirect assessment of general competence, students assessed their cognitive processes by answering the guiding questions, and writing down reflectively about their learning in journals, as well as doing so regularly. The meta-cognitive assessment of setting goals, is used in class on a bi-weekly basis. Students assessed their emotions and behaviors, such as anxiety, confusion, happiness, attitudes, values, punctuality, attendance, participation, collaboration, and efforts. They did this by answering given self-evaluated rating scale questionnaires.

To conclude, in-class exercises and tasks, as well as take-home exercises and tasks, were assessed by self and peers (direct assessment of performance), mostly after the exercises and tasks were due. However, students were required to assess their own performance, as well, by reflecting what they had learned, or done, in previous weeks in their journals (indirect assessment of general competence). Students' emotions, attitudes, values and other performances were assessed biweekly with self-evaluated rating scales (meta-cognitive assessment of set goals). It should be noted that the indirect assessment of general competence and meta-cognitive assessment of set goals used in this study were not only used to assess and reflect upon students' performance. Both of these were employed as research tools to measure students' affective, behavioral and cognitive engagement, as Table 12 presents below shows how students were assessed in this study.

Student	Type of assessment	How to measure	What to be
engagement			measured
n/a	Direct assessment of	Peer-assessment	In-class and take-
	performance	with provided	home exercises and
		rubrics	tasks
Cognitive	Indirect assessment of	Self-assessment	Cognitive process
	general competence	using journal	reflected in journal
		writing	writing
Affective and	Meta-cognitive	Self-assessment	Emotions, attitudes,
Behavioral	assessment of setting	using rating scales	values and other
	goals		performances

Table 12: Self and Peer Assessments in this Study

For the students in the experimental group who received NBLT as a special treatment, Web log or Blog is considered a crucial learning instrument. Based on the concept of NBLT, in which students communicate via networks and interpret and construct online multimedia documents (Kern and Warschauer, 2000), a Blog, a regularly updated website, in which contents are composed in journal style, displayed,

in a reverse chronological order, and readily accessible to the general public, was considered a proper learning tool and a performance assessment tool for CTBA with NBLT with two main reasons, particularly, user-friendliness and versatility.

Blog's user-friendliness

Students needed no specific skill or knowledge to create a Blog. Students went to Blog provider Web sites, created an account, gave a name to their blogs, chose the look, waited for a while, and they own their Blogs. In the past, students needed to attend a special training for technical knowledge and skills such as Hyper Text Markup Language (HTML) or File Transfer Protocol (FTP), just to make a simple Web page (Shetzer and Warschauer, 2001). With innovation in ICT, Blog software allows students to create a Web site in few minutes. In this study, instructions for Blog construction were distributed to students in the experimental group at the beginning of the semester (see Appendix 6). Moreover, the simple layout and interface in a Blog page made it easy to understand and to use even for first time users. A sample of the experimental group students' Blog can be found in Appendix 7.

Blogs' versatility

Blogs were used in this study for three main purposes, specifically as online journal, electronic portfolio, and CMC. With Blogs, students are able to compose an article, attach images, and add links to other Web pages, and other media. With these features, Blogs can function as electronic journals in which students reflect their learning process and also function as electronic portfolios in which their work is collected and exhibited.

However, the most important feature in a Blog that supports collaboration is a comment box. Though a Blog is considered personal property, it is open to the public to view and comment upon. Peers and teacher could leave comments for a Blog owner while the Blog owner could respond to such comments. Asynchronous communication offered in Blogs is similar to one usually found in Web boards.

Table 13 presents the roles of Blog as a journal, a portfolio, and a channel for communication, in a course conducted under CTBA with NBLT, compared with a course conducted under CTBA without NBLT.

	The control group	The experimental group
Reflective journal writing	CTBA without NBLT Students wrote their reflective writing in their paper-based journal and collect them in portfolio.	CTBA with NBLT Students wrote their reflective writing online and collect them in their Blogs.
Portfolio	Students collected their task outcomes in their paper-based portfolios.	Students collected their task outcomes in their Blogs. Blogs functioned as electronic portfolios.
Task presentation	Students presented the task outcomes to the class in paper- based format. Video visualizer and LCD projector were use to facilitate the presentation.	Students presented the task outcomes to the class through their online Blogs.
Peer assessment	Students were encouraged to give feedbacks to other students' tasks, verbally. The guidelines such as rubrics were provided.	Students were required to give feedbacks to other students' tasks online by leaving them in the groups' Blogs. The guidelines including rubric were also provided
Teacher support	Students were informed specific office hours to have discussion with the instructor face-to-face in case they had questions/problems out of the classroom.	Students were informed to contact the instructor through web logs and/ or e-mails in case they had questions/problems out of class.

Table 13: Roles	of Blogs in CTBA	with, and without, NBLT

4.8 Student roles

The roles of students in the English for Mass Media course were as active team participants, monitors, information sharers and risk takers. They were required to work actively and collaboratively in team activities and were also encouraged to be reflective and critical thinkers, as well as users of the target language.

4.9 Instructor roles

Differing from the common and dominant role as a source of knowledge, and as a knowledge transmitter, the roles of the instructor in the English for Mass Media course were various. For instance, the roles included planner, manager, quality controller, group organizer, facilitator, and motivator. The teacher introduced students to tasks by relating them to their background knowledge, assisted them to complete the tasks properly, and helped them to consciously notice the language elements within tasks. Another important responsibility of the instructor in this study was to encourage students to use the target language while participating in the tasks. However, the authority of the instructor was gradually transferred to students while the course was in process. This was due to the lesson design based on CLL and Bloom's revised taxonomy, as previously mentioned.

4.10 Teaching materials

The teaching materials were revised and developed based on the course description and course objectives, as well as the CTBA framework. Also, the teaching materials in both the control and experiment groups were different in some detail but mainly included the textbook, newspapers, LCD projectors, computers, and the Internet connection for the experimental group. Authentic materials, mainly from newspapers, were used throughout the course.

5. Steps of Treatment

There were 24 students in the control group and other 24 students in the experimental group. Students were informed that they were to study the English for Mass Media course collaboratively in teams, and they must stay with their teams for the whole semester. Students were then randomly divided and distributed into teams of four and there were six teams in each the control group and the experimental group.

They were asked to name their team, as well as to submit the team name and name lists of their members to the instructor. The names of students and their teams in both the control and the experimental groups are shown in Table 14. Please be noted that all these names are pseudonyms.

The control group		The experimental group		
Teams' names	Members' names	Teams' names	Members' names	
Clarity	Pasaporn	Hellohangbok	Noparat	
	Posatas		Arthitaya	
	Vipada		Thanatha	
	Thanatha		Usanee	
Snoopy	Panumas	Girlyberry	Achara	
	Varunee		Rasamee	
	Anusorn		Rossukon	
	Sukanya		Natharika	
Angel	Wanlaya	Buachompoo	Jaruwan	
	Prathana		Sasirin	
	Kwanchanok		Taksina	
	Prathan		Laksikar	
Mickey	Ratima	Veerapon	Panwarot	
	Sirinapa		Naree	
	Patama		Veerapon	
	Inthira		Chantima	
Sweet	Uraiwan	Snowqueen	Supaporn	
	Jureemas		Jariya	
	Supasorn		Tasawan	
	Kanchana		Juthamas	
A Please	Wasawan	Pittigirl	Thapanee	
	Panadda	C C	Sasithorn	
	Orawan		Wanapa	
	Prapasri		Achara	

Table 14: List of Students in the Control and the Experimental Groups

The control and the experimental groups were similar in many aspects, specifically, the instructor, the students, class timing, and the teaching approach (CTBA) which included content in the textbook, items and options in language-focused exercises, as well as tasks (in-class tasks, take-home tasks, weekly news

summary, and term project). The similarities in the control and the experimental groups are presented in Table 15 below.

	The control group	The experimental group
	CTBA without NBLT	CTBA with NBLT
Teacher	With at least 3 years of	Similar to the control group
	experience of teaching the	
	English for Mass Media course	
Students	24 third year Business English	Similar to the control group
	students	
Timing	- Morning (0900-1200) in the	- Afternoon (1300-1600) in the
	first half of the semester	first half of the semester
	- Afternoon (1300-1600) in the	- Morning (0900-1200) in the
	second half of the semester	second half of the semester
Content	English for Mass Media	Similar to the control group
Content	Based on the framework of	Similar to the control group
organization	СТВА	
Tasks and	Based on the framework of	Similar to the control group
language	СТВА	
exercises		

Table 15: Similarities in the Control and the Experimental Groups

However, there were differences between the two groups, especially ICTbased facilities provided in the experimental group. The differences were presented and compared side by side in the Table 16 below.

	CTBA without NBLT	CTBA with NBLT
Classroom	A traditional classroom, free from distracting sounds	A computer laboratory, free from distracting sounds
Classroom setting	Classroom formation, with separate lecture chairs which were easy to move and put into other formations, such as groups or pairs.	Classroom formation with computers on long tables Due to the weight of tables and computer, as well as cabling, these could not be moved and repositioned.
Content delivery	Students received the content from the print textbook.	At first, students received the contents online. But, due to some difficulty in accessing computers and the Internet at their homes, content was made available in CD and in print.
Language exercise delivery	Paper-based	Online interactive exercises (Example is available in Appendix 8)
Learning materials besides textbook	News articles from two local English newspaper in print	News articles from newspapers and news agencies Web sites around the world
Assessment	Performance assessment using portfolios, journal writing and self/peer assessment	Similar to that of the control group, but the experimental group kept their journals and task outcomes, as well as gave feedback to their peers in their teams' Blog.

Table 16: Differences in the Control and the Experimental Groups

In order to provide the clearer insight into the English for Mass Media course which was conducted under CTBA either with or without NBLT, the Unit 3 from the textbook is used to illustrate the steps of treatment students in the control and the experimental groups received. The pedagogical procedure of Unit 3 is presented in Table 17 below.

Mode of communication	Interpretative			Interpersonal	Presentational
Skills focused in each mode	Listening/ Reading			Listening/ Reading Speaking/Writing	Speaking and Writing
	Schema building	Controlled practice	Language focus	Tasks	Presentation
3. Types of newspapers	News	Types of Newspapers (controlled)	Headlines	Types of Newspapers(free)	Types of Newspapers
	News reading comprehension exercise	Hard and soft news	Present participle	Have Ss compare English newspaper and other Thai	Presentation
		Quantitative and	To infinitive	newspaper.	
	Hard and soft news	qualitative newspapers		Have Ss identify whether they are quality or quantity newspapers.	

Table 17: Lesson plan of Chapter 3: Types of newspaper

The steps of treatment for the control and the experimental groups followed the pedagogical procedure of CTBA, which starts with schema building, controlled practice, language focus, tasks, presentation, and wrap-up, as shown in Table 18. The procedure was designed for a weekly class session which last 180 minutes.

Steps	Time	The control group CTBA with NBLT	The experimental group CTBA without NBLT
Schema building	20 minutes	Two teams were systematically assigned to report their news summary to class, on weekly basis.	As similar to the control group, students were to summarize news articles, as a weekly routine task.
		Weekly news articles to be summarized were from two local English newspapers: <i>the Bangkok</i> <i>Post</i> and <i>the Nation</i> .	The experimental group was able to access the news article from <i>the Bangkok Post</i> and <i>the Nation</i> through their Web sites.
			However, students had opportunity to access Web sites of newspapers and news agencies around the world.
		Students could conveniently present news summary by cutting news	Unlike the way the control group did, the experimental group could

Table 18: The Steps of Treatment

Steps	Time	The control group	The experimental group
		CTBA with NBLT	CTBA without NBLT
		clips from newspaper, pasting it on a piece of paper, writing their news summary, and placing it under a video visualizer so that the LCD project could show it on the screen.	conveniently copy the news stories they chose, both text and cuts, paste them on their Blogs, typed in their summary. The experimental group reported news summary to class from their blog,
		The presenting teams were encouraged to ask the audience questions to check their understanding while the audience was encouraged to ask questions in	The interaction between the presenting teams and the audience was encouraged, similarly to the control group.
		case the presentation was not clear enough.	However, with NBLT the audience could listen to the presentation, while, at the same time, could read the stories in original version, ask questions or provide feedback through the asynchronous communication system provided in Blogs.
	20 minutes	After the presentation, students were to read news articles and finish reading comprehension exercises provided in the textbook.	Similarly to what the control group did. However, the experimental group completed the online exercises which provide automatic and interactive feedback.
Controlled practice	20 minutes	Students studied the course content from print textbook. In chapter 3, students studied the types of news, particularly hard news and soft news, as well as types of newspapers, specifically quantity newspapers and quality newspapers.	Students studied the course content provided online, in Compact Disc or on their textbook, while the instructor gave the lecture.
		The instructor took the main role in giving lecture. Students supposed to listen, write down notes and ask questions if they did not understand.	
	20 minutes	Students completed controlled tasks in which they were to judge whether the news stories (that they had read in Schema building section) were hard or soft news, as well as whether the newspaper that presented them were quantity or	The controlled task was similar to that of the control group but they were asked to submit their answer to the instructor'a Blog so that the other teams could review and compare their answers.

Steps	Time	The control group	The experimental group
		CTBA with NBLT	CTBA without NBLT
		quality newspapers, by using the knowledge from the text and lecture.	
		The answers were written on their textbooks.	
Language focus	20 minutes	Language focus section in chapter 3 focused on present participle and to-infinitive in headlines. Students were to read news stories and identify the relationship between the specific verb forms and timing or voices presented in news stories.	The exercises in language focus is similar to those in the control group but the experimental group did it with an online interactive exercises which provided automatic feedback.
Tasks	40 minutes	Students were to find more samples of soft and hard news and identify the newspapers that presented those news stories whether they were quantity or quality newspapers, from other sources which were not provided in the textbook.	Similarly to the control group did, but the control group could use the Internet to search for extra information to solve assigned tasks, conveniently, and at the same time, thoroughly.
		The completed tasks were required to be collected in teams' portfolios.	The completed tasks were collected in teams' Blogs, functioning as e- portfolios.
Presentati on	30 minutes	Students presented what they found to the class. The findings were usually presented	The presenter went in front of the classroom, open his/her team's Blog and presented the findings to the classroom.
		in hard copy.	The instructor and their peers were able to provide written feedback to their work verbally or through the Blog communication system.
Wrap-up	10 minutes	Teacher concluded taught content, answered questions, if any, and assigned take-home tasks.	Most were similar to what the control group did, but the instructor posted the take-home tasks and assignment on his Blog.

Two points should be noted for lesson plans for the English for Mass Media course which was conducted under CTBA with and without NBLT. Firstly, the news

summarized and presented by students was up-to date, relevant, or even meaningful to students' lives while the news reading comprehension exercises were related to the content students were to learn in controlled practice section. Thus, both news summary and reading exercises were considered appropriate schema building. Secondly, all tasks and exercises were encouraged to complete collaboratively in teams. Provided with self-evaluation rubrics, students were also supported to review their works and give feedback to their peers. Tasks, specifically free tasks and news summaries must be kept in groups' portfolios for peer and instructor review.

6. Research Instruments

To study the effects of CTBA with, and without, NBLT on English language achievement, student engagement, and student engagement's sub-elements in three aspects, various types of research instruments were employed in this study as illustrated in Figure 10.

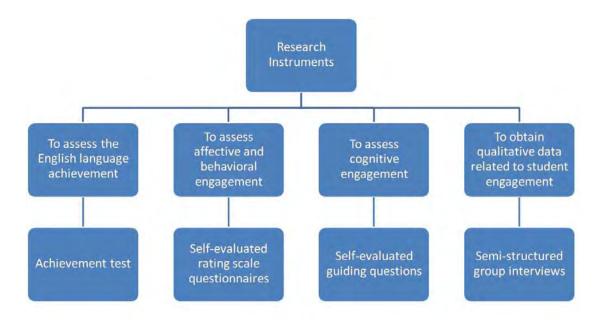


Figure 10: Research instruments in this study

The details of instruments employed to assess dependent variables in this study are as follows:

1. An achievement test to measure English language achievement;

- 2. A set of self-evaluated rating scale questionnaires and semi-structured group interviews to measure and evaluate affective engagement;
- 3. A set of self-evaluated rating scale questionnaires and semi-structured group interviews to measure and evaluate behavioral engagement;
- 4. A set of self-evaluated guiding questions and semi-structured interviews to measure and evaluate cognitive engagement.

Detailed descriptions, including rational, construction and validation process of each instrument are presented in the sections below.

6.1 Achievement test

6.1.1 Rationale for the achievement test

Tests play important roles in research in that they are used to investigate the effects of different instructional settings and techniques on language acquisition, as well as to provide criterion indicators of language ability for studies of classroom-centered second language acquisition (Bachman, 1990). Assessing English language achievement refers to the students' mastery of grammatical elements and vocabulary frequently found in newspaper articles, and an achievement test is appropriate (Brown, 1996). In addition, though there is a current trend to measure holistic performance of language use, testing grammar and vocabulary is still considered appropriate, especially for criterion referenced tests, such as achievement test. As Hughes, (2003) suggests:

- grammatical structures are seen as the core element of language ability and, without such ability, the language performance would be limited; and,
- 2. if grammatical structures and vocabulary are consciously taught to students, all items are appropriate to be selected for the test.

6.1.2 Construction of the achievement test

The steps in developing the achievement test were as follows:

- The achievement test was developed by the researcher to assess the degree of mastery of knowledge and skills after students took the English for Mass Media course for a semester;
- The tests were constructed based on the course description and course objectives. The main focuses of the tests were lexical and syntactic features frequently found in English newspapers;
- 3. The related literature (Frederickson and Wedel, 1980; Punyaratabandhu, 1999) was reviewed as a guideline;
- 4. While developing the achievement test, the researcher kept the notion of similarity between the Target Language Use Tasks (TLU) and Test Tasks as the main concern. Bachman and Palmer's designing and developing language tests (Bachman & Palmer, 1996) as well as other works relating to constructing language tests were used as guidelines (Alderson, 2002; Brown, 2004);
- 5. Objective tests, such as multiple choice tests, which do not require subjective judgment, were chosen for constructing the test (Hughes, 2003). The advantages of multiple choice tests are as follows:
 - 1. Scoring is reliable, rapid, and economical;
 - 2. More items could be included in limited test time;
 - 3. The test could evaluate receptive skills without asking test takers to produce any other skills;
- 6. Based on the course objectives, the test was consisted of three main parts which were designed to assess students' ability to master lexical and syntactic features, usually found in newspapers, including reading comprehension of newspaper articles; and,
- The test was composed of 60 items. As a multiple-choice test, there were four options in each item. A copy of the English language achievement test is available in Appendix 9.

6.1.3 Validation of the achievement test

The procedure to assure the validity and reliability of the achievement test was as follows. For content validity, three experts were invited to validate the English language achievement test items. A name list of the experts is available in Appendix 10. They all had the following characteristics:

- Held an M.A. or Ph.D. in English, Teaching English as a Second Language, Teaching English as a Foreign Language, Applied Linguistics, Linguistics, Mass Communication, or related fields;
- Had at least one year of experience in teaching the English for Mass Media course.

The index of Item-Objective Congruence (IOC) was used to assess the validity of the questionnaire items (Rovinelli & Hambleton, 1977). Index of IOC from the experts for test items was 0.978. Any items that received IOC under 0.670 were revised and the suggestions from the experts were applied in improving the test items. The index of IOC for each test item is available in Appendix 11.

Items in the English Language achievement test in the main study obtained item difficulty level (p = 0.20-0.80) and item discrimination power ($d \ge 0.15$), (Harris, 1969; Madsen, 1983). Any "poor" items were improved before being used in the main study (Brown, 1996). On average, the difficulty level of the test was 0.463, and its discrimination power was 0.227. The difficulty level and discrimination power of each test item are available in Appendix 12.

Kuder-Richardson (KR 20) was applied to measure internal consistency of the test. The test employed in the main study was consider reliable due to the alpha level of 0.898 (Brown, 1996; Best & Kahn, 1986). The reliability statistics for the achievement test are available in Appendix 13

6.2 Self-evaluated rating scale questionnaires for affective engagement

The questionnaires asked questions related to students' emotions, attitudes, and values toward course elements, namely tasks, content, teaching methods, teachers, peers, and classroom environment.

6.2.1 Rationale for the affective engagement self-evaluated rating scale questionnaires

Many studies which focused on affective engagement were conducted with a cross-sectional research design in which surveys were the main instruments (Connell et al, 1994; Connell & Wellborn, 1991; Finn, 1993; Finn & Voelkl, 1993; Skinner & Belmont, 1993; Skinner et al., 1990). Students were asked to rate their affective reaction to or interest in tasks, content, teaching methods, teachers, students, and classroom environment. The popularity of surveys comes from its advantages, stated as follows:

- They are the most widely use technique in education and behavioral science for the collection of data (Isaac, & Michael, 1983);
- 2. They are flexible tools to collect ranges of data from counts and frequencies, to attitudes and opinions;
- They are the most cost-effective, efficient, and credible means of collecting data, because the respondents are the best person who could speak for themselves (Isacc & Michael, 1983); and,
- 4. They are anonymous and self-administering.

However, surveys also have a disadvantage that they are vulnerable to over-rater or under-rater bias.

6.2.2 Construction of the affective engagement self-evaluated rating scale questionnaires

Though many surveys used to assess the affective engagement were found in the literature, there were still some possible problems to use them properly in this study, such as obtaining the guarantee of quality, copyright restrictions, and the relevance for the purposes of this study (Ruhe, 2006). Therefore, the researcher decided to study questions from several sources and then selected ones which potentially had validity and reliability to assess affective engagement studied in this research. However, in order to cover the depth of the content, but also keep the instrument at a reasonable length, the original scales were not used without modification. Many questions were modified in wording before they were translated into Thai. All were done in order to make questions more consistent in term of the response scale, and to make questions clearer to the students. Some questions were newly created to make them relevant to the study. The steps in constructing the questionnaires were as follows:

- 1. The constructs were defined;
- 2. Existing surveys and literature related to the affective engagement were reviewed; and,
- 3. The items were written.

Samples of items to measure affective engagement found in the literature are presented in Table 19.

Experts	Items to measure affective engagement	
Willms (2003)	1. Other students seem to like me.	
	2. I feel lonely.	
	3. I do not want to go to school.	
	4. I often feel bored.	
Fredricks et al.	1. I feel happy in school.	

Table 19: Samples of Items to Measure Affective Engagement from Literature

Experts	Items to measure affective engagement
(2003)	2. I feel bored in school (reversed).
	3. I feel excited by the work at school.
	4. I like being at school.
	5. I am interested in the work at school.
	6. My classroom is a fun place to be.
Finlay (2006)	1. When I first walked into my classroom, I thought it was
	(good, bad).
	2. I thought it was (friendly, unfriendly).
	3. I thought it was (clean, dirty).
	4. I am happy to be at my class.
	5. The teachers in my school treat students fairly.
	6. I like the teacher in my class.
	7. The teacher in my class cares about what I'm doing.
	8. The teacher knows the subject matter well.
	9. I enjoy the work I do in class.
	10. I feel I can go to my teacher with the things that I need to
	talk about.
NSSE (2006)	1. Other students are (friendly \rightarrow unfriendly).
	2. Other students are (supportive \rightarrow unsupportive).
	3. Faculty members are (available \rightarrow unavailable).
	4. Faculty members are (helpful \rightarrow unhelpful).
	5. Faculty members are (sympathetic \rightarrow unsympathetic).
	6. The entire education experience at this institute is
	(excellent \rightarrow poor).
Handelsman, Briggs,	1. I really desire to learn the materials.
Sullivan, & Towler,	2. I am confident that I can learn and do well in class.
(2005)	3. I have fun in class.
Langley (2006)	1. I believe the instructor was fair and impartial in dealing
	with me in this course.
	2. I was treated in a respectful manner by the instructor

Experts	Items to measure affective engagement
	during this course.
	3. I developed enthusiasm and interest to learn more about
	course content.
	4. My performance in this course was directly related to the
	positive learning environment created by the instructor.
	5. The environment created by the instructor was safe and
	supportive.
Ruhe (2006)	1. Most of the time, I enjoy participating in group discussion
	in class.
	2. Most of the time, I like to ask question in class.
	3. Mostly, I come to the class because I enjoy the class.
	4. I enjoy working with classmates on group assignments.
	5. I enjoy applying theories and concepts from this class to
	practical problems.
	6. I enjoy thinking about the ideas in this class after the class
	has ended.
	7. I like thinking about problems with no obvious "right"
	answers.

6.2.3 Validation of the affective engagement self-evaluated rating scale questionnaires

The self-evaluated rating scale questionnaires were considered high in face validity because it measures students' affective engagement by asking subjects about their emotions, attitudes and values toward learning.

For content validity, the experts who were invited to validate research instruments in this study came from recognized academic institutions, particularly Chulalongkorn University, King Mongkut's University of Technology Thonburi, and Suan Duist Rajabhat University. A name list of the experts who validated the selfevaluated rating scale questionnaires for student engagement, including affective, behavioral, and cognitive engagement, is available in Appendix 14. They all had the following characteristics:

- Held an M.A. or Ph.D. in English, Teaching English as a Second Language, Teaching English as a Foreign Language, Applied Linguistics, Linguistics, Mass Communication, or related fields;
- Had at least two years of experience in implementing collaborative language learning, task-based language teaching, or network-based language teaching in language teaching;
- 3. Were involved in academic research concerning collaborative learning, task-based language teaching, or network-based language teaching.

The index of Item-Objective Congruence (IOC) was used to assess the validity of the questionnaire items (Rovinelli & Hambleton, 1977). IOC from the experts for items in this study was 0.968. Any items that received IOC under 0.670 were revised and the suggestions from the experts were applied in improving items in the questionnaires. The index of IOC for items to measure affective engagement is available in Appendix 15.

For reliability, the questionnaires were field-tested by asking 21 students who had the similar characteristics with the subjects of the main study to do the test. In this case, students in the pilot study were SDRU Business English students who enrolled in the English for Mass Media course in another section. The Cronbach's alpha was applied to measure the rating scale for internal consistency. The result showed the Cronbach's alpha value of 0.857, which was interpreted that the internal consistency reliability of the items was high (Brown, 1996). The reliability statistics for items to measure affective engagement are available in Appendix 16.

Examples of items designed to assess affective engagement, and its subelements in the research reported in this dissertation are presented in Table 20.

Sub-elements	Items
Emotions	1. I feel happy in this course.
	2. I feel bored in this course.
	3. I feel nervous in this course.
	4. I feel confused in this course.
	5. I enjoy the work I do in class.
Attitudes	6. I like studying in the class.
	7. The teacher is knowledgeable.
	8. The teacher is friendly.
	9. The teacher is supportive.
	10. The teacher is available.
	11. I feel I am a valuable person in my group.
	12. Other students are friendly.
	13. Other students are supportive.
	14. The activities in the class are interesting.
	15. The activities in the class enhance my comprehension.
	16. The learning environment is safe.
	17. The learning environment is supportive.
	18. The teaching materials in this course are interesting.
	19. The teaching materials in this course enhance my
	comprehension.
	20. I developed enthusiasm and interest to learn more about course
	content.
	21. I am confident that I can learn and do well in class.
Values	22. Learning in this course help develop my English proficiency.
	23. I can apply theories and concepts from this class to practical
	problems.
	24. Theories and concepts from this class will be valuable for my career in the future.

Table 20: List of Items to Assess Affective Engagement in This Study

6.3 Semi-structured group interviews for affective engagement measurement

Based on questions listed in self-evaluated rating scale questionnaires for affective engagement, the items in the semi-structured group interviews asked students to clarify their emotions, attitudes and values toward tasks, contents, teaching methods, teachers, peers, and classroom environment.

6.3.1 Rationale for semi-structured group interviews for affective engagement

In order to confirm the results of the questionnaires, as well as to gather more in-depth information, semi-structured interviews were administered. This method was considered suitable because it yielded insights into the learning process which would be difficult to obtain by other means (Nunan, 1992a). Interviews come with many advantages (Isaac & Michael, 1983) as follows:

- 1. They are flexible, adaptable and personalized;
- 2. Body language, gestures, and tones of voice in face-to-face interviews lead to clearer and better understanding; and
- 3. The free responses in interviews will also provide in-depth insight about affective engagement.

However, interviews also have some disadvantages, such as:

- 1. They are expensive, time consuming, and inconvenient;
- 2. Skilled and trained interviewers are required;
- 3. The responses might be manipulated by the interviewers; and,
- 4. They might be difficult to summarize.

Therefore, in order to control the flaws of inconvenience and time and, at the same time, to observe the students' responses to collaboration in groups, group interviews were applied to collect in-depth data in this study. However, group interviews also have both advantages and disadvantages (Isaac and Michael, 1983). The advantages of group interviews are as follows.

- 1. They are more efficient and economical than one-to-one interviews;
- 2. They show group behavior and consensus;
- 3. They show group interaction patterns; and
- 4. While brainstorming, students can stimulate the ideas of others.

The disadvantages of group interviews are as follows:

- 1. They may restrain individuality while promoting conformity;
- 2. They may intensify group loyalties; and,
- 3. Group members might be manipulated by an influential member.

6.3.2 Construction questions for semi-structured group interviews for affective engagement

Questions were developed by the researcher to gain the clearer and deeper insight of students' affective engagement. As indicated previously, the interviews asked students to clarify their affective engagement and its sub-elements. According to the nature of semi-structured interviews, the questions mostly came from the items listed in the questionnaires, but their emphasis was more on finding the answers for "why" and "how."

6.3.3 Validation of questions for semi-structured interviews for affective engagement

This semi-structure interview was high in face validity because it measured students' affective engagement by asking subjects about their emotions, attitudes, and values toward learning.

For content validity, the questions in the interview were framed by items listed in the questionnaires. The items were validated by the three experts, previously mentioned, and achieved IOC of 0.968.

6.4 Self-evaluated rating scale questionnaires for behavioral engagement

Items in the questionnaires covered students' behavior toward academicrelated activities, namely class attendance, preparation, attention, asking questions, contributions, and effort.

6.4.1 Rationale for behavioral engagement self-evaluated rating scale questionnaires

Similar to studies of affective engagement, the studies which focused mainly on behavioral engagement were conducted with a cross-sectional design in which surveys were widely used as a major tool (Connell et al., 1994; Connell & Wellborn, 1991; Finn, 1993; Skinner & Belmont, 1993; Skinner et al., 1990). Students were asked to report on their response levels during class time, such as having participation with group discussion, asking questions, contributing meaningful comments, and being distracted by other non-academic activities.

6.4.2 Construction of behavioral engagement self-evaluated rating scale questionnaires

A detailed description of construction of self-evaluated rating scale questionnaires for behavioral engagement would be similar to one for affective engagement and can be found in this Chapter, section 6.2.2. Samples of items to measure behavioral engagement found in the literature are presented in Table 21.

 Table 21: Samples of Items to Measure Behavioral Engagement from Literature

Experts	Items to measure behavioral engagement
Willms (2003)	How many times in the previous two weeks did you
	1. miss school?
	2. skip classes?
	3. arrive late for school?
Fredricks et al.	1. I pay attention in class.
(2003)	2. When I am in class, I just act as if I'm working (reversed).

Experts	Items to measure behavioral engagement
	3. I complete my homework on time.
	4. I follow the rules at school.
	5. I get in trouble at school (reversed)
Finlay (2006)	1. How often have you thought of dropping out?
	2. When I am in class I just pretend I am working.
	3. I follow the rules in class.
	4. I skip classes during school.
	5. I skip the entire school day.
	6. I try to stay home from school.
NSSE (2005)	How often have you done any of following?
	1. Asked questions in class or contributed to class
	discussions
	2. Worked on a paper or project that required integrating of
	ideas or information from various sources
	3. Come to class without completing readings or assignments
	4. Worked with other students on projects during class
	5. Worked with classmates outside of class to prepare class assignment
	6. Tutored or taught other students (paid or voluntary)
	7. Used an electronic medium (listen, chat group, Internet,
	instant messaging, etc) to discuss or complete an assignment
	8. Used e-mail to contact with an instructor
	9. Received prompt feedback from faculty on your academic
	performance (written or oral)
	10. Worked harder than you thought you could to meet an
	instructor's standards or expectations
	11. Discussed ideas from your readings or classes with others
	outside of class (students, family members, co-workers)

Experts	Items to measure behavioral engagement
Handelsman et al.	1. I raise my hand in class.
(2005)	2. I participate actively in small group discussions.
	3. I ask questions when I don't understand the instructor.
	4. I do all the homework problems.
	5. I come to class every day.
	6. I go to the professor's office to review assignments, or
	tests, or to ask questions.
	7. I think about the course between class meetings.
	8. I find ways to make course interesting to me.
	9. I take good notes in class.
	10. I look over class notes during classes to make sure I
	understand the material.
	11. I help fellow students.
	12. I listen carefully in class.
Langley (2006)	1. I participated actively in most class learning experiences.
	2. I participated actively in discussion boards for this Web
	course.
	3. I was an active participant in class discussions.
	4. I was encouraged to make use of my personal experiences
	to learn the content.
	5. I frequently worked with other students to solve problem
	in class.
	6. I frequently worked with other students to complete class
	projects or assignments.
Ruhe (2006)	1. I have been working harder than I thought I would to meet
	the professor's expectations.
	2. I usually come to class prepared.
	3. I have been tutoring or teaching other students.
	4. In this course, I have tried to understand viewpoints which
	are different from mine.

6.4.3 Validation of behavioral engagement self-evaluated rating scale questionnaires

The self-evaluated rating scale was considered high in face validity because it measured subjects' behavioral engagement by asking the subjects themselves to rate their behaviors in academic activities.

For content validity, the items in self-evaluated rating scale questionnaires were validated by the group of three experts, already mentioned in section 6.2.3, using IOC (Rovinelli & Hambleton, 1977). The validation resulted in IOC of 0.905 which was higher than that needed at 0.750. The index of IOC of items to assess behavioral engagement is available in Appendix 17.

For reliability, the questionnaires were field-tested with the same group of students who were in the pilot study of affective engagement. The Cronbach's alpha was applied to measure the rating scale internal consistency. The results showed that the set of items achieved the Cronbach's alpha value of 0.765, which was acceptable for this study (Brown, 1996; Best & Kahn, 1986). The reliability statistics for items to assess behavioral engagement can be found in Appendix 18. Examples of items designed to assess behavioral engagement, and its sub-elements in the research reported in this dissertation are presented in Table 22.

Sub-elements	Items
Attendance	1. I came to class on time.
Preparation	2. I came to class with readings in advance.
Attention	3. I listened carefully in class.
	4. I took good notes in class.
	5. I willingly answered the teacher's questions.
	6. When I was in class, I just pretended I am working. (negative)

Table 22: List of Items to Assess Behavioral Engagement in This Study

Sub-elements	Items	

Asking questions	7. I asked questions when I did not understand.
Contribution	8. I complete my homework on time.
	9. I participated actively in small group discussions.
	10. I tutored or taught other students.
	11. I worked actively with other students on activities during class.
	12. I worked actively with classmates outside of class to prepare class assignment.
Effort	13. I worked harder than I thought I could to meet an instructor's standards or expectations.
	14. I had conversations with the teacher to review assignments or tests or to ask questions.

A copy of self-evaluated rating scale questionnaires for affective and behavioral engagement assessment is available in Appendix 19.

6.5 Semi-structured group interviews prompted with video for behavioral engagement measurement

Questions in the interviews were developed by the researcher to gain the clearer and deeper insight of students' motives of behaviors. According to the nature of semi-structured interviews, the questions mostly came from the items listed in the questionnaires, related to behavioral engagement, but their emphasis was more on finding the answers for "why" and "how." Video records of students' behavior in class was planned to encourage students' responses, and contributions in the interviews.

6.5.1 Rationale for behavioral engagement semi-structured group interviews prompted with video

Though the common instrument to measure behavioral engagement is a survey, to confirm the result that might be biased from a self-evaluated rating scale, and to gain deep qualitative data of behavioral engagement, group interviews, prompted with a video record of class activities, were administered (Fredricks et al., 2002). This method was considered suitable because it yields insights into the learning process which would be difficult to obtain by other means (Nunan, 1992a). The video tape which recorded behavior of the subjects in classrooms was played while the interviews were conducted. This was done with the expectation to stimulate subjects' contributions which would result in clearer and deeper insight into students' behavioral engagement.

The advantages of video recording are as follows:

- 1. They can be viewed later: and,
- 2. They can record small details in the class, such as movements, gestures, and facial expression (Michael, 1998).

However, the video recording comes with some disadvantages:

- 1. They are expensive; and,
- 2. They are time consuming for transcription.

6.5.2 Construction questions for behavioral engagement semistructured group interviews

According to the nature of semi-structured interviews, the core questions mostly came from the items listed in the behavioral engagement questionnaires. However, questions in the interviews emphasized more on finding the answers for the "why" and "how" questions. All questions were prepared and asked in Thai so that the students could reflect their behavioral engagement as precisely as possible, without a barrier of the English language.

6.5.3 Validation of questions for behavioral engagement semistructured group interviews

This semi-structured interview was high in face validity because it measured subjects' behavioral engagement by asking subjects about their behavior toward academic-related activities, such as class attendance, preparation, attention, asking questions, contributions, and efforts. The items were already validated by three experts, as stated previously, and achieve IOC of 0.905.

6.6 Self-evaluated guiding questions for journal writing

6.6.1 Construction of self-evaluated guiding questions

The self-evaluated guiding questions were developed by the researcher. Based on Bloom's revised taxonomy and tasks in the English for Mass Media course, the designed questions were used for the subjects to reflect their application of cognitive processes, which were divided into six levels, while they were completing assigned tasks. The guiding questions were constructed in Thai so that the students could well understand the questions and answer them accurately, without any linguistic barrier.

6.6.2 Validation of self-evaluated guiding questions

For content validity, the guiding questions were validated by three experts, as earlier mentioned. The content validation resulted in IOC of 0.879. The index of IOC of items to assess cognitive engagement is available in Appendix 20.

For reliability, the guiding questions were field-tested with a group of subjects who were in the pilot study of affective and behavioral engagement. The results of the internal consistency test showed that the set of items achieved the Cronbach's alpha value of 0.978, which was acceptable for this study (Brown, 1996; Best & Kahn, 1986). The reliability statistics for items to assess cognitive engagement can be found in Appendix 21.

Based on the notions of CLL and a revised version of Bloom's taxonomy of the cognitive domain (Anderson and Krathwohl, 2001), tasks in the English for Mass Media course gradually required more complex cognitive process to complete them. The guiding questions, therefore, reflect tasks in each level of the cognitive process. Examples of guiding questions designed to assess cognitive processed while the students were learning and completing required tasks are presented in Table 23.

Sub-elements	Items
Remembering	1. I recalled what I learned in the past two weeks.
	2. I recalled new words I learned in the past two weeks.
Understanding	3. I summarized the contents I learned in forms of tables or mind
	maps.
	4. I summarized the main ideas of the news I read.
	5. I related the content studied this week with ones previously studied.
	6. I explained the contents to other students who did not
	understand.
	7. I could solve questions I found from the learning text.
	8. I could solve questions I found from the news stories I read.
	9. I found others samples that could add up to ones in the learning
	text.
Applying	10. I adapted what I have learned in this class with other subjects.
	11. I wrote a news headline that is more appropriate than the original one.
	12. I interviewed people to write my own news stories.
	13. I wrote a short news story (a headline and a lead) to report the
	current event.
Analyzing	14. I found discrepancies in a similar news story on different newspapers.
	15. From a news story I read, I differentiated facts from opinions.
	16. From the interview data, I differentiated facts from opinions.
Evaluating	17. From a news story I read, I found it is valid and reliable.
	18. From a news story I read, I found it is invalid and unreliable.
	19. From the interview data, I found it is valid and reliable.
	20. I wrote a letter to the editor to express my opinion toward a
	current situation, supporting with concrete reasons.

Table 23: List of Items to Assess Cognitive Engagement in This Study

Items
1. I wrote news stories to report current situations from valid and
reliable sources completing with headlines, leads, bodies, cuts, and captions.
2. I wrote a commentary article that is well supported with critical reasons and concrete evidence.

A copy of self-evaluated guiding questions for journal writing that was distributed to students in this research could be found in Appendix 22.

6.7 Semi-structured group interviews for cognitive engagement measurement

The interviews asked subjects to clarify any inconsistencies found between weekly English for Mass Media content and tasks and the subjects' reflective written contributions on their application of the cognitive processes when they were completing the tasks.

6.7.1 Rationale for cognitive engagement semi-structured group interviews

Semi-structured interviews were administered, in order to confirm the results that might be biased by the students' contributions to guiding questions, and to gain insight into cognitive engagement. The advantages and disadvantages of semi-structured group interviews were already provided in section 6.3.1.

6.7.2 Construction questions for semi-structured interviews

The questions were developed by the researcher to get a clearer and deeper insight of students' cognitive engagement, based on the self-evaluated guiding questions for journal writing, previously mentioned in section 6.6.

6.7.3 Validation of questions for semi-structured interviews

This semi-structured interview was high in face validity because it assesses students' cognitive engagement by asking students about their cognitive processes in comprehending the contents and completing the tasks. For content validity, the items were validated by the experts, who were previously mentioned, and the items achieved IOC of 0.879.

7. Data Collection

Data collection was conducted in two main stages: the pilot study and the main study.

7.1 Data collection in the pilot study

After the research instruments were constructed, validated by the experts, and revised in order to achieve the pre-set criteria, they were tried out with a group of students who had the similar characteristics with the subjects of the main study. The pilot study was conducted in the first semester of the academic year 2007. To collect data in the pilot study, the process was divided into three phases, particularly quantitative data collection for student engagement, qualitative data collection for student engagement, and quantitative data collection for English language achievement.

7.1.1 Quantitative data collection for student engagement

Self-evaluated rating scale questionnaires for affective, behavioral and cognitive engagement were merged into one questionnaire for convenience of distribution and data collection. Data collection was administered in a classroom, after the actual class of English for Mass Media was over. The classroom was air-conditioned, well-lit, and free from any distracting sound.

With permission from the course instructor, the researcher introduced himself, as well as objectives of the questionnaires and instructions, plus indicated that the answers would not have any effects on them in any aspect. The explanation was done in Thai for clearer understanding. The quantitative data collection of student engagement in the pilot phrase took approximately 30 minutes.

7.1.2 Qualitative data collection for student engagement

Students in the pilot study were randomly chosen before they were asked to have an interview in groups. The room in which the interviews took place was a meeting room of the Faculty of Humanities and Social Sciences. At first, data of affective, behavioral, and cognitive engagement was planned to be collected separately in different interviews. However, this plan was later changed so that all affective, behavioral, and cognitive engagement data were collected together in a session of interviews. The decision for change was based on many reasons, as are explained below:

- Student engagement was, itself, a multi-faceted construct. To collect data of one sub-element, such as affective engagement, without mentioning other sub-elements, such as behavioral or cognitive engagement, was hardly possible;
- To find time when all subjects in teams were available for an interview was difficult. It would be three times more difficult if qualitative data of student engagement was collected separately; and,
- 3. The Faculty meeting room was the most appropriate place for interviews, but it must be booked in advance. The meeting room could be occupied for other more important purposes as well. Therefore, lowering the number of interviews helped reduce the necessary time and effort in finding other places in case the meeting room was not available.

The procedure in a pilot interview was in the following order:

- 1. Students were seated at a round table with their team members;
- 2. The researcher introduced the objectives of the interview, the procedure, and remarks, such as it was audio-recorded and that it would not affect the students in any aspect; and,

3. All questions and answers were in Thai. Prompts, such as their journals, were used to encourage students' contributions. The order of questions followed the organization of items in the questionnaires. However, some points found interesting could be more focused upon than others.

A difficulty found during the pilot study led to another change applied in the main study, particularly the video prompts were replaced by still image prompts. In the experimental group, at first, the researcher planned to use closed circuit video cameras that were installed in the computer laboratories to record students' behaviors in the experimental group. However, it was found out later that such cameras were surveillance cameras of which main purpose was to monitor the computer laboratories' property. The video signal in an individual computer laboratory was not recorded directly. Instead, signals from all laboratories were sent to a main server which would record video signals from a single lab for 30 seconds before it switched to record signals from other labs. The recorded video retrieved from the main servers, then, was comprised of small adjacent chunks of video signal from all computer laboratories and, thus, it could not be used properly in this study.

In the control group, the researcher planned to use portable video camera placed on a tripod to record the students' behavior. However, the portable video camera also came with some flaws, such as:

- They could not record the behavior of students who sat far away from the camera. Though the video camera was portable, with the weight and size of a camera and a tripod attached to it, moving the camera around the room was inconvenient;
- The existence of the video camera in the classroom made subjects felt uncomfortable, especially those close to the video camera. Their behavior became unnatural. Students either tried to avoid the video camera, or they posed in front of the camera; and
- 3. Video prompt was initiated as an attempt to stimulate the students' reflections during the interviews. However, finding a specific

moment from a three-hour-long video clip, which was recorded during a weekly English for Mass Media course, consumed a lot of times and efforts. Doing so, while having an interview, also negatively affected the students' flow of contributions.

The digital still cameras could compensate for weakness found in a video camera, for instance:

- A digital still camera could capture moments in the class, such as movements, gestures and facial expression;
- 2. Still images could be viewed later;
- 3. It was lighter and thus, the, operator could freely move around the classroom.
- 4. With its tiny size, it did not make students uncomfortable.
- 5. The digital still camera allowed the researcher to record only moments he was interested in for further study. It was inconvenient to do the same with a video camera.
- 6. Selecting required images and organizing them into some order was less time and effort consuming.

Because of many advantages provided by a digital still camera, the researcher decided to use still images from the camera as prompts in the semi-structured group interviews, for both the control and the experimental groups.

7.1.3 Data collection for English language achievement

In the pilot phase, English language achievement was measured by an achievement test, in the first semester of the academic year 2007. The test was conducted in the classroom in which the pilot students studied the English for Mass Media course. The procedure of the test administration was as follows:

1. The pilot students were informed in advance that they were required to have the test, including the date and time;

- 2. They were also informed that the result of the test would not have any effects on their grades in any courses;
- The test administration was conducted with formal examination protocol. Students were seated in the order of their student identification numbers, as appeared on separated lecture chairs. Dictionaries, cell phones, and textbooks were not allowed; and,
- 4. Time allocation for the examination was one and a half hour.

7.2 Data collection in the main study

In the main study, the data collection was conducted throughout the English for Mass Media course in the second semester of the academic year 2007. The data collection could be divided into four categories based on the instruments used to collect data. These were self-evaluated rating scale questionnaires, guiding questions, semi-structured group interviews, and an achievement test.

7.2.1 Self-evaluated rating scale questionnaires

The questionnaires were used to collect data of affective and behavioral engagement. The procedure to collect the data with questionnaires was as follows:

- 1. In order to study affective and behavioral engagement, and their trends, the questionnaires were distributed periodically through the semester, in the 4th, 6th, 8th, 10th, and 12th weeks;
- Students in the control and experimental groups received the questionnaires after the English for Mass Media course was over, in the classroom for the control group, and in the computer laboratory for the experimental group;
- 3. In the first week, the objectives of the questionnaires, the instructions, and the remark that the subjects' responses would be kept anonymous and would not have any effects on the subjects

were explained in Thai. However, on the later weeks, only the instructions and remarks were mentioned;

- 4. Subjects were told not to write their names down. However, the researcher still could identify each subject from codes on the back of each set of questionnaires; and,
- 5. The allocation of time to finish the questionnaires was not fixed, but most students completed them within 15 minutes. Students were told to place questionnaires in the boxes provided before they left the room.

7.2.2 Guiding questions

The guiding questions were used to collect data on cognitive engagement. The procedure to collect data with guiding questions was as follows:

- 1. Students in the control and experimental groups received the guiding questions in the 2nd week. The researcher explained the objectives of the guiding questions, as well as instructions and remarks that their contribution would provide valuable reflective evidence for their leaning. The contributions were voluntary and would not have any effect on them. All explanations were conducted in Thai for better understanding;
- 2. In order to study cognitive engagement and its trends, the responses to the guiding questions, in the form of journal writing, were collected periodically through the semester. Students in the control and experimental groups were informed to submit their journal within the end of the 4th, 6th, 8th, 10th, and 12th weeks of the semester; and
- 3. Students in the control group answered the guiding questions and collected them in their group portfolios, while students in the experimental group collected their answers in their group online portfolios.

7.2.3 Semi-structured interviews

Semi-structured interviews were used to collect qualitative data of affective, behavioral, and cognitive engagement. In order to deal with a criticism that the data form interviews was unreliable due to the chronological gap between the event and the reporting (Nisbett & Wilson, 1977), data collection in semi-structured group interviews was conducts within a week after each weekly class was over. By collecting the data as soon as possible after the task or event has taken place, it enhances reliability of the data (Ericsson and Simon, 1984, cited in Nunan, 1992a: 124). The interview procedure was as follows:

- 1. Twelve cohorts of students from the control and experimental groups, the same teams they were in class activities, were systematically selected for interviews. In each of the 4th, 6th, 8th, 10th, 12th, and 14th weeks of the semester, one cohort from the control group and another from the experimental group were scheduled for the interviews;
- Students were informed, in advance, of the day, date, time, and place that the interviews would take place;
- The interviews were administered at a meeting room of the Faculty of Humanities and Social Sciences;
- 4. The subjects and the researchers sat together at a round table. The interviews were audio-recorded and later transcribed;
- 5. Before each session of the interviews started, the researcher introduced the interviews' objectives and procedure, as well as expected contributions from the interviewees, and remarked that the interviews would not affect the students in any way;
- 6. The interviews were conducted in Thai. Prompts such as still images of students in actions, task outcomes, and students' answers in the questionnaires were used as cross references and for in-depth investigation;
- 7. Though the questions in the interviews were framed by ones from questionnaires, the researcher encouraged students to clarify more on

issues of "how" and "why" that the questionnaires could not provide deep and satisfactory answers; and

8. In general, a session of semi-structured group interviews to collect qualitative data on affective, behavioral, and cognitive engagement took approximately one and a half hours.

7.2.4 English for mass media achievement test

Students in both the control and experimental groups were required to take the achievement test at the end of the semester (in the 16^{th} week). The procedure of the test administration was as follows:

- The students were informed in advance that they were required to take the test, including the day, date, time, and place;
- 2. They were also informed that the scores from the achievement test would later be accumulated with the total scores and would affect their final grade of the English for Mass Media course.
- 3. The test administration was conducted with formal examination protocol. In a well lit, air-conditioned room, free from any distracting sounds, students were seated on separated chairs in the order of their student identification numbers. Dictionaries, cell phones, and textbooks were not allowed;
- 4. A test paper, computerized answer sheet, and a pencil were already placed on each chair before the students were allowed to enter the test rooms.
- 5. Both the control and experimental groups took the achievement at the same time in two adjacent rooms;
- 6. Time allocation for the examination was one and a half hours. The test started at 10:30 a.m. and was over by 12:00 p.m. A proctor was assigned to supervise the examination in each room. The remaining time was announced 15, 10, and 5 minutes before the test time was over; and

7. Students were asked to leave the test paper and answer sheets face down on the chairs, when they finished the test.

Based on two main reasons, particularly that student engagement is a process, happening in periods of time, and that one of the objectives in this research was to study the development of effects of CTBA with NBLT on student engagement, data in this research, therefore, were collected periodically during the semester. Time table for collection of all types of data is presented in Table 24.

Weeks	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Questionnaires				\checkmark		\checkmark		\checkmark		\checkmark						
Guiding questions										\checkmark						
Interviews				\checkmark						\checkmark						
Achievement																
test																v

Table 24: Timetable for Data Collection

8. Data Analysis

To study the effects of CTBA with, and without, NBLT on English language achievement and student engagement, three main research questions were set, as follows:

- 1. Does CTBA with NBLT have significant effects on undergraduate students' language achievement? If it does, what is the size of the effect?
- 2. Does CTBA with NBLT have any impact on undergraduate students' engagement? If it does, what is the magnitude of the effect size and is there any development of the effect?
- 3. Is there a significant correlation between English language achievement and student engagement of the undergraduate students? If there is, what is the size of the effect?

The comprehensive list of statics tools to answer each question was illustrated in Figure 11 below.

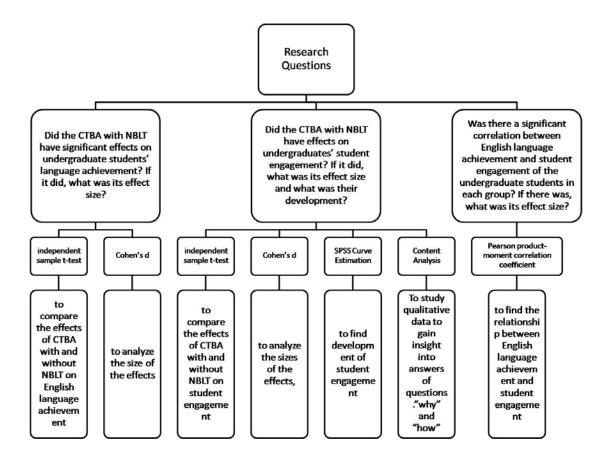


Figure 11: The comprehensive list of statics tools for data analysis

8.1 Data analysis on the effects of CTBA with, and without, NBLT on English language achievement

- 1. The students' computerized answer sheets from the control and experimental groups were marked separately by the automatic marking machine;
- 2. The scores from each group were quantified to find the mean scores and standard deviations;

- 3. The Independent-samples t-test was applied to find out whether there was a significance difference in English language achievement between the two groups (p = .05); and,
- 4. Cohen's *d* index was applied to find out the size of the effect.

8.2 Quantitative data analysis on the effects of CTBA with, and without, NBLT on student engagement

To gain an insight into student engagement, quantitative data of affective, behavioral, and cognitive engagement, from self-evaluated questionnaire, and guiding questions were analyzed separately by way of the following procedure.

- 1. Data obtained from self-evaluated rating scale questionnaires for affective engagement from both groups were quantified for descriptive statistics;
- 2. The Independent-samples t-test was applied to find out whether there was a significance difference in affective engagement between the two groups (p = .05);
- 3. Cohen's *d* index was applied to find out the size of the effect; and,
- 4. The Pearson-product moment correlation coefficient was applied to find out whether there was a significant development in student engagement, and its sub-elements, in the control and/or experimental groups. The relationships between time and student engagement, plus its sub-elements were interpreted from the coefficient of correlation (*r*) (Best & Kahn, 1986).

8.3 Qualitative data analysis on the effects of CTBA with, and without, NBLT on student engagement

To gain more insight into student engagement, qualitative data of affective, behavioral and cognitive engagement were then analyzed as follows.

8.3.1 Affective and behavioral engagement

The data, related to affective and behavioral engagement, gained from semi-structured group interviews, from both control and experimental groups was analyzed by means of content analysis. The procedure of data analysis from semistructured group interviews was as follows:

- 1. The interviews in Thai were transcribed;
- 2. The transcription was later translated into English;
- 3. The data were coded and categorized into groups;
- 4. The categorized data showed patterns which help validate and explain the results from quantitative data analysis;
- 5. Pseudonyms were used in the findings thoroughly.

8.3.2 Cognitive engagement

Data obtained from guiding questions, reflective journals and semistructured group interviews from both groups was analyzed by means of content analysis. Doing so, data was conceptualized, coded, and grouped into categories. Nevertheless, responses to the guiding questions in the form of reflective journal writing were reviewed later in the study and insufficiently supported the findings. In the pilot study, it was found that students were willing to do journal writing. However, the difference between the pilot study and the actual study was that the pilot students were asked to write the journal once, while the students in the main study were required to write them five times while they were being assigned with other tasks from the English for Mass Media course and other courses. This resulted in the students gradually losing interest in contributing cognitive reflection into their journals. Thus, observations from the instructor were used to support the cognitive engagement results found through the guiding questions and semi-structured interviews.

8.4 Data analysis on the correlations between English language achievement and student engagement

The Pearson product-moment coefficient was applied to find out if there was any relationship between the students' achievement test scores and their student, affective, behavioral, and cognitive engagement in the control group and in the experimental group. The Pearson-product moment correlation coefficient was also used to indicate the size of the effect of the treatment.

In Chapter IV, the research findings for research questions stated in this chapter are presented.

CHAPTER IV RESEARCH FINDINGS

In this chapter, the quantitative data from the English for Mass Media achievement test, self-evaluated rating scale questionnaires, and guiding questions, as well as qualitative data from semi-structured group interviews and observation are analyzed to answer the following research questions.

- 1. Does CTBA with NBLT have significant effects on undergraduate students' language achievement? If it does, what is the size of the effect?
- 2. Does CTBA with NBLT have any impact on undergraduate students' engagement? If it does, what is the magnitude of the effect size and is there any development of the effect?
- 3. Is there a significant correlation between English language achievement and student engagement of the undergraduate students? If so is, what is the size of the effect?

The three research questions were set in order to investigate the effects of CTBA wit, NBLT on undergraduate students' English language achievement, and on student engagement, as well as to study the correlation between the English language achievement and student engagement.

1. Effects of CTBA with NBLT on English language achievement

With a research question as to whether the CTBA with NBLT had significant effects on undergraduate students' English language achievement, the null hypothesis was set that the English language achievement of the undergraduate students who were taught by the CTBA with the NBLT would not be significantly different from those who were taught without such an approach. The findings from the achievement test showed that, from the total scores of 120, the average scores of the control group ($\bar{x} = 54.167$, SD = 13.117) were higher than ones of the experimental group ($\bar{x} = 49.542$, SD = 12.371).

Groups	n	Mean	Std. Dev.	df	t-value
Control	24	54.167	13.117	46	1.257
Experimental	24	49.542	12.371		

Table 25: Comparison of the Students' English Language Achievement

However, when calculated by Independent-samples t-test, the result presented in the Table 18 shows that English language achievement mean scores of the students in both groups were insignificantly different, t (46) = 1.257, p = 0.108. Thus, the hypothesis for the first research question at alpha = 0.05 was accepted.

Moreover, the effect size of CTBA with NBLT on the undergraduate students' English language achievement was small, Cohen's d = 0.36. An effect size of 0.36 indicated that the mean scores of the control group were about at the 64th percentile, whereas those of the experimental group were at the 50 percentile (Cohen, 1988).

2. Effects of CTBA with NBLT on Student Engagement

The research question for student engagement was set whether CTBA with NBLT had effects on undergraduate students' engagement. If so, what was the size of the effects, and was there development of the effects? From the literature review, it was hypothesized that the student engagement, including its sub-elements, of the undergraduate students who were taught by CTBA with NBLT would be significantly higher than those who were taught without such an approach.

2.1 Effects of CTBA with NBLT on student engagement

To test the hypothesis, data from the undergraduate students' student engagement were collected five times during the semester. The findings showed that the average scores of the control group ($\overline{x} = 2.681$, SD = 0.592) were lower than ones of the experimental group ($\overline{x} = 3.216$, SD = 0.762).

Groups	n	Mean	Std. Dev.	df	t-value
Control	24	2.681	0.592	46	-2.716*
Experimental	24	3.216	0.762		
* 0.05					

 Table 26: Comparison of the Students' Student Engagement

*p < 0.05

The result from the Independent-samples t-test in the Table 19 shows that the student engagement of the control group was significantly lower than that of the experimental group, t (46) = -2.716, p < 0.05. Thus, the hypothesis was accepted at alpha = 0.05. In addition, the effect size of CTBA with NBLT on the undergraduate students' student engagement was large, Cohen's d = -1.41. An effect size of -1.41 indicated that the mean scores of the control group were about at the 50th percentile whereas those of the experimental group were at the 92th percentile (Cohen, 1988).

For the development of student engagement, the results from the questionnaires collected five times during the semester showed a significant development of the student engagement in a linear formation in the control group (r = 0.774, p < 0.05) as illustrated in Figure 12.

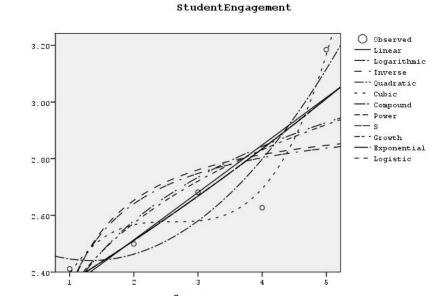


Figure 12: The control group's student engagement trends

The development of student engagement in a linear formation was also found the experimental group (r = 0.895, p < 0.05), as illustrated in Figure 13.

StudentEngagement

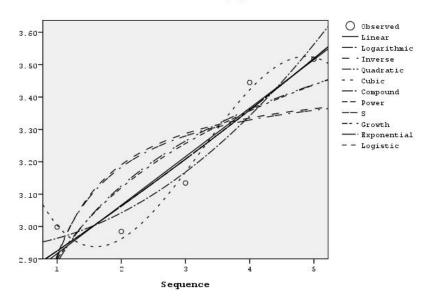


Figure 13: The experimental group's student engagement trends

Student engagement was a broad term which covered three sub-elements that are affective, behavioral, and cognitive engagement. Therefore, to investigate the student engagement in depth, three further sub-hypotheses were required to be tested.

2.2 Effects of CTBA with NBLT on affective engagement

The hypothesis for affective engagement was that the affective engagement of the undergraduate students who were taught by the CTBA with NBLT was significantly higher than those who were taught without such an approach. Undergraduate students' affective engagement data was collected five times during a semester. The affective engagement average scores of the control group students ($\bar{x} = 3.597$, SD = 0.263) were lower than ones of the experimental group students ($\bar{x} = 3.632$, SD = 0.448). A comparison of the effects of CTBA with, and without, NBLT on affective engagement in the control and the experimental groups is shown in Tabled 20.

Groups	n	Mean	Std. Dev.	df	t-value
Control	24	3.597	0.263	46	-0.333
Experimental	24	3.632	0.448		

Table 27: Comparison of the Students' Affective Engagement

Table 20 shows the results from the Independent-samples t-test that the affective engagement in both groups were insignificantly different, t (46) = -0.333, p > 0.050. Thus, the hypothesis that the affective engagement of the undergraduate students who were taught by the CTBA with NBLT was significantly higher than those who were taught by CTBA without NBLT at alpha = 0.05 was rejected.

The size of the effect of CTBA with NBLT on the undergraduate students' affective engagement was near zero, Cohen's d = -0.10. An effect size of -0.10 indicated that the mean scores of the control group and the experimental group were about at the 50th percentile (Cohen, 1988). Furthermore, data from the

questionnaires collected during the semester did not show any systematic development of affective engagement in both the control and experimental groups.

Due to the fact that the affective engagement studied in this research was composed of three sub-elements, being emotions, attitudes and values, to investigate the affective engagement in depth, it was necessary that all sub-elements must be studied, as well. Quantitatively, it was found that the control group had lower average scores in emotions and attitudes but higher average scores in values, than what the experimental group had. However, when Independent-samples t-test was applied, emotions, attitudes and values in both the control and experimental groups were insignificantly different, as shown in Table 28.

	Groups	n	Mean	Std. Dev.	df	t-value
Emotions	Control	24	3.262	0.285	38.581	-1.042
	Experimental	24	3.376	0.456		
Attitudes	Control	24	3.870	0.272	46	-0.201
	Experimental	24	3.891	0.445		
Values	Control	24	3.659	0.362	46	0.222
	Experimental	24	3.629	0.544		

Table 28: Comparison of the Students' Sub-Elements of Affective Engagement

Qualitatively, the control and the experimental groups shared some similarities and differences in affective engagement. The qualitative findings of sub-elements of affective engagement are presented in detail below.

2.2.1 Emotions

Anxiety was the most outstanding emotion which both groups shared. Anxiety found in this study is classified into three types, specifically anxiety from tests and examinations, from collaboration in groups, and from teaching methods. Three types of anxiety concluded from the qualitative data analysis are presented in detail as follows:

1. Anxiety for tests and examinations

The students in both groups had anxiety towards tests and examination; they were afraid to fail the course. They claimed that they would have been less anxious if the instructor allowed them to bring dictionaries into the examination rooms, or designed test items that came directly from the textbook or gave them some hints for test items.

2. Anxiety for collaboration in groups

The second type of anxiety is one associated with collaborative learning. Because CTBA with NBLT focused on working collaboratively with the network functioning as an assisting tool for collaborating, completing tasks would be much more difficult if the tasks were not shared by group members. Collaboration, then, was a necessity. However, some students accepted that they were anxious to work in groups, especially when they did not receive collaboration from other members, fearing that they might not come to class, not be fully responsible for their share of the work, or be distracted by other non-academic activities

3. Anxiety for teaching methods

The experimental group had anxiety over unfamiliarity of using computers and the Internet for learning. A student (Kanchana) said that she loves to learn this course but "*did not want to use computers and post the answers on the network*." Other students (Thapanee and Rachanee) mentioned the difference between reading traditional newspapers and online newspapers, saying that reading online newspaper required clicking and scrolling, which they did not feel comfortable with, compared to reading print newspapers.

2.2.2 Attitudes

In this thesis, attitudes were investigated in three aspects: the instructor, CTBA, and NBLT.

1. Attitudes towards the instructor

In general, both groups had positive attitudes towards the instructor's characteristics, agreeing that he was knowledgeable and expert in the course he taught, as well as, funny, friendly and flexible in teaching. When he taught, he did not focus solely on grammatical correctness, but tried to encourage students to experiment and complete tasks. Ratima gave an example that the instructor allowed her extra time to complete and submit tasks and that such flexibility resulted in her gaining better task outcomes. Veerapol admitted that he felt happy while learning because the instructor was not strict about the way he dressed which did not conform to the regulation of the university. However, the instructor's friendliness and flexibility could be considered as a flaw. Some students, such as Intira thought that the instructor should have been stricter so that the students would have been afraid of him, and he, then, could have fully controlled the classroom regulations.

Some students had an attitude that an attempt to develop an autonomous learning habit in them was because of recklessness of the instructor. The Buachompoo group from the experiment group said they needed the instructor to be more available and to take care of them more closely. They preferred learning with teachers who treated them like they were young high school students. Unlike high school teachers, the university instructors treated students as adult learners who are supposed to be autonomous, independent and responsible in learning. However, they said they were not yet ready.

2. Attitudes toward CTBA

In this research study, members from the control and experimental groups admitted they realized the advantages of group working, namely that they could share ideas, discuss the best answers, learn from others and become positive forces for each other. However, if they had options, they preferred to work individually. The conflict between an ideal and a reality became apparent in the interviews. Only the Girlyberry, a team from the experimental group admitted that they preferred to work together, claiming they were able to share the strength of each member; ones who were expert in computers and the Internet would mainly take care of technical tasks, such as searching or uploading tasks, whilst ones who were good at English would, chiefly, take care of academic tasks, such as reading comprehension exercises or writing news stories. However, the rest of the students from both the control and experimental groups admitted that they preferred learning individually due to the perceived learning convenience and learning independence.

Learning convenience is the first reason. Finding times and places that all team members were free to work together beyond the classroom hours was very difficult. A student (Posatas) from the control group admitted he financially supported other members of his team because he had to work a part time job and could not join others for take-home tasks. Other students added that working solo was more convenient because they need not to wait for other team members to have mutual free time so that they can work together.

The other reason was learning independence which, claimed by the students, came with many advantages. For example:

- 1. They could finish tasks based largely on their ideas, without any necessity to attend discussions with others that were "*troublesome, chaotic and never ending,*" (Kanchana);
- 2. They would not worry that they would complete tasks incorrectly and would be blamed later by other members of their teams;
- 3. The individual learning would truly reflect each student's performance. Students who were industrious and responsible for learning and tasks should deserve the good grades. By doing the tasks in groups, the diligent students had no choice but to be responsible for free riders.

However, the students still agreed that working in groups was agreeable and appropriate under some conditions. For instance:

- 1. They preferred to work in groups for tasks that were assigned to be finished within the class hours; and,
- 2. Group work would be appropriate for some large and complex tasks which were too difficult for one single person to complete them individually.

3. Attitudes towards NBLT

The experiment group agreed that the Internet is an interesting and powerful tool to help connect them to the learning resources and learning communities. A student (Sasirin) even suggested that it was the most appropriate medium for learning in a course, the content of which directly related to mass media. Others in the experiment group agreed that using computers and the Internet in a computer laboratory was a convenient method for learning.

However, when the issue of NBLT was further investigated, the students admitted that if learning success was considered as the first priority, they preferred to learn in a traditional classroom. The atmosphere in the traditional classroom was more academic, offering more learning concentration and less distraction on lectures and group works compared to the computer laboratory. The experimental group's negative attitudes towards learning with NBLT in a computer laboratory stemmed from the extra demands on devices and conduits, skills, times, and concentration. The detailed descriptions of extra demands from NBLT are presented below.

The first extra demand is for devices and conduits. Despite the positive attitudes toward the attractive and convenient aspects of NBLT, some students in experimental group, especially ones who did not have either computers or the Internet connection at home, complained and questioned the claimed convenience. If the tasks were assigned to do and submit within class hours, their difficulties experienced by the students would be minor. However, if students were asked to do some take-home tasks, the issue of digital divide became more apparent. In order to

complete the take-home tasks, they had extra requirements to go to the university central library or pay extra money for the Internet connection at Internet cafes.

Juthamas gave her comment towards extra demands of NBLT that is worth considering, especially for instructors whose students cannot access the Network conveniently. She said, "Paper newspapers can be read everywhere, every time. To read online newspaper, we must go to internet café, spending time reading and translating, which took time for understanding. Going to internet café, after school, took 20 baht per hour. To translate and to try to understand each news story, it took at least 30 minutes."

The second extra demand is for computer and the Internet skills. Despite a confirmation that all students in this study possessed some fundamental digital literacy, some students still complained that they lacked skills required for learning with NBLT. Reading news stories on the screen was different and far unnatural for some when compared to reading print newspapers. By reading traditional newspapers, students could physically touch the papers, flip through pages, as well as, scan and skim a whole page quickly. While reading online newspapers, they could not see a whole page due to the limitation of computer screens. To quickly scan all contents, flipping through pages was not possible for online newspapers; they were forced to scroll up and down the Web pages, as well as to click on links and buttons.

The third extra demand is for time. NBLT required students to spend more time for learning. Some students in the experimental group claimed that traditional newspapers were more agreeable in terms of time spent because they could be read more conveniently, at any time and at any place. However, the requirement for NBLT was not exclusively limited to news reading. A student (Juthamas) said that searching information on the Internet to complete tasks took a lot of time, especially when compared to having exercises in the textbook. The textbook was considered the bible for her because, in her opinion, it covered all contents she needed to know for the final examination. The last extra demand students mentioned is for concentration. Learning with NBLT required extra concentration. Though each and every student in the experiment group had the privilege to access a computer and Internet connection, and it was considered an advantage, it actually turned out that the Internet access become a drawback. Experimental group students admitted they could not control themselves to focus on learning. While the instructor was giving lectures, they were engaged in non-academic activities offered on the Internet, such as sending short messages, viewing Web pages, posting comments on networking sites, watching videos and playing online games. A team (Girlyberry group) commented that most students in the experimental group would absolutely fail this course if the evaluation would have been based entirely on lexical and syntactic correctness.

2.2.3 Values

Values in this research study referred to the students' realization of the importance of the English for Mass Media course in developing their English language proficiency, increasing comprehension in world current situations, and enhancing future career opportunities. The detailed findings in sub-categories of values are presented below.

1. Development of English language proficiency

Most students from the control and experimental groups agreed that English for Mass Media improved their English proficiency to some extent. They agreed that they better had come to know lexical features, such as vocabulary, abbreviations and acronyms, as well as syntactic features such as, specific verb forms frequently used in headlines which convey voices and timing messages. Such types of knowledge positively affected other English courses, especially the Translation course. The English for Mass Media course helped them translate news headlines and leads in the Translation course, doing so more accurately.

2. Development of comprehension of world current events

However, the students from both control and experimental groups did not value the roles of the English for Mass Media course in expanding their perspectives as to the world current events, claiming they usually followed (or listened to or even overheard) news from other sources, such as television or radio news programs, which mostly were broadcasted in Thai.

3. Development of future career opportunities

Both the control and experimental groups did not value the English for Mass Media course in increasing the opportunities for their future careers. Moreover, students could not find any concrete example of knowledge and skills gained from the course that could be advantageous for their future careers.

2.3 Effects of CTBA with NBLT on behavioral engagement

The effect of CTBA with NBLT on behavioral engagement was hypothesized that the undergraduate students who were taught by CTBA with NBLT would have behavioral engagement significantly higher than those who were taught without such an approach. When the data were collected, it was found that the average scores of the control group (\bar{x} = 3.199, *SD* = 0.413) were lower than that of the experimental group (\bar{x} = 3.461, SD = 0.335).

Furthermore, when calculated with the Independent-samples t-test, the behavioral engagement in the control group was significantly lower than that in the experimental group, t (46) = -2.412, p < 0.05, as shown in Table 29. Thus, the hypothesis that the experimental group had behavioral engagement significantly higher than the control had was accepted at alpha = 0.05.

Groups	n	Mean	Std. Dev.	df	t-value
Control	24	3.199	0.413	46	-2.412*
Experimental	24	3.461	0.335		
* 0.01					

Table 29: Comparison of the Students' Behavioral Engagement

* *p* < 0.01

The effect size of CTBA with NBLT on the behavioral engagement was moderate, Cohen's d = -0.70. An effect size of -0.70 indicated that the mean scores of the control group were about at the 50th percentile whereas those of the experimental group were at the 76th percentile (Cohen, 1988). In addition, the development in linear formation (r = 0.740, p = 0.061) was likely to occur in the experimental group in the case that the period of the study was extended as illustrated in Figure 14.

Behavioral Engagement

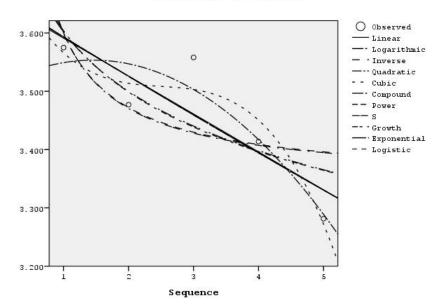


Figure 14: Possible behavioral engagement trends in the experimental group

The behavioral engagement in this study consisted of six sub-elements that were attendance, preparation, attention, asking questions, contributions, and efforts. Table 30 below shows that the control group had lower average scores than the experimental group had, in all sub-elements of behavioral engagement. However, when the Independent-samples t-test was applied, it was found that, quantitatively, the

experimental group only had attendance and asking questions significantly higher than the control group had, t (33.68) = -5.466, p < 0.05 and t (46) = -2.139, p < 0.05, respectively.

	Groups	n	Mean	Std. Dev.	df	t-value
Attendance	Control	24	3.880	0.597	33.677	-5.466 *
	Experimental	24	4.624	0.296		
Preparation	Control	24	2.218	0.618	46	-0.513
	Experimental	24	2.304	0.539		
Attention	Control	24	3.368	0.462	46	-0.284
	Experimental	24	3.404	0.395		
Asking	Control	24	2.901	0.617	46	-2.139 *
questions	Experimental	24	3.304	0.688		
Contributions	Control	24	3.514	0.440	46	-1.118
	Experimental	24	3.656	0.435		
Efforts	Control	24	3.314	0.483	46	-1.198
	Experimental	24	3.475	0.446		

Table 30: Comparison of Students' Sub-Elements of Behavioral Engagement

* *p* < 0.05

Qualitative findings of the effects of CTBA with NBLT on the sub-elements of behavioral engagement, supported with more evidence from students' interviews are presented below in relation to the experience of, and feedback from, students in the research process reported in this thesis. The findings in sub-elements of behavioral engagement which were found to be insignificantly different between the two groups are to be presented firstly, specifically preparation, attention, contributions and efforts. The sub-elements that were found to be significantly higher in the experimental group, particularly attendance and asking questions are presented later.

2.3.1 Preparation

Preparation in this study was classified into two categories, specifically, reading textbooks before coming to class and reading textbook before

having a test. The detailed description of preparation for class and for a test is discussed below.

1. Reading textbooks before coming to class

Very few students admitted that they had read the textbook in advance and none of them had read it thoroughly. The group interviews revealed that poor learning habits and inadequate personal perseverance were reasons behind their lack of appropriate preparation before having a class.

Some students said they firstly needed to listen to the lectures in order to conceptualize the main ideas in the textbook. "I need to understand first in the class and then review the text for better understanding later", said Ratima. "I totally depend on your lectures," Sirinapa added. Other students said that the organization in the textbook did not fit their learning style so they did not read it. The textbook in this study was organized within a CTBA framework in which a schema building step required students to complete news story reading comprehension exercises. In relation to this, Thapanee said that she would rather not spend her time for the reading comprehension exercises, but would focus on the linguistic contents only. Thapanee concluded, "I would read textbook in which the contents were organized into topics, showing the main ideas and easy to understand. In English mass media, I did not like reading long news stories but I would read the main concepts which were organized into an order such as news types or news values. Such an organization helped me to grab the main ideas. I was too lazy to categorize the contents into topics myself."

Some students did not have the necessary perseverance to prepare themselves for learning. Orawan, a student who lives at Bang Bua Thong, a place far from the university, said that she tried to read textbook in advance but hardly made it, claiming that, "*I did not have time*. *I arrive home late at night around 9 -10 p.m. and still had some chores to do*." Other students simply accepted that they were too lazy to read the textbook. "*I'm just lazy*. *I never read texts in advance in any course*," Panadda and Prapasri said while laughing. "*I just don't like reading books*," said Rasami. "*I did not understand in class. Though I have read the textbook in advance, I* would not understand it anyway because I was just too lazy to translate the English into Thai," said Wasawan.

2. Reading textbooks before having a test

The students from both the control and experimental groups were not serious about preparing themselves for the tests, as well. "*I never reviewed what I've learned after school. I would read one day before the test,*" Panadda said. However, if they read the textbook, they would not read it thoroughly; they just scanned pages and read only the headings in each unit. "*I scanned through the topics and tried to make understanding the major points,*" said Orawan. "*I read a little; just scanned through pages, and focused on some parts that I did not understand. I was not serious about the tests,*" Patharaporn said.

Reasons that they were not seriously prepared before having the tests were various. Some students frankly accepted that they did not prepare themselves for tests at all. "*I never ever read for exams*", said Panadda. Thapanee denied that she did not read the textbook was not because she was not lazy. "*I was just not in the mood*. *Though there was a test next day. If I was not in mood, I would not read,*" she said. She also thought it was not necessary; what she really needed was clear understanding in concepts, not memorizing the contents.

Thapanee further explained, "I would read only courses that require memorizing but your course does not. The tests cover unseen news stories. The questions need thinking which did not come directly from the textbook. I need to know and apply the concepts to do the tests. It depends whether I could remember and understand the concepts you taught, which is more comprehensible than reading the book myself." Achara agreed with Thapanee's explanation and added, "I did not know what to read or what would be included in the tests. Thinking it might be a waste of time. Contrary to other courses of which contents are fixed to what was in the textbook; this course are not." However, both groups admitted that some exercises or tasks must be assigned so that they had chance to review the textbook before they completed the tasks. Some students also added that this technique would be more effective if the assignments were graded and scores were given.

"I would read textbook only if the instructor asked me to do some assignments in the textbook. If the instructor did not, I would not," Uraiwan, another student in the control group confirmed that statement. "Most of the time, I would read text in Ajarn James course because he asked us to submit assignments which were required to do in the textbook," Wanapa, a student in the experimental group, said.

2.3.2 Attention

Despite learning at the undergraduate level, the students still behaved like young high school students who require close supervision, instructions or even orders from the instructors who, in Thai culture, are viewed as a proxy for benevolent parents.

A student in the control group (Uraiwan) said that she could concentrate well in a traditional classroom setting. Listening to lectures, jotting down lecture notes, following instructions on tasks, and finishing tasks in groups were all achieved with less distraction. Yet, it could not be interpreted that the control group always concentrated on learning. Ratima, explained that casual or even disruptive behavior in classroom was normal. "*To sit, study, chit chat, have some sweet in classroom, is a common thing; it's just teenagers' habits,*" said Ratima. The statement clearly reflected some Thai students' attitudes and behaviors toward learning.

When the experimental group studied under CTBA with NBLT in which the instructor's role changed from a sole authority to a facilitator, some of them insisted firmly that, despite being distracted, they could control themselves to pay attention to learning. A team (Hellohangbok) said that, in the computer laboratory, they used the Internet for entertainment purposes, but only did so when they had finished the assigned tasks and the instructor was busy helping students in other groups. Some students, in addition, commented that the computer laboratory was not suitable for using the Internet for pleasure. "*The school Internet connection is so slow*. *It is far faster at my house. I see no point to play it here*," said Sasithorn, whilst Juthamas said that she had no chance to be distracted due to a large number of tasks assigned to be completed in class. "*There were a lot of works. If I did not listen I would not understand what you said. With limited time and help, I also could not ask friends in other group*," she said.

Nevertheless, the interviews revealed another perspective which was contrary to what the students had firmly said. Either consciously or subconsciously aware of the distraction, students could not control themselves to focus on learning, either listening to lecture, jotting down notes or voluntarily answering questions. In addition, the experimental group admitted that the computer laboratory was a suitable place to avoid answering the instructor's questions. They were able to hide behind the computers, and looking at the computer screens. This was done just to avoid eye contact which could lead to interaction with the instructor. As Thapanee commented, *"It might be easier to control ourselves in traditional classroom."*

Panwarot, who thought that distraction would not affect her performance in class said, "Usually in the computer laboratory, I would open hamster related *Web pages. I was reading the web while I was listening to what you were saying. While you assigned work, I would ask Naree what you just said.*" If Panwarot actually could concentrate on what the instructor was saying whilst she was busy dealing with the Internet, she should not recheck the instructions with her peer. What was more absurd was when Naree, a student who Panwarot expected to depend upon, was asked whether she was listening to the lecture whilst Panwarot was reading hamsters Web pages, the answer was, "*I did not. I was reading entertainment news.*" "*I just can't control myself*," admitted Naree.

Juthamas added that the Internet occupied her group mates' attention and made them more difficult to work with. "*I also warned her (Supaporn, her team* member) about using Hi5. She believed me for a while. When you asked her to turn her computer screen off, she would later turn it on, anyway."

2.3.3 Contributions

Contribution referred to activities that must involve other people in order to achieve learning success. Despite provided with ICT tools, contribution in the experimental group was insignificantly different from that of the control group. Such insignificant difference of contribution was possibly affected from the following factors:

- 1. Low attendance which negatively affected the control group,
- 2. CTBA with NBLT which positively and negatively affected the experimental group,
- 3. Requirements for devices and conduits which negatively affected the experimental group, and
- 4. Characteristics of tasks in CTBA which affected both groups.

The mentioned factors that possibly affected students' contributions are discussed in detail below.

1. Low attendance

The control group's contributions were negatively affected by low attendance which was so low that in some teams, all members never attended the class together. In such cases, students had less chance to interact with each other and contribute their knowledge into the team learning process, either inside or outside classroom. For in-class tasks, the members from low-attendance teams were indirectly forced to join other teams; otherwise they had to finish the tasks alone. For take-home tasks, low attendance still affected contribution; it was difficult for the students to find a mutually suitable time and place to work together. Apparently, it became a responsibility of the student who attended the class to pass the lecture notes and task assignments to the others who missed the class.

2. CTBA with NBLT

Even though the control group's contribution suffered from low attendance, the difference in contribution between the control and experimental groups was insignificantly different. This possibly stemmed from the facts that CTBA with NBLT, which took place in the experimental group, had positive effects only on in-class contributions.

In the sessions of schema building and language focus, it was found that students in the experimental group gained advantages from Web-based exercises created by an application named Hot Potatoes. This application offered automatic feedback, score calculating, a stop watch function and a sense of competition. When the students were asked to complete reading comprehension exercises in schema building session, they were informed in advance that the exercises was timed and any incorrect answers would penalize the final scores. In order to gain the highest total scores, they had to choose the correct answer at their first attempt. The scores for the second or third time correct answers would be deducted. Whilst students did this activity, the team members moved to sit together, sharing a single computer, looking at the computer screen and contributing their ideas to find the best answers. The students admitted that they enjoyed working collaboratively with their peers and having competition with other groups.

In addition, unlike learning in a traditional classroom setting which required mainly English language proficiency, learning under CTBA with NBLT in computer laboratory required both English language proficiency and digital literacy. With the requirement for such diversity to ensure success in this course, students in the experiment group contributed their knowledge and shared their responsibility based on their expertise. In the Hellohangbok team, Noparat took care of academic stuff, such as writing a news summary, whilst Usanee was the key person who took care of technology aspects, such as creating and updating their group's Web logs.

The Girlyberry team confirmed that their members contributed and helped each other. "When a consensus was needed, we tried to discuss for solution and consult with other sources such as the Internet and online dictionary." However, when a task required specific expertise, they would put a right person to a right job. "We like group works. Sharing ideas and strengths – academic stuffs would go to Rossukon and Natharika while the technology stuffs would go to Rasamee", said the Girlyberry group. The Pittigirl team also confirmed collaborative learning in computer laboratory. Sasithorn, the Pitigirl team member said, "None of us were fussy or bossy. We tried to help each other finding the best solution to the assigned tasks. When we reached disagreement, we tried to compromise. But if we could not solve it ourselves, we would consult friends in other groups or the instructor".

However, it did not mean that CTBA with NBLT had positive effects on the contribution of all students in the experimental group. Similar to results in other sub-elements of student engagement, CTBA with NBLT had both positive and negative effects. This finding presented a drawback of CTBA with NBLT that NBLT distracted students from learning. Some students reported that they had problems dealing with other members who were distracted by the Internet while they were required to finish in-class tasks. As mentioned while discussing behavioral engagement' attention, some students were engaged with the Internet and did not pay attention well to lectures. Then, when the tasks were assigned, they became a hindrance to the whole group. Juthamas explained the reasons why her group could not finish in-class tasks on time. It was that her friends did not focus on learning.

Juthamas said, "I already explained it to her (a group member) but she still did not understand. I had to repeat from the beginning. She should listen to the instructor at first and ask only some points, not the whole. If she listened to the instructor, she would have understood. She made our group could not finish the tasks."

3. Requirement for devices and conduits

Most students rarely read, commented, or corrected errors in other members' shares of tasks before the tasks were submitted. Such behavior could have resulted from low attendance in the control group and unavailability of devices and conduits in the experimental group. "We had less chance to meet each other, so we did not review others' works whether they were right or wrong. We might read for spelling check but that was not frequent," said Prathana.

The experimental group's students complained about the unavailability of devices and conduits and the inconvenience of NBLT. From a total of 24 students in the experimental group, only 14 students could access the computers and 9 students had access to the computer and the Internet conveniently at their homes. The unavailability became a major reason that students used as an excuse when they did not make proper contribution outside of the classroom. However, it should be noted that Suan Dusit Rajabhat University provides computers and the Internet connection at the central library and wireless Internet connection throughout the university compound, all free of charge.

4. Characteristics of tasks

Characteristic of tasks was another factor that possibly allowed students to avoid completing tasks collaboratively with other members. In the control group, take home tasks were divided into small parts and distributed to each member for which they were responsible. The clear separation of tasks, though, could solve the difficulty of nonattendance, it lessened the chance students had for contributions on collaborative learning.

The ways that the student contributed to learning depended on the characteristics of the tasks. If the tasks were simple, or they were routine, students would tend to handle them individually, or cooperatively at best. The obvious example was a news summary task that was required to be done every week and could be completed individually without much difficulty. It was found that the responsibility in the task was rotated from one member to another each week. "*This week for news summary A takes it. Next week, new news story, B will take it,*" Kanchana explained.

However, if a task was large in scale, like controlled news writing, in which students were asked to write news stories from given information, they tended to deal with it cooperatively. For example, information given as news sources for controlled news writing tasks was separated into small parts and distributed to each member. Each part of a news story was then written separately by each member before everything was merged and submitted as a single news story. Students commented that with the divide-and-merge method, they could cope with difficulties related to nonattendance, finding time and place for working together beyond class hours, and heavy workloads.

It was only when the tasks were so large and so complex that a student could not complete them individually or cooperatively, the students in the control group, them, tended to complete them collaboratively, as they did in free news writing tasks, in which they were assigned to write news stories from the primary and secondary source with appropriate format.

The pattern of divide-and-merge tasks was found in the experimental group as well. However, due to the requirement to submit tasks online, the ways the experimental group contributed to learning was slightly different from the control group. From a small and simple task, to a large and complex task, the experimental group tended to manage it in three directions: individually, cooperatively, and collaboratively.

Individually, a student who could conveniently access the Internet took all responsibility, especially in simple and routine tasks, such as weekly news summary. "If the news story was easy, we would summarize it individually each week but if the task was huge or complex, we would do it together", said Naree.

Cooperatively, each student was responsible for a share of a divided task. All shares would be collected, merged and handed to a student who could conveniently access the Internet to upload the tasks to the teams' Blog. "For controlled news writing that we had to rewrite news story (from given information) using direct and indirect quotes, the news stories were divided into pieces and distributed to each member. When finished, we gave Veerapol files so that he could merge and post them on the blog," said Naree.

However, that the experimental group students completed tasks in groups collaboratively were not limited to the large and complex tasks as it was in the control group. Collaborative, it was found that some teams in the experimental group would try to complete tasks, whether they were considered small, simple and routine, such as news summary task, in the computer laboratory together in teams, due to the requirement to submit tasks online. Many of them accepted that they finished the tasks on the class day, before or, sometimes, after the class started, in the computer laboratory. The issue that the experimental group together complete tasks in the computer laboratory is further discussed in behavioral engagement's attendance section.

2.3.4 Efforts

Efforts referred to the state when students tried harder in order to be successful in learning including consulting the instructor beyond the class times, and completing tasks for higher expectation. It was found that both groups were not significantly different in learning efforts, despite extra learning tools provided in the experiment group. The detailed characteristics of efforts found in both the control and experimental groups are to be discussed in the section below.

1. Consulting the instructor beyond the class times

The students from both groups accepted that they did not consult the instructor beyond the class hours, and they explained with many reasons namely they preferred to consult friends; they were learning-independent; and, they were afraid that it might disturb the instructor.

In asking questions, some students admitted that they did not ask questions in the classroom because of they were afraid of losing face. Though, the CMC could help them avoid face to face encounters with the instructor, the instructor never received questions from the experimental group through any kinds of CMC. Unavailability of devices and conduits mentioned in contribution might explain this occurrence, or the students possibly believed their responsibility for learning was limited within the classroom walls. Kanchana provided an example which supported such an assumption. "I would like to ask teacher but would do that only in class. When the class was over, it was over. I would not do anything further," said Kanchana.

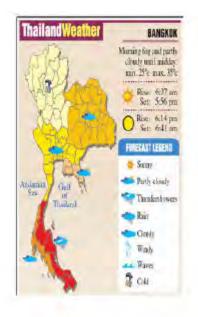
2. Completing tasks for higher expectation

The students in the experimental group possessed positive attitudes towards learning with technology, electronic literacy, and were provided devices and conduit, but evidence presented that they did not make extra effort to achieve higher learning success.

Generally, both the control and experimental groups could submit takehome tasks on time. Students in the control group tried to finish take-home tasks in the classroom on the due date, with scissors, glue sticks, paper sheets and pens in hands, as could be seen from time to time. Similarly, some experimental group members completed tasks assigned in the previous week just minutes before the class began. The Girlyberry team refused a claim that they completed tasks in the computer laboratory on the class day because they did not make an enough effort in learning. Instead, they asserted that they would like to summarize the most up-to-date news stories and to do the tasks collaboratively in groups due to the fact that some of their members did not have computers and/or the Internet connection at home.

The absence of effort was also reflected in the way students chose news stories based on ease and simplicity with which to summarize them. Instead of reading many news stories, and then choosing one to summarize, some students specifically chose news stories about which they already possessed background knowledge, such as news stories that they heard via Thai televisions, or read in Thai newspapers. The Panwarot's statement helped clarify this finding well. Panwarot said, "Reading the web is faster; news is divided into subcategories. I needed not to flip pages reading newspapers. Just turn on the web sites, then I directly picked a news story I already understood from other Thai sources." Naree added, "I would listen and watch the news first (from other source such as Thai television) and decided which news I would summarize. Any news I liked, I would pick that specific news directly from the Internet for summarizing. I would not read the rest.

The Girlyberry team chose news stories to summarize in a simpler way. They chose the biggest and most eye-catching news of the day, which was always displayed on news Web sites' homepages. Another obvious sample of students' low effort was that Naree chose a weather report, which was mainly composed of graphics and numbers, for a news summary. "*I thought it was easy*," she said. Naree's news summary is shown in Figure 15.



News summarizing

Weather today, in North have weather cold in the upper part and cool elsewhere. Cold to very cold in mountain tops min 6 – 12 c. Northeast and Central have weather cloudy. East & Coastal and South have weather partly cloudy. South espon.mstph.com/pumaP8page_start=20(10 of 16)(12/9/2551 10.03.59) apont Blog have weather thundershowers.

Figure 15: Weather report as a sample of students' low efforts

From findings presented above, four of six sub-elements of behavioral engagement in the control group were not significantly different from those of the

experimental group. However, attendance and asking questions in the experimental group were found to be significantly higher than those in the control group.

2.3.5 Attendance

Statistically, students in the experimental group came to school significantly more on-time and more often than the control group did. This phenomenon could be interpreted either as attractiveness of NBLT per se, or as an indirect effects that the experimental group was required to use computers and the Internet connection to complete tasks.

Suan Dusit Rajabhat University is located in downtown amid governmental and military offices without any shopping centers or movie theaters for teenagers to hang around. "When we were studying at Victory Monument Campus, we always cut classes to hang around in the shopping malls nearby, watching movies, shopping, etc," Achara said, "but here, there was nowhere to go." In addition, many buildings in the university were under construction. This caused a noisy and dusty environment around the university vicinity, not to overlook the year-round hot and humid Bangkok climates, so students in the experimental group decided that going to the computer laboratory, which was air-conditioned and equipped with computers and Internet connection, was preferable to being outdoors elsewhere. Even the students had no assignment to finish, they could spend their time surfing websites, chatting to their friends online or playing online games.

The other reason was the students' unavailability of computers and the Internet, plus the NBLT's requirement to submit tasks online. From the data collected before the study began, only 14 from total 24 students in the experimental groups could conveniently access computers at their homes and only 9 students had access to the Internet at their homes. Therefore, that members of the experimental group came to the computer laboratory before the class started was mainly to finish the assigned tasks with their group members. "We hardy cut the class or came to class late. It is because we had tasks to finish, to find news or to post news summary on our blog," said Supaporn.

In contrast, students in the control group came to class late and less frequently. It could be understood that the control group was not affected by the needs and attractiveness of computers and the Internet the same way that indirectly forced the experiment group to come to class. Members of the control groups made frequent excuses about the travel distance, Bangkok traffic conditions, insufficient and inefficient mass transportation, or even the early hours of the class, all of which potentially demonstrated their indifference in learning. "*I live in Srinakarin and come to the university by train. If I woke up late, I would miss the train and had to wait for another one and come to the class late. To come to the morning class on time means I have to wake up at four in the morning," said Prathana.*

Many control group students frankly admitted that they felt too lazy to come to class. Supasorn said that he was late because he woke up late and there was a terrible traffic jam from his house at Kaset to the university. From the same team, Kanchana, a girl, whose house is in Lad Prao district, said, "*I came to class late because I woke up late. Sometimes, I already woke up but felt too lazy to go to the university, so I just stayed in bed.*" Prapasri, another member of the control group whose apartment was in Bangplad district, a few kilometers from the university said that she was late because, "*I woke up at eight and arrived at the university at 10 a.m. or 11 a.m. I am also too lazy to walk out of my place, which is in a deep soi.*" Panadda, her group member, added, "*I like to read Thai novels till late at 3 a.m. to 4 a.m., so I could not wake up. Sometimes, I woke up at noon and decide not to attend classes.*"

However, not all students in the control group accepted or offered these excuses, especially ones whose houses were far from the university but who could still come to class on time and regularly. They said they would be responsible for all courses in which they were enrolled whether they liked them or not. They also commented upon the non-punctual students, saying that those were actually "lazy" and "irresponsible." Panumas, whose house is in Samut Prakarn said, "*I came to class in the early morning to avoid traffic jam. This is because I know I am not good at* English. I hope that coming to class every time would help in some ways. I might get some attendance scores or something from listening to lecture."

2.3.6 Asking questions

Both the control and experimental groups accepted that most of the time when they had questions or doubts, they would rather consult their friends than their instructor. They would ask the instructor for assistance only when the instructor was available, at the spots and at the moment that they could reach him easily, such as while the instructor was walking past them, or monitoring them when working in groups. Many reasons were raised to support their behavior namely they did not want to interrupt the instructor while teaching; they did not have courage to ask; and, they were afraid to be mocked by friends in class and would lose their faces.

Panumas admitted, "There were too many points that I did not understand, but I did not want to ask again and again because you would walk to me, explaining one on one, point by point. This made me feel uncomfortable." Prapasri supported Panumas's statement, saying, "I was afraid of losing face when I asked you but still could not understand. When I asked you and you answered back, I still did not get it yet but had to nod, pretending that I already got it."

Some students said their friends could explain the contents more quickly and clearly, in Thai, than the instructor did. When they asked the instructor, the instructor would ask them questions, trying to stimulate them to get the answers by themselves, and these done mainly in English. Orawan said, "I would ask friends, never asked the instructor because I'm afraid that if I had asked, I would be more confused. I'm afraid that the answer would contradict my own understanding."

2.4 Effects of CTBA with NBLT on cognitive engagement

The effect of CTBA with NBLT on cognitive engagement was hypothesized that the undergraduate students who were taught by CTBA with NBLT would have cognitive engagement significantly higher than those who were taught without such an approach. Data collected during the semester showed students' cognitive engagement in the control group ($\bar{x} = 1.704$, SD = 1.205) was lower than that in the experimental group ($\bar{x}=2.763$, SD = 1.702). Calculated by Independent-samples t-test the cognitive engagement in the control group was significantly lower than that in the experimental group, t(46) = -2.487, p < 0.05, as shown in Table 32.

Groups	n	Mean	Std. Dev.	df	t-value
Control	24	1.704	1.205	46	-2.487*
Experimental	24	2.763	1.702		

Table 31: Comparison of the Students' Cognitive Engagement

*p < 0.05

Therefore, the hypothesis that the cognitive engagement of the undergraduate students who were taught by the CTBA with NBLT was significantly higher than that of students who were taught without such an approach was accepted at alpha = 0.05.

The size of the effect of CTBA with NBLT on students' cognitive engagement was moderate, Cohen's d = -0.73. An effect size of -0.73 indicated that the mean scores of the control group were about at the 50th percentile whereas those of the experimental group were at the 70th percentile (Cohen, 1988). Moreover, a systematic development of the effect of CTBA with NBLT, on cognitive engagement, in compound formation was found in the control group, (r = 0.955, p < 0.05) as illustrated in Figure 16.

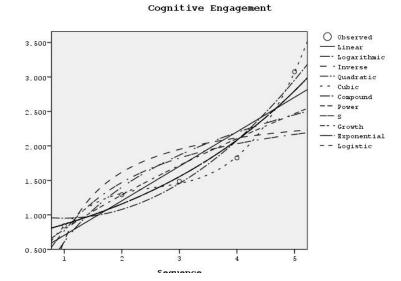


Figure 16: The control group's cognitive engagement trends

A developing trend of the effect of CTBA with NBLT, on cognitive engagement, in compound formation was also found in the experimental group, (r = 0.916, p < 0.05) as illustrated in Figure 17.

Cognitive Engagement

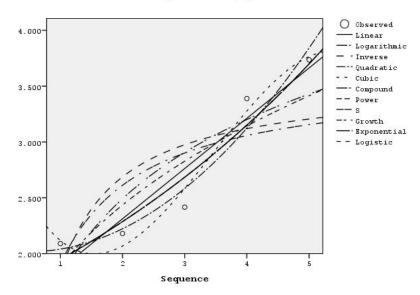


Figure 17: The experimental group's cognitive engagement trends

Cognitive engagement was comprised of six sub-elements namely, remembering, understanding, applying, analyzing, evaluating, and creating. When the Independent-samples t-test was applied to compare cognitive engagement's sub-elements in both control and experimental groups, it was found that the experimental group had remembering, understanding, analyzing, and evaluating, significantly higher than the control group had at alpha level = 0.05. However, applying and creating in both groups were found insignificantly different (p = 0.05), as shown in Table 32.

Sub-elements	Groups	n	Mean	Std. Dev.	df	t-value
Remembering	Control	24	0.975	0.631	42.048	-4.134*
	Experimental	24	1.633	0.459		
Understanding	Control	24	2.917	2.240	46	-3.072*
	Experimental	24	5.217	2.905		
Applying	Control	24	2.575	1.506	46	-1.197
	Experimental	24	3.075	1.385		
Analyzing	Control	24	1.767	2.015	46	-2.183*
	Experimental	24	3.433	3.152		
Evaluating	Control	24	1.542	1.888	36.365	-1.758*
	Experimental	24	2.917	3.335		
Creating	Control	24	0.450	0.776	46	0.731
	Experimental	24	0.300	0.638		

Table 32: Comparison of the Students' Sub-Elements of Cognitive Engagement

* *p* < 0.05

Despite the significant differences in cognitive engagement, the Girlyberry team viewed ICT tools as a convenience and mainly used them for simple tasks, such as downloading online news stories, and uploading the news summaries. They did not perceive the differences between learning in a traditional classroom and learning with NBLT in a computer lab. Some of them said that they neither used the Internet for academic purposes such as searching for extra information, nor completed tasks beyond simple reading and writing unless they were specifically assigned to do so by the instructor. Those indifferent perspectives towards ICT were confirmed by the findings in affective engagement and the behavioral engagement which were previously discussed.

Based on CTBA and Bloom's revised taxonomy (Anderson & Krathwohl, 2001), the lesson plans in the English for Mass Media course for both the control and experimental groups was designed to be parallel in content, tasks, and organization. However, when the lesson plans were implemented in actual classrooms, the pedagogical activities in the English for Mass Media when integrated with features provided by NBLT possibly affected cognitive engagement significantly, as supported in quantitative findings. The features of NBLT including online interactive exercise, computer and web applications, digital literacy, and dynamic nature of the Internet are presented in detail below.

2.4.1 Online interactive exercises

In the schema building session of the textbook, students were asked to read news stories before they completed the reading comprehension exercises in the form of multiple-choice questions. It was observed that the students in the experimental group collaborated more, and tried harder, than ones in the control group in order to find out the best answers for the questions. It should be noted that the items and options in the reading comprehension exercises for both groups were similar. The major differences were the ways that the questions, answers and feedback were delivered. This was found to have affected the patterns that the students engaged in the exercises, both behaviorally and cognitively. For instance, the control group would do the printed exercises in the textbook and wait for the instructor to provide the correct answers, while the experimental group would do the exercises online which automatically provided feedback after the questions were answered.

The students in the control group, though, sat with their group members, yet they preferred to complete the exercises individually, such as reading news stories, checking word meanings from the dictionary, marking possibly correct answers in the textbook, and waiting for the instructor's feedback. On the contrary, in the experimental group, students in each team would gather around a computer screen with their fellow members, working collaboratively to find the best solutions for the tasks.

The online, interactive, multiple-choice exercises, created by the application named Hot Potatoes, developed an atmosphere of collaboration within groups, but also competition among groups, due to the following features: automatic item and options shuffling, timer, automatic feedbacks. The detailed descriptions of features provided Hot Potatoes that possibly affected the students' behavioral and cognitive engagements are presented in detail below.

1. Automatic item and options shuffling

Every time, students opened new web pages for the next question, items would be selected at random from the question pool, and the options would be reshuffled. By way of this, each team had less of a chance to copy the correct answers from other groups. Also, they could not turn on four computers at the same time to guess the answers randomly. The only way to complete all the questions was through collaboration.

2. Timer

Students were required to finish exercises in an assigned period of time. If the time was up, the exercises would be locked and the students would not be allowed to finish the rest of the questions. By way of this condition, they were indirectly forced to focus on completing exercises.

3. Automatic feedback

The automatic feedback provided in the exercises was separated into two main categories. The first one was the feedback that informed the students whether their answers were correct. If their answers were incorrect, the feedback system would provide the correct answers. The second type was grading feedback which would give scores based on conditions set in advance. In each question,

- 1. if the students choose the correct answer in the first attempt, they would receive a whole point;
- if they answered the question correctly in the second attempt, they would receive less than a point;
- 3. If they could not answer it correctly in the second attempt, the correct answer would show up and they would not get any point.

By these conditions, if the teams would like to achieve the highest scores and become the winner, they must choose only the correct answers in the first attempts. To accomplish this goal, collaboration became a necessity. From observations made, it was found that some teams even used two sets of computers: the first one for the online exercises, and the second one for online assistance, such as online dictionary.

2.4.2 Computer-based and Web-based applications

The experimental group was not limited to web browsers and search engines for learning, as seen while they tried to complete reading comprehension exercise. It was also found that the experimental group applied other computer-based and web-based applications in their learning process such as word processing and web logs. These applications possibly affected their cognitive engagement.

1. Word processors

In the first week of the English for Mass Media course conducted in the computer laboratory, students were suggested to type their responses, answers, task outcomes, and feedback firstly on a word processor, such as Microsoft Word, before they posted them on the Web logs simply with the an objective to prevent any technical and/or human errors that might cause their work to disappear. However, from observations, it was found that the word processor affected the students' cognitive process in many aspects.

Firstly, the word processor highlighted the students' lexical and basic syntactical errors so that they would notice and correct them before submitting the

final outcomes. It was found that the errors in the task outcomes presented in Blog usually came from the students who typed their answers directly into the Blog, without using the word processor.

Secondly, the word processor came with a feature that allowed students to insert or draw tables. Also, Multiply, the website which hosted all experimental group's Blogs, allowed their users to drag and drop tables created in a word processor into their Blogs effortlessly. Therefore, it was found that the experimental group submitted task outcomes, such as news types, news values, and types of newspapers, in well categorized and organized tables.

2. Blogs

Students in the experimental groups were given an opportunity to create news stories in a broader perspective. Due to the popularity of cellular phones and its features of image and video recorders, instead of creating news stories on plain text, it was found that most students applied still images and/or video clips they originally had taken into their own news stories, which resulted in more reliable, valid and lively news stories. The example of their sophisticated news writing tasks with images and video can be found in Appendix 23.

2.4.3 Digital literacy

To search for desirable information online requires more than language and simple computer literacy. Finding the definitions for abbreviations and acronyms is an example. Unlike vocabulary in general, abbreviations and acronyms sometimes stand for proper nouns which were not included in paper-based on even electronicbased dictionaries. To find the definitions for such the words online, students required more than traditional reading skills, particularly the analytical and critical skills. For example, students faced an abbreviation, ETA, in a specific context which did not provide the exact definition to such an abbreviation. When they used online search engines, they must select carefully the keyword for searching. Otherwise, they would be bombarded with thousands of web pages. Even though they could screen some unrelated web sites, and finally reached the desired web pages due to proper keywords they applied, more than one answers appeared to be correct. ETA could stand for *Estimated Time of Arrival, Employment and Training Administration* or *Expressway and Rapid Transit Authority of Thailand*, depending on the context. Therefore, to achieve the correct answers by online search involves complex cognitive processes. Language literacy and lower level thinking processes were not sufficient; students required digital literacy and higher level thinking process (Shetzer and Warschauer, 2000).

2.4.4 Dynamic nature of the Internet

The last, but considered the most important feature, of NBLT was that it allows the instructor and the students the possibility to learn up-to-date content more flexibly and dynamically. As mentioned earlier, the lesson plans for the control and the experimental groups were parallel in content, tasks and organization. However, in practice, the up to date news stories were more interesting and desirable to use as a lead-in activity than the outdated ones published in the textbook.

This research was conducted in the second semester of academic year 2007 in which a national election was to take place for the first time after the coup d'état of September 2006. News stories related to campaigns and policies of the political parties became the main focus of newspapers at that time. Instead of asking students to read out-of-date news stories which were already prepared in the textbook, having them read current news that related to general election would be more effective to engage them with both English language learning and current local situations. NBLT not only engaged the students to learn English from authentic content and within familiar contexts, but the instructor also had more opportunities to produce tasks, with more creativity and flexibility. To engage students with the coming national election, the instructor had set a series of questions and tasks as follows:

- 1. What political party are you going to vote for?
- 2. What is the policy of that party that you favor the most?

- 3. Set up a poll in your class and find out which party is the favorite one.
- 4. Write a news headline and news lead reporting the result of the poll.
- 5. Present the news story to the class.

The dynamic tasks resulted in using computers and the Internet for "just-in-time" problem solving. The questions and tasks had the students ask themselves what political party they were going to vote and what reasons were behind their decisions. The Internet opened the opportunities for them to find out the answers instantly. This type of emerging task could not be accomplished within the traditional classroom. Moreover, when faced with questions or difficulties either from the newspapers or textbook, the students used the Internet to solve such the difficulties instantly, such as to find the definitions for word, abbreviations and acronyms from online dictionaries, or to compare the news stories from Thai newspaper Web sites with the English ones for better comprehension.

In conclusion, from observation, the features provided within NBLT, namely interactive exercises, computer-based and Web-based applications and dynamic nature of the Internet, as well as the digital literacy which was required for learning with NBLT were possibly responsible for significantly differences in cognitive engagement between the control and experimental groups.

3. Correlations of English Language Achievement and Student Engagement

A null hypothesis was set that there was not a significant correlation between the English language achievement and the student engagement in the control and the experimental groups. The relationships between the English language achievement and the student engagement within each group were calculated by the Pearson product-moment correlation coefficient.

3.1 Correlations in the control group

As is evident in Table 26 below, the correlation between the English language achievement and student engagement in the control group was not found to be significant. Therefore, for the control group, the hypothesis that there was not a significant correlation between English language achievement and student engagement was accepted at p = 0.05. However, when the sub-elements of student engagement were analyzed, only the positive intermediate correlation between the affective engagement and English language achievement was found (r = 0.417, p < 0.05). In comparison, relationships between behavioral engagement and cognitive engagement with English language achievement were low and insignificant.

				r	
	Affective	Behavioral	Cognitive	Achievement	English
	Engagement	Engagement	Engagement		Proficiency
Student	0.498*	0.657*	0.950*	0.041	-0.104
Engagement					
Affective		0.621*	0.290	0.417*	0.186
Engagement					
Behavioral			0.397*	-0.009	-0.087
Engagement					
Cognitive				0.008	-0.118
Engagement					
Achievement					0.416*
N. 4 * .0.07					

 Table 33: Relationship of Student Engagement, English Language Achievement,

 and English Language Proficiency in the Control Group

Note: * *p* < 0.05

3.2 Correlations in the experimental group

According to the results presented in Table 34, there was no significant relationship between English language achievement and the student engagement in the experimental group. When sub-elements in the student engagement were analyzed, the affective, behavioral, and cognitive engagement did not correlate with English language achievement. Therefore, the hypothesis that there was not a significant correlation between the English language achievement and student engagement, including its three sub-elements in the experimental group, was accepted at p = 0.05.

	Affective	Behavioral	Cognitive	Achievement	English
	Engagement	Engagement	Engagement		Proficiency
Student	0.316	0.574*	0.965*	-0.006	-0.339
Engagement					
Affective		0.705*	0.083	0.015	0.107
Engagement					
Behavioral			0.353*	0.167	0.041
Engagement					
Cognitive				-0.042	-0.401
Engagement					
Achievement					0.779*
*n < 0.05					

 Table 34: Relationship of Student Engagement, English Language Achievement,

 and English Language Proficiency in the Experimental Group

* p < 0.05

4. Conclusion

In this chapter, the quantitative data from self-evaluated rating scale questionnaires, guiding questions and English language achievement scores, as well as the qualitative data collected from semi-structured group interviews and observations were analyzed and the findings can be concluded as follows.

1. CTBA with NBLT had insignificant effects on English language achievement at alpha level = 0.05, as illustrated in Table 35 and the hypothesis was accepted.

	Significantly different at p< 0.05	Size of the Effects
English language achieveme	nt No	Small
		(Cohen's $d = 0.36$)

- 2. CTBA with NBLT had significant effects on student engagement in general at alpha level = 0.05, and the size of the effect was large. The finding accepted the hypothesis. However, because student engagement was multifaceted, the findings on sub-elements of student engagement are as follows:
 - 2.1 CTBA with NBLT had insignificant effects on affective engagement at alpha level = 0.05, and the size of the effect was very small. The finding rejected the hypothesis. The qualitative findings showed that experimental group felt more anxious toward the new teaching approach. They also expressed negative attitudes towards CTBA and NBLT. Learning together in groups and completing tasks through ICT, especially outside the computer laboratory, were viewed as troublesome and inconvenient activities. They preferred passive learning with teacher's close assistance to the more active, constructive, autonomous learning associated with ICT. The experimental group's learning preferences reflected in values as to how they valued the Translation course. The Translation course, which was conducted under a grammar-translation method, was viewed as an English course that helped improve their English the most, as well as a course that was important for their future careers;
 - 2.2 CTBA with NBLT had significant effects on behavioral engagement at alpha level = 0.05, and the size of the effect was

moderate. This finding accepted the hypothesis. A development of the effects was likely to occur if the time frame in the study would have been prolonged. Qualitative findings showed that both groups of students did not read the assigned textbook in advance, either for class or for tests. Distracted by content and activities on the Internet, the experimental group could not pay attention fully to lectures. Although it was found that the members of experimental group learned collaboratively well in the computer laboratory, they hardly collaborated outside the classroom. Despite being provided with ICT as a learning medium, members of the experimental group did not consult the instructor beyond class hours, either through face-to-face communication or CMC. The experimental group's passive learning habits also reflected in most parts of behavioral engagement, particularly in efforts. The students would try to complete tasks and submit them on the due date exactly as they were assigned. They would not try to do any extra work for research unless they were specifically appointed to do so.

2.3 CTBA with NBLT had significant effects on cognitive engagement at alpha level = 0.05, so the hypothesis was accepted. The size of the effect was moderate. Developments of the effects were found in both the control and experimental groups. That the positive trends in cognitive engagement were found in both groups meant lesson plans based on Bloom's revised taxonomy affected the students' application of the cognitive processes. Moreover, that the experimental group had significantly higher cognitive engagement than the control group had indicated that NBLT helped enhance their cognitive processes as were applied in dealing with tasks. Findings related to student engagement and its sub-elements are summarized in Table 36 below.

	Experimental significantly high		Size of the Effects
Student engagement		Yes	Large (Cohen's $d = 1.41$)
Affective engager	nent	No	Near zero effect (Cohen's $d = 0.10$)
	Emotions	No	
	Attitudes	No	
	Values	No	
Behavioral engagement		Yes	Moderate (Cohen's $d = 0.70$)
	Attendance	Yes	
	Preparation	No	
	Attention	No	
	Asking questions	Yes	
	Contributions	No	
	Efforts	No	
Cognitive engage	Cognitive engagement		Moderate (Cohen's $d = 0.73$)
	Remembering	Yes	
	Understanding	Yes	
	Applying	No	
	Analyzing	Yes	
	Evaluating	Yes	
	Creating	No	

 Table 36: Student Engagement Finding Summary

3. Relationships between English language achievement and student engagement with its sub-elements in the control and experimental groups were low and insignificant at alpha level = 0.05, as shown in Table 37. The hypothesis was, then, accepted.

G : : C : ()	0.05		
Significant at $p < 0.05$		Size of the Effects	
Control group	No	Low and	
		insignificant	
		(r = 0.041)	
Experimental	No	Low and	
group		insignificant	
		(r = -0.006)	
	Control group Experimental	Experimental No	

Table 37: Correlation Finding Summary

The underlying causes for the research findings were explored, analyzed and interpreted based on both the quantitative and qualitative data and are presented in Chapter V.

CHAPTER V SUMMARY, DISCUSSION, RECOMMENDATIONS

In this chapter, the summary of the research reported in this dissertation is presented in the first section. The factors that possibly prevented students who were taught using CTBA with NBLT to obtain achievement test scores significantly higher than those who were taught without such an approach, as well as the appropriate teaching approach to be implemented in English for Mass Media class in the future are to be discussed in section 2. The recommendations for research consumers and researchers who were interested to conduct further studies related to CTBA, NBLT or student engagement are presented in section 3.

1. Summary

In this thesis, Collaborative Language Learning (CLL) and Task-based Language Teaching (TBLT) were together implemented as Collaborative Task-Based Approach (CTBA) in the English for Mass Media course to engage students. Also, Network-Based Language Teaching (NBLT) was used as a catalyst to enhance English language achievement and student engagement. ICT, a main component in NBLT, was claimed to help connect students with content, contexts and communities, doing so more quickly, widely and conveniently. Nevertheless, it was impossible to judge a student who regularly spent a great deal of time surfing the Internet and had routine online communication as a learning student. That Web pages were opened did not imply any were read. Even if read, there was still a question of how reading Web pages supported learning in any way. Moreover, it is quite an overstatement to interpret the success of ICT integration based upon students' scores in the achievement examination. This is due to the limitation of the examinations. Particularly, the examinations do not assess leaning as a process; they also did not give a clear and detailed insight into what exactly positively affected teaching and learning (Lally & De Laat, 2002: 1).

Therefore, student engagement became a solution to compensate for the weaknesses of examinations, doing so as an attempt to assess the learning process and, at the same time, to gain an insight in order to improve learning and teaching success in a holistic way. When students engage, they "... read more, write more and interact more in positive ways with their teachers and peers, they gain more in terms of essential skills and competencies such as critical thinking, problem solving, and effective communication," (NSSE, 2000: 2). A teacher who engages learners tries to arouse their interest by using amusing, stimulating and challenging lessons or activities (Harmer, 1998). When learners engage in meaningful and quality activities, there is potential that they will learn better, have better academic performance, as well as gain the skills to work with others and know how to transfer knowledge to solve problems creatively (Bowen, 2003).

However, student engagement is not a single construct which is easy to measure and evaluate; instead it is multi-dimensional, involving three main elements that are students' affections, behaviors, and cognitive investment in learning (Fredricks, et al., 2004). In this study, affective engagement referred to students' emotions, attitudes and values toward course elements, such as tasks, content, teaching methods, teachers, peers, and classroom environment. Behavioral engagement referred to students' behaviors toward academic related activities, namely class attendance, preparation, attention, asking questions, contributions and efforts. Cognitive engagement referred to students' application of cognitive process in order to complete assigned tasks. The cognitive engagement was divided into six levels, from simple to complex cognitive processes, which were remembering, understanding, applying, analyzing, evaluating and creating. These six levels of cognitive processes were based on Benjamin Bloom's revised taxonomy on cognitive domain (Anderson & Krathwohl, 2001).

To study the effects of CTBA with, and without, NBLT on English language achievement and student engagement, three main research questions were set, as follows.

- 1. Did the CTBA with NBLT have significant effects on undergraduate students' language achievement? If it did, what was the size of the effect?
- 2. Did the CTBA with NBLT have effects on undergraduates' student engagement? If it did, what was the size of the effect and what was the development of the effect?
- 3. Was there a significant relationship between English language achievement and student engagement of the undergraduate students in each group? If there was, what was the size of the effect?

This study was designed as a quasi-experimental research with a nonequivalent group pre-test post-test design. The population in this study was composed of 120 third year Business English students at SDRU who enrolled in four sections of the English for Mass Media course, academic year 2007. They are Thai, female and male, 17-19 year-old students with limited English proficiency. To select students for this study, two out of the four sections of students were purposively chosen before each section was randomly assigned to a control and an experimental group. In each group, there were 24 students whose English language proficiency, digital literacy and study habits were not significantly different.

The research instruments included English language achievement test, selfevaluated rating scale questionnaires for affective and behavioral engagement, selfevaluated guiding questions for cognitive engagement, and semi-structured group interviews for qualitative data for affective, behavioral and cognitive engagement. They were constructed based on literature, validated by the experts, field tested, and revised before they were used to collect the data. All questionnaires and guiding questions were constructed in Thai; responses to the guiding question, as well as those to the semi-structured interviews were also in Thai.

To answer the research questions, the procedure and statistical instruments to analyze the data were employed as follows:

- For the first research question, to find out the differences in English language achievement between the control and experimental groups, the independent sample t-test was applied whilst Cohen's *d* index was applied to find out the size of the effect;
- For the second research question, to find out the differences in student engagement between the two groups, the independent sample t-test was applied; Cohen's *d* index was applied to find out the size of the effect; Pearson-product moment correlation coefficient was applied to find out whether there was the significant development in student engagement;
- 3. For the third question, the Pearson product-moment coefficient was applied to find out correlation between the students' achievement test scores and their student, affective, behavioral and cognitive engagement in the control and the experimental group. Pearson *r* correlation was also used to find out the size of the effect.

The answers for the research questions are as follows.

- CTBA with NBLT had insignificant effects on English language achievement. The experimental groups did not achieve test scores that were significantly different from those of the control group.
- 2. CTBA with NBLT had significant effects on student engagement in general. However, because student engagement was multi-faceted, the findings on sub elements of student engagement are as follows.
 - 2.1 CTBA with NBLT had insignificant effects on affective engagement. The experimental group did not have positive emotions, attitudes and values toward the new teaching approach higher than those of the control group.
 - 2.2 CTBA with NBLT had significant effects on behavioral engagement. The experimental group came to school on time and asked questions significantly more than the control group did but both of them were not

different in preparation, attention, contributions and efforts. The developing trend in the experimental group would have been possible if the study would have been extended.

- 2.3 CTBA with NBLT had significant effects on cognitive engagement; students in the experimental group had applied cognitive processes, particularly remembering, understanding, analyzing and evaluating significantly more than the control group had. The cognitive engagement trends were also found in both groups.
- 3. The correlations between the English language achievement and the student engagement with its sub-elements in the control and experimental groups were not found to be significant.

2. Discussion

Two points worthy of discussion after the findings were found are as follows:

- 1. What factors prevent students who were taught using CTBA with NBLT to obtain achievement test scores significantly higher than those who were taught without such an approach?
- 2. Which teaching approach is more appropriate for future implementation in English for Mass Media class?

2.1 Possible factors in insignificant differences in English language achievement test scores

In order to discuss for the factors to explain the reasons why CTBA with NBLT had insignificant effects on English language achievement, it is necessary to study both students' learning processes and products, specifically student engagement and English language achievement test.

2.1.1 Student engagement

CTBA with NBLT was implemented in the English for Mass Media course due to the literature review that language could be acquired through negotiation of meaning. Negotiation of meaning increases when people collaborate, while ICT could increase collaboration by enhancing connection to learning resources and communication within learning communities (ONEC, 2002). The relationships between student engagement and achievement were also found in many studies (Carini, et al, 2006; Fincham, et al., 1989; Fredricks et al., 2004; Nystrand & Gamoran, 1991; Zimmerman, 1990). At the same time, many studies also showed the positive effects of NBLT on affective engagement (Ng, 2002b; Reimann, 2001; Shetzer & Warschauer, 2001; Suanpang, & Petocz, 2006; Warschauer & Grimes, 2005; Warschauer et al, 2004), behavioral engagement (Kamhistein, 2000; Ng and Ma, 2002; Nunan and Lamb, 1996a, cited in Beatty, 2003; Persell, 2004; Reimann, 2001), and cognitive engagement (CAST, 1996; Benston, 2000; Chun and Plass (2000); Reimann, 2001; Rersell, 2004; Sterling, 2004; Thomas, 2005; Warschauer et al., 2004).

However, many scholars agree that Thai learners are passive and dependent (Malaiwong, 1997; Pragram & Pragram; 2006; Sanae & Bruekner, 2004; Sinlarat, 2005; Viartas & Sangkamnee, 2000), while language classrooms, even after the educational reform, were conducted with teacher-centered method (Prapaisit, 2003). Moreover, studies revealed that students from collectivist culture, namely students from Asian countries, rarely have interaction with others, particularly in online contexts (Anakwe et al.,1999; Chin et al. 2000; Raksasuk, 2000; Tetiwat and Huff, 2003). Thai students' passive learning habits mentioned agreed with quantitative findings in affective and behavioral engagement in this research study. Therefore, to find out the possible explanation for insignificant difference in English achievement between the students who were taught under CTBA with NBLT and students who were taught without such an approach, the factors that affected the student engagement are to be discussed in detail.

As mentioned, student engagement is multi-faceted. Even though, the students who were taught under CTBA with NBLT had student engagement significantly higher than the students who were taught without such approach, not all sub-elements of student engagement were found significantly different. It was found that affective engagement's emotions, attitudes and values, behavioral engagement's preparation, attention, contributions and efforts, as well as cognitive engagement's applying and creating in both groups were not significantly different.

Three major factors were possibly responsible for the insignificant different in some sub-elements in student engagement, specifically low English proficiency, passive learning habits and unavailability of computers and the Internet connection, particularly at the students' homes.

1. Low English proficiency

As mentioned in Chapter III, the CU-TEP average scores of the students from both groups were 40 from a total of 120. The results could be interpreted that the students in both group were extremely limited to limited English language users. Even though the instructor, particularly in this research, used English as a major medium for giving lectures and answering questions, students preferred to use Thai with their instructor and peers, both inside and outside classroom. According to the literature review, language was acquired through social interaction, while people tried to negotiate for mutual understanding (Long, 1985; Swain, 1985; Lightbown & Spada, 1996). CTBA gave students an opportunity to practice various functions of English language, with authentic purposes and within authentic context, while they were trying to complete tasks collaboratively in groups. Their limitation in English language possibly obstructed them from acquiring language through CTBA with NBLT, as well as negatively affected the effects of CTBA with NBLT on affective and behavioral engagement.

Their preference toward using Thai in learning English reflected in their attitudes and behavior of which data were collected from the semi-structured interviews. The examples of students' preference for Thai language in English class are presented as follows. In affective engagement, the instructor's English lectures and task instructions caused students to feel anxious and confused. For behavioral engagement, students claimed that they did not like reading the textbook because they did not want to translate text from English to Thai, as in preparation. In asking questions, when in doubt, students preferred to consult with their friends in Thai, claiming that the instructor's responses in English could not satisfy them, and even confused them. In contributions, students accepted that they mainly used Thai when asking and answering questions, as well as when having discussions, both inside and outside classroom. Moreover, it was found that translation of English into Thai, and Thai to English, became crucial processes in most learning activities from reading texts to completing news stories. In this regard, a team (Veerepon) admitted that when they summarized news stories, they read English news stories, summarized them in Thai, and then translated the summary into English. In addition, many students admitted that news stories they chose to summarize were ones they had already read and/or heard of in Thai from other sources.

"I would listen/ watch the news first (from other source such as TV in Thai) and decided which news I would summarize," said Naree. Panwarot further explained, "I would find news stories that I already understood. I read the Thai newspaper before read English newspapers for better understanding. Instead of reading a lot of news stories and then choosing one to summarize, I directly picked one that already understand from other Thai sources."

Thus, the native language preference stemmed from the low English language proficiency of the students and the major requirement to use the target language in CTBA with NBLT possibly affected the student engagement, specifically in affective and behavioral engagement.

2. Unavailability of computers and the Internet connection

Outside the computer laboratory, students in the experimental group did not bother to use the Internet to complete tasks, to communicate with other team members, to give feedback to their teams' tasks outcomes, or to consult the instructor. Not doing so, they claimed that it was a result from unavailability of computers and the Internet connection at their homes. Their claims were confirmed by data collected before the research started that only 14 from total 24 students in the experimental groups could conveniently access computers at their homes and only 9 students had access to the Internet at their homes.

The experimental group's insignificant difference in efforts also agreed with their learning contribution. There were differences in efforts between the students who could access the Internet conveniently, and the ones who could not. Students who could access the Internet conveniently accepted that they used them to follow current events by reading news stories from online news websites. Sasirin said that she would scan Web pages for news stories she liked, except sport news, before she chose them to summarize. She also mentioned that she was following news related to the national general election. In contrast to Sasirin's taste for news types, Veerapol liked sport news and read it regularly on the Bangkok Post and the Nation Web sites. Having a chance to read many news stories online, Veerapol could comment as to the differences between two major English newspapers in Thailand. *"For English newspapers, the Nation is better (on sport news) than the Bangkok Post; the Nation presents sport results in detail and it is more updated,"* Veerapol said.

On the other hand, students who could not access the Internet conveniently at home admitted that they would do what they were asked to do only and nothing more. They would search for information on the Internet for a report, only if they were specifically asked to do so and if extra grades were promised. Voluntarily spending extra time to go to the library, or spending extra money to go to Internet cafes, just simply for academic related activities was unlikely.

3. Passive learning habits

Unavailability of computers and the Internet at homes could be just an excuse, if it was considered that SDRU has provided the computers and the Internet at the main library, not including free wireless Internet connection throughout the university area, and dial-up Internet account for every student. Students' passive,

dependent, and immature learning habits in both control and experimental groups, reflected in affective engagement' emotions, attitudes and values, as well as behavioral engagement's preparation, attention, contributions, and efforts were possibly the actual causes for insignificant differences in those sub-elements. Using the framework of culture dimensions (Hofstede, 2001), high power distance, high uncertainty avoidance, femininity, and collectivism, as well as low intrinsic motivation for learning and high extrinsic motivation for rewards were found throughout affective and behavioral engagement.

As found in emotions, learning English in a new collaborative and innovative way made the students felt anxious that they might fail the course. Instead of paying more attention to learning to solve their anxiety, they viewed that the instructor's intervention could help them pass the course. The students; perspective that their learning success was dependent directly upon the instructor's mercy was an example of high power distance influence in Thai culture.

In attitudes, some students complained that the instructor in higher education level did not take good care of them closely like their high school teachers did. The expectation for assistance, supervision and good care are aspects of people from a collectivism culture, as is related to Thais. According to Scarborough (1998: 83), the expected characteristics of teachers in Thai culture are similar to the ones of leaders in that they should be decisive, but kind and concerned.

Moreover, students from both groups did not have positive attitudes towards collaborative learning; instead, they had positive attitudes towards individual learning, thinking collaborative learning was troublesome and potentially risky as it could form interpersonal conflicts. The preference to learn individually is in contrast to the concept of people from a collectivist culture who feel more comfortable to live, work, or learn in groups comprised of their own kind. However, a previous study of the learning style preferences of ESL students revealed that English learners, including both native speakers and non-native speakers did not prefer to learn in groups. Thai students were found to have a minor preference for individual learning styles, but had a negative preference for group learning (Reid, 1987). People from high uncertainty avoidance do not avoid risks; they just avoid unfamiliar risks (Scarborough, 1998). The students' negative attitudes toward learning collaboratively could possibly be influenced by needs not to be involved with unpredictable factors, such as other students and the experiences of dealing with them. Therefore, it is another characteristic of people from a high uncertainty avoidance culture that they do not like change.

In values, the English for Mass Media course was valued as a course that partly developed the students' English proficiency, but it was not valued as a course that helped open the views toward the world or one that increased their future career opportunities. The students also accepted that they enjoyed the contents from content-based courses, such as the English fro Hotel Business course or the English for Tourism course, or activities in skill-based courses, such as the Listening and Speaking course; however, the Translation course was valued as an English language course that helped improve their English proficiency the most, as well as their opportunities for future careers.

The finding was surprising to the researcher, but it could be understood. The grammar- translation methods has long been used in language teaching (Richard & Schmidt, 2002). Despite an attempt to reform education from rote learning to active, constructive and collaborative learning, the grammar translation method still apparently exists, at least in the Translation course. The course consisted of the presentation of grammar rules, list of vocabulary and translation exercises whilst learning activities are passive, emphasizing reading over other communicative skills, such as speaking and listening. Typically, students are asked to read English sentences before translating them into Thai, or vice versa, while a teacher would be the main authority who gives final judgment to their answers. The students felt more secure and comfortable with a familiar passive-learning method in which the instructor was the knowledge feeder while they were passive knowledge receivers. As such, there is no risk in discussion, idea sharing, oral presentation, and self and peer assessment. The students valued a course in which language was taught as a passive transfer of knowledge and that they could learn mainly from remembering static contents printed in the textbook. They loved to learn with the instructor who was the single source of knowledge, and to have answers that were absolute. In contrast, the English for Mass Media course, which supported active learning with socially constructed knowledge, was not highly valued as much. These samples of passive learning habits was likely to be found in high power distance and uncertainty avoidance societies, such as Thai society (Anakwe et al., 1999; Chin et al., 2000.).

The characteristics of passive learning habits affected by high power distance demonstrated clearly in behavioral engagement. In preparation, it was found that students were unprepared; they did not voluntarily read textbook for coming classes in advance. Instead, they waited for the order from the instructor, in telling them which chapters to read, and what exercises to fulfill. All were chiefly done for the sake of reward from the higher authority. Students admitted that they would read the textbook only when they were assigned to complete the exercise or assignments, but those assignments must be grade-assigned. Moreover, the students denied reading the textbooks for the tests after they realized that the test items would not come directly from the textbooks. This was also true in efforts that students completed tasks simply to fulfill the task requirements without making any extra efforts, even with the experimental group that was given extra learning tools.

Despite the higher contributions in class, findings in behavioral engagement demonstrated that members of the experimental group did not work collaboratively or industriously outside of the classroom. Instead, they tended to lower their workload on tasks and tried to finish them easily. It was found as indicated previously that a student (Naree) chose weather forecast which was full of graphics and numbers to summarize for her group's weekly news summary, or a team (Girlyberry) simply chose any eye-catching news story which appeared on the newspaper homepage to summarize, regardless of whether it was the story they were interested in or not.

Moreover, characteristics of tasks also affected the students' behavioral engagement's contributions. If the take-home tasks were simple or small, like weekly news summary, students tended to manage them individually. For a news summary, students in teams of four should have read newspapers regularly and summarized a news story together once a week. However, it was found that each of them had read newspapers and summarized news stories once a month instead. If tasks were simple but large, like controlled news writing, the students tended to divided it into smaller bits and then had each member finish them cooperatively. With such management, one group resulted in an unfinished task because one of their members could not finish her share on time while another team handed in an unorganized and unedited news story because they simply merged without any revision. Students possibly thought that their responsibility towards tasks was limited to their shares only and the responsibility was over when they handed them to other members. The perspectives resulted in lack of discussion and peer review either before or after the tasks were submitted. Collaboration was only found in tasks that were large and complex, like free news writing in which students would make an appointment so that they could complete the tasks together collaboratively.

For attention, the experimental group was severely distracted by content and activities offered on the Internet. They accepted that without the instructor's strict supervision, they could not control themselves and that they let the Internet distract them either with, or without, their awareness.

Moreover, it is a common characteristic of people in high power distance society that the subordinates try to avoid any encounter with ones with higher authorities. Results found in efforts showed that students from both the control and experimental groups did not consult with the instructor outside the classroom. Correlated to findings in attention, both groups did not voluntarily have participation with the instructor. The students possibly believed their responsibility for learning was limited within the classroom walls. Kanchana provided an example which supported such an assumption. "I would like to ask teacher but would do that only in class. When the class was over, it was over. I would not do anything further," said

Kanchana. However, rapport became another excuse that students used not to approach the instructor. Students from the experimental group mentioned that the university instructor did not take good care of them, like their secondary school teachers did. Jaruwan said, "*The instructor in the university taught with faster pace and did not explain the contents thoroughly. Then I gained English knowledge less than I did in high school.*" The distance between the instructor and students was not limited to issues of academic comprehension. For more serious issues which could damage their performance and grades, such as free riders in teams, students said that they never had an idea to consult the instructor.

Other cultural dimensions, particularly collectivism and femininity, possibly explained students' behaviors found in contribution. That students denied giving feedback to other team members could be interpreted as an effort to avoid causing any interpersonal conflicts. In interviews related to affective engagement, both groups had expressed their anxiety over working in groups, claiming they felt more comfortable to work individually. Such anxiety possibly stemmed from dimensions of Thai culture, particularly collectivism and femininity. That is to say, Thais prefer to live harmoniously with others and keep a low profile. In general, they did not like to be singled out either for praise or blame or take unfamiliar risks like working with others, which, potentially, causes conflicts or failures. The students from both the control and experimental groups agreed that the tasks that were already divided and distributed to each member became an individual responsibility. "*We had not reviewed whether they were OK, right or wrong. Consider it was each person's responsibility,*" said Kanchana, a student from the control group.

The perspective of individual responsibility was also shared by students in the experimental group. After a task was submitted online, no group members opened the Web logs, read and commented what their friends did. The experimental group members tried to explain such the poor contribution that they viewed divided tasks as an individual responsibility. Veerapol said, "I had read others' works because I was the one who posted tasks on the Blog. But I did not review whether they were right or wrong. As I told you, good or bad grade was up to

what each one did. Though I knew that it was wrong I would not mention it because it was an idea of individual person. I might tell them their errors only if we still had enough time to correct (the errors). I would not tell if the tasks were on the deadline."

For behavioral engagement's attendance, and asking questions, at first glance, it is possible that there were some characteristics of CTBA with NBLT which possibly overcame the students and the approach's flaws, However, from the discussion above, the factors, specifically low English proficiency, unavailability of computers and the Internet connection, passive learning habits, as well as grade as a major extrinsic motivation, which possibly diminished the positive effects of CTBA with NBLT on most sub-elements of affective and behavioral engagement, could possibly affected behavioral engagement's attendance and asking questions, as well. The above assumption above was supported by quantitative finding. Referring to Table 33 and Table 34 in Chapter IV, the positive correlations between the affective engagement and behavioral engagement were found significant in the control group (r = 0.621, p < 0.05) and the experimental group (r = 0.705, p < 0.05). There were some relationships between affective engagement and behavioral engagement in both the control and the experimental groups.

Therefore, from the quantitative and qualitative findings in affective and behavioral engagement, it is highly possible to interpret that high attendance in the experimental groups did not directly relate to NBLT; NBLT per se was not attractive enough to persuade students to come to class often and on time. Regarding to interviews, students accepted that they still preferred to learn with traditional method, in traditional classroom. Moreover, the Translation course, an English course which was conducted with grammar-translation method was highly valued as an English course which helped develop students' English proficiency, as well as future career opportunity, by both groups of students.

As learned from the interviews, all students agreed that instructors (Thai or foreign, whether compassionate or austere), course content (interesting or boring), timing (morning or afternoon class) were not significant factors affecting class attendance. The diligent students would come to classes in every course, no matter what, while the lazy ones were not enthusiastic to attend and tried to find excuses for such a behavior. Grades were one major factor that could encourage both diligent and lazy students to go to the university. The demotivated students admitted that they would try harder to come to classes on the days when there were tests, or to classes with extra scores assigned for class attendance.

"Ajarn James, (a male native English speaking instructor), would deduct our attendance scores if we came to his class late. Moreover, he also made us feel guilty by looking at his wrist watch and look at us, back and forth," said Thapanee. Sasithron added, "Also Ajarn Jane (another native English speaking instructor). She would not allow us to have tests, which were conducted weekly, if we could not come to class on time."

Prapasri, a student who hardly came to class said, "If there is something that could make me come to class on time, it is testing. I would try very hard (to come)." However, her statement seemed absurd. On one test day, which was announced in advance, she still came to the class late. "Because I thought the test would start at 11 a.m. But, apparently it was 9 a.m.," said she.

The extrinsic motivation based on grades was not limited to inactive students; it also affected the diligent students who hardly cut the class. Supaporn said that she and her group members hardy cut the class or came to class late because they had tasks to finish and submit online. Achara said that she never had the idea not to attend the English for Mass Media class. "*Because the content is difficult and there were lots of tasks which are required to submit in class ever week*," she said.

Therefore, it is sensible to interpret that the experimental group's attendance possibly related to the unavailability of computers and Internet at their homes and the requirement to submit tasks online. That the members of the experimental group came to the computer laboratory before the class started was to finish the assigned tasks with their group members.

For asking question, NBLT affected the experimental group and made asking questions in the group significantly higher than that in the control groups with many possible factors, though the influence of Thai culture did not encourage communication, especially between the authorities and the subordinates. First of all, despite the similarity in contents and tasks, the ways the students in both groups learned and completed them were different. To complete the tasks, the experimental group must involve both English language and digital literacy so there were more opportunities for the students to ask questions particularly ones related to digital literacy. Questions found in the experimental group could be very simple namely the addresses of the Web, or the complex ones such as how to add still images and video clips into their tasks and upload them to Blogs.

Secondly, the Internet distraction could be considered a cause for asking questions. Distracted by the Internet, students in the experimental missed the instructions for assignment that must be submitted within class, so they were forced to ask the instructor for repetition and clarification. Students said that they were confused when tasks were assigned because the instructor sometimes gave a series of tasks to do at the same time. However, some students admitted that the confusion possibly came from their inattention. "I liked traditional class because teacher was a focus of the class. In computer laboratory there was you and there were computers. I was likely to pay attention to the computer screen more than to what you were teaching. I think that we were confused because of ourselves that did not pay attention to your instructions at first so that we had to ask for explanation again later", Thapanee said.

To summarize, the interpretation related to significantly difference in attendance and asking questions at first reached a conclusion that it was the direct effects of CTBA with NBLT. The students in the experimental group came to the computer laboratory often and on time because of the attractiveness and convenience of the NBLT. Also, the students asked questions more mainly because of the complexity in the NBLT tasks. However, when the picture was viewed as a whole, while passive learning habits and extrinsic motivation had influence over affective engagement and most sub-elements in behavioral engagement, it possibly had influence over attendance and asking questions, as well.

From the discussion above, therefore, it is sensible to interpret that CTBA with NBLT per se did not directly affect behavioral engagement's attendance and asking questions. The needs for computers and the Internet connection to complete assigned tasks, the Internet distraction, as well as the complexity to complete tasks under NBLT, all possibly forced the experimental group to come to class, and to ask questions for task clarification. It resulted in that they did so significantly more than the control group did and all were possibly done from their concerns over grades, not learning. Learning, in students' view, became passive processes, particularly following the instructors' orders and waiting for his judgment. They did not autonomously and enthusiastically learn for the sake of self development.

2.1.2 English language achievement

The English language achievement test per se possibly was a reason that the experimental group did not gain significantly different test scores from the control group, despite having behavioral and cognitive engagement significantly more than the control group had. From quantitative findings in cognitive engagement, two interpretations could be reached. The positive trends in cognitive engagement were found in both groups meant lesson plans based on Bloom's revised taxonomy affected the students' application of the cognitive processes; and, that the experimental group had significantly higher cognitive engagement than the control group was possibly effects of NBLT that enhanced students cognitive processes as were applied in dealing with tasks. Despite being designed to be parallel in content, tasks, and organization, the features of NBLT including online interactive exercise, computer and web applications, digital literacy, and dynamic nature of the Internet, when implemented in actual classroom, possibly affected cognitive engagement significantly, as found in quantitative findings. However, that the test did not result in significant difference between two groups could not be considered a weakness of the test, but rather a strength. This was due to the fact that the achievement was designed based on the course description and course objectives which focused mainly on lexical and syntactic features frequently found in newspapers articles. It should be noted that the achievement test was designed to measure mainly the lower level thinking process, such as remembering and understanding of specific areas in English lexical and syntactic features. The close-ended, multiple-choice English language achievement test in this study was not designed to, and then was not sufficient to measure higher level thinking that the experimental group had while they were engaging with tasks.

The above claim is also supported by the findings of the significant correlations between the English language achievement and the English language proficiency in both the control and experimental groups supported the above mentioned explanation that the test exclusively measured only the mastery of lexical and syntactical features in English for Mass Media course. Referring to Table 26 and Table 27, a small correlation was found between English language achievement and English language proficiency in the control group (r = 0.416, p < 0.05) while a large correlation was found in the experimental group (r = 0.779, p < 0.01). This finding could be interpreted that the strong students attained higher achievement test scores while the weak students gained lower scores, no matter what their student engagements were.

From the discussion, it could be concluded that the insignificant difference in English language achievement test scores in the two groups of students was possibly resulted from student engagement and the English language achievement test per se. The experimental group's student engagement was negatively affected from the students' low English proficiency, unavailability of computers and the Internet connection, as well as passive learning habits. Though CTBA with NBLT had significant effects on the experimental group' cognitive engagement, the English language achievement test was exclusively designed to measure learning products, particularly, lexical and syntactical features, not to measure learning process, specifically, student engagement.

2.2 Appropriate Teaching approach for the English for Mass Media course

In this section, the findings related to CTBA and NBLT found in this study would be analyzed based on the concept of SWOT analysis to answer whether CTBA with NBLT should be further implemented in the English for Mass Media course.

2.2.1 Strengths of CTBA

The strengths of CTBA were expressed clearly in the pattern of cognitive engagement developing trends in both groups. The results could be interpreted that, based on Bloom's revised taxonomy, CTBA gave the students opportunities to exercise their cognitive processes from the passive low level of remembering to active constructive higher level of creating. Rote learning was avoided, but the students were not left unable to have experiments with syntactic and lexical features. Based on the TBLT frameworks belonging to David Nunan (Nunan, 1999, 2004) and Jane Willis (Willis, 1996), students have an opportunity to practice English meaningfully and authentically, while grammar focus, such as exercises and explanations on grammatical aspects, were not omitted.

2.2.2 Weaknesses of CTBA

The main objective of CTBA was to have students learn English language by completing tasks collaboratively. However, with these groups of students, many weaknesses of CTBA were found. For example, CTBA failed to encourage students to use the target language as a main medium in learning; it could not encourage the students to complete the tasks collaboratively; and the strict framework of CTBA prevented students from completing the tasks in the timeframe allowed, especially the complex ones in the second half of the semester. The weaknesses of CTBA are discussed below in detail.

1. Native language used in CTBA

As mentioned, one of strengths of CLL and TBLT is allowing students to acquired language naturally by using the language. However, in real life situations, such as in Suan Dusit Rajabhat University, English was not commonly used as a native tongue. The findings demonstrated that, under CTBA, though students applied higher level thinking processes to solve complex tasks, they preferred to do them in Thai, either with peers or with the instructor, inside or outside classroom.

Tasks in CTBA were designed with collaboration as an ultimate goal while communication in English was expected as a by-product. At the beginning of the semester, the course started with simple and close-ended tasks which required students to work together in order to complete all tasks perfectly. While the course continued during the semester, the tasks gradually became larger, more complex, more open-ended, and could be completed by collaboration only. The quantitative findings indicated that the tasks organized in an order of complexity affected the students' development of cognitive engagement. However, the qualitative findings revealed that the complex tasks were completed through extensive use of Thai language either, by communicating in Thai or by drafting tasks in Thai before translating them into English for the final outcomes.

2. Task characteristics

The flaw of CTBA was the tasks per se. Collaborative tasks were unlike cooperative tasks which all participating students must involve themselves in completing the tasks, as they do in jigsaw tasks. The collaborative tasks could possibly be done individually, but the best outcomes could only be achieved through a combination of ideas and efforts from different people. However, the collaborative tasks could not force students to contribute their ideas and background knowledge on learning willingly and enthusiastically. Tasks in this study, such as the news summary task, were likely to be not interesting enough for the students to become engaged. It was also found that if tasks were small and simple, the students preferred to complete them individually. If tasks were large, but simple, they would be done cooperatively. Only large and complex tasks would be collaboratively completed.

3. Time management

The solidly structured lesson plan designed based on the framework of CRBA and the limited time in each class session did not allow students enough time to complete complex tasks in the classroom. Students were allowed less than three hours to complete both simple and complex tasks in a single class session. It was found out later, especially in the second half of the semester when the assigned tasks became more complex, that students needed more time to complete tasks, especially the complex ones. For example, in a task which required students to judge the reliability and validity of news stories, students had to complete all of following activities within less than three hours:

- 1. reading two pieces of news stories reporting on a similar event,
- 2. identifying the news source and quotes,
- 3. differentiating the facts from opinions,
- 4. judging the validity of news sources with supported reasons,
- 5. judging the reliability of news sources with supported reasons,
- 6. writing report, and
- 7. making a verbal presentation.

The complex set of tasks required many skills and complex cognitive processes, and could not be achieved within the limitation of time, especially in an environment in which students could be easily distracted, like in a computer laboratory.

2.2.3 Opportunities of CTBA

Providing passive learning habits was considered a threat to CTBA. With optimistic point of views, students in this study were the products of the Thai traditional education system. While the National Education Act was legislated in 1999, these students might be studying in high school level and had been educated in traditional rote learning, for a long period of time. Any absolute and sudden change might not be comfortably accepted. The promotion and implementation of student-centeredness, autonomous lifelong learning and the integration of knowledge, as stated in the National Education Act of 1999, might help prepare Thai young generation for active and collaborative learning and that possibly resolves the threats and become an opportunity for CTBA.

2.2.4 Threats of CTBA

The students' learning habits, partially caused by Thai culture, could be considered threats for CTBA. Their passive learning habits were found to affect both affective and behavioral engagement.

Affected by Thai culture' high power distance and high certainty avoidance, as well as rote learning and grammar-translation method which long rooted in Thai education, students did not feel comfortable nor had positive attitude towards learning collaboratively with their peers in order to complete open-ended task. The instructor's efforts to develop autonomous learning habits, as well as critical and liberal thinking, were regarded as recklessness of the instructors. CTBA alone could not persuade the students to come to class voluntarily or to work in groups collaboratively and enthusiastically. Students who did not want to come to class would not do so and non-attendance would, therefore, deprive them of opportunities to engage in learning. The findings of this study revealed that the instructors, the course content, and the teaching methods, could not bring demotivated students to class and make them work collaboratively with others. Grades were found to be a main factor that students in both the control and experimental groups agreed could motivate them to engage more in learning; they would come to class on time and regularly, read the textbooks, and complete the exercises if they would be rewarded with grades.

2.2.5 Strengths of NBLT

The quantitative findings in this thesis revealed that NBLT had significant positive effects on both behavioral and cognitive engagement. The experimental group came to class often and on time, statistically more than the control group did, in order to use the computers and the Internet. They also had more participation in class either asking questions or collaborations. On simple and closeended tasks, such as reading comprehension exercises, NBLT provided interactive exercises with automatic feedback and a time controlled system. Such features facilitated sense of collaboration within groups, and also a sense of competition between groups. It was found that students in the experimental group worked together collaboratively with their group members in order to complete the online reading comprehension exercises. For more complex tasks, students used search engines to find information which helped complete their tasks more appropriately. In addition, NBLT also well supported CTBA. It was found that, with NBLT, students divided responsibility of tasks based on their expertise. Students who were good at computers and the Internet would take care of searching the Internet, uploading the contents to groups' blogs, and decorating the blog appearance, while ones who were good at English would take care of some language tasks, namely news summarizing and news writing.

2.2.6 Weaknesses of NBLT

If the strengths of NBLT laid mainly in ICT which engaged students behaviorally and cognitively by enhancing their digital literacy, as well as connecting them to learning resources and learning communities, the weaknesses of NBLT laid within the ICT as well. It did not exclusively connect students to academic resources, but also provide access to other distractive non-academic ones.

NBLT allows students more opportunities to practice their higher level cognitive processes, including searching, comparing, analyzing and evaluating while trying to find needed information from the Internet. However, the chance to practice higher level thinking processes within a dynamic and chaotic environment of the Internet came with a cost, specifically distraction. In the computer laboratory, students were guided and supervised, but were not strictly controlled. This was due to the framework of collaborative learning which encourages student-centeredness and autonomous learning. The examples of loose control in the NBLT were as follows:

- 1. Students were not controlled when to turn on or turn off the computers, even when they were not necessarily involved with learning activities, as in lecture sessions.
- 2. Most Web sites were not censored nor blocked; only pornography or gambling Web sites were blocked by the university.
- 3. The computer laboratory, which was set in a classroom formation, allowed students to hide behind their computer screens. They could pretend that they were paying attention to the lectures while they were actually looking at the computer screens or dealing with other non-academic activities.

In addition, despite being undergraduate students, many students admitted that they could not control themselves sufficiently to concentrate on learning. They were distracted by other online content and activities, such as Web surfing, instant messaging, online gaming, etc, while they should have paid attention to learning. The negative effects of distraction possibly resulted in the English language achievement test scores that the control group could do better than the experimental group did, despite the experimental group's statistically higher behavioral and cognitive engagement.

2.2.7 Opportunities of NBLT

A report from NECTEC (2009) presented that the Internet users in Thailand have increased from 1,500,000 users in 1999, the year the National Education Act was legislated, to 13,416,000 users in 2007. In other words it has increased nine times over the eight-year period. An advantage of technology products is that they are getting better, faster but cheaper, which makes them easier to acquire. Moreover, with the support from the government in devices, conduits, and literacy, according to the ICT for Education National Masterplan (ONEC, 2002), it is easier for Thai students to have more opportunity to learn with ICT.

2.2.8 Threats of NBLT

Two major threats of NBLT is the unavailability of computers and the Internet connections and the passive learning habits.

The unavailability of devices and conduits seemed to be obstacles for applying NBLT in real life. Despite the availability of computers in the central library, and wireless Internet connection throughout the university vicinity, students came up with many reasons not to use them outside the computer laboratory. One was the unavailability of time. Students claimed that they did not have extra time to go to the central library to use the Internet at the university. The other one was the unavailability of computers and the Internet at their homes. The claimed convenience of NBLT became an inconvenience for them. It is because to complete tasks, students who could not access the Internet at homes must go out and pay extra money at Internet cafes. The unavailability of devices and conduits possibly affected the effectiveness of NBLT in many aspects as presented in the findings that the students:

- 1. did not commit extra research to improve task outcomes;
- 2. did not use all kinds of CMC to communicate with peers, the instructors or others outside the computer laboratory;
- 3. did the task on the due date;
- 4. divided tasks into smaller pieces, distributed to each member to completed them cooperatively; and
- 5. let a member who could conveniently access the Internet at home handle routine tasks individually.

The second threat of NBLT is students' passive learning habits. Some students in the experimental group were accustomed to the teacher-centered method wherein they could learn passively. Instructors were viewed as main authorities in the classroom who spoon-fed them knowledge while textbooks were viewed as a bible, holding the ultimate truth that should not be denied or doubted. With such a point of view, the students expected that questions in the achievement test should come directly from the textbook and when they knew that the test items would be chosen from authentic and recent news stories, some of them decided not to read the textbook, or read only parts of it.

In addition, learning dependency was also reflected in their requirement for taking care closely from the instructors similar to what they received from their secondary school teachers. They viewed an attempt to develop learning autonomy and learning independence as negligence of the instructor. Learning with peers and using the network to connect with learning resources and communities also made some of them feel uncomfortable.

2.2.9 Decision for further implementation

Before decision is made whether CTBA with NBLT should be further implemented in English class, it is necessary to be noted that the SWOT analysis reported above was conducted based on quantitative and qualitative data collected from the subjects studied in this research. As stated in the research limitations in Chapter I, the findings in this study were not appropriate to be generalized for larger population, due to the small number of subjects, the subject selection method, and a specific learning context of the English for Mass Media course conducted in SDRU.

From the SWOT analysis, it was found that CTBA and NBLT possess both strengths and weaknesses, as well as both opportunities and threats. The decision to further implement the approach in the English for Mass Media course or in other English courses depends majorly on the course goals and course objectives. By having the English for Mass Media course for a concrete example, providing the main goal of the course was mastery of syntactic and lexical features of mass media print text while expected outcome was merely identifying linguistic forms in sentences, learning under traditional grammar translation method, with drills and exercises might be appropriate.

However, by using framework for English language teaching course offered by John Murphy (Murphy, 2001), some factors should be put into consideration, specifically conceptual underpinnings, course objectives, and setting. As stated in the rationale in Chapter I, the conceptual underpinnings of the English for Mass Media course was based on the goal of Thailand educational reform that is to create "lifelong education for all" (ONEC, 1999). Thai learners should be cultivated active learning habits so that they could learn throughout life. Moreover, with the needs of the English for Mass Media course, specifically the need for change from grammar-focused syllabus, the change of technology, and the need for training critical thinking skills, the course objectives had shifted the focus from mastery of individual and separated linguistic features to mastery of target language literacy and learning strategies. According to the course objectives, students are able not only to read and comprehend the news stories reported by mass media, they should also be able to distinguish facts out of opinion, to judge the reliability and validity of reported news, and to reflect their own point of views in the forms of news articles and commentary articles. As an ICT-enhanced university, SDRU is considered appropriate setting for conducting courses with above mentioned conceptual underpinnings and course objectives. ICT was considered to be an appropriate learning tool for achieving the goal of educational reform by facilitating the connection between learners and learning resources, learning contexts and learning communities (ONEC, 2002). SDRU readily provided their students with devices (computers), conduits (electricity and the Internet connection), and content (database, online courses, long distance classes).

Moreover, the findings in this study were still promising. The results revealed development of student engagement and cognitive engagement in both the control and experimental groups while CTBA with NBLT was found having significant effects on behavioral and cognitive engagement. The developing trends in the cognitive engagement found in both the control and experimental groups pointed out that CTBA affected the higher level thinking processes of the students who applied them while trying to solve the tasks with gradually increasing complexity. The significant differences found in cognitive engagement confirmed the positive effects of NBLT in enhancing the degree of cognitive engagement in learning while the significant difference in behavioral engagement indicated that CTBA with NBLT motivated students to come to class often and on time, to have more collaboration with peers and to ask the instructor more questions.

Some weaknesses and threats were found in CTBA and NBLT. For example, CTBA failed to encourage students to use the target language as a main medium in learning, and failed to encourage the students to complete the tasks collaboratively. For NBLT, It did not exclusively connect students to learning resources, but also provide access to other non academic source which, in return, distracted students' engagement. The most significant weakness of CTBA with NBLT was its inability to develop significant difference in language achievement in a group of students who were taught with such the approach. However, referring to earlier discussion, factors found to be responsible for the weaknesses and threats of CTBA and NBLT, were externally stemmed from students themselves, specifically their low English proficiency, and passive learning habits. Students still needed directions, close supervision, and assistance from instructors. They did not prefer a new, active, student-centered, collaborative and constructive teaching approach which was different from the passive, teacher-centered, grammar-focused ones to which they were accustomed to. Moreover, grades, an extrinsic motivation, were found to be a major driver responsible for student engagement.

Therefore, students' needs should be considered more important than students' preferences. Based on above mentioned conceptual underpinning and newly-revised course objectives of the English for Mass Media course, Thai students should be provided opportunities to learn and construct knowledge actively, collaboratively and meaningfully in order to maximize their potentials for dealing with fierce competition in international trades, digital literacy in the age of information, critical thinking for media consumption and liberal mindedness in term of accepting diversity. Learning the English for Mass Media course, under CTBA with NBLT opens the opportunities for students to reach such the goals, and then is recommended to be further implemented in the English for Mass Media course.

3. Recommendations

3.1 Recommendations for research consumers

The learning environment, knowledge, activities, and class room management could be tailored to be appropriate for a specific group of learners, as a common responsibility of the instructor and academic institutions (Darling-Hammond et al, 2003). Two points should be considered for any academic personnel who are interested in applying CTBA with NBLT in their courses, particularly CTBA with NBLT per se, and the students

3.1.1 Points to be considered: CTBA with NBLT

From the SWOT analyses on CTBA and NBLT, some weaknesses of CTBA and NBLT could be improved with project works and hybrid courses, as is discussed below.

1. Project works

Two major weaknesses found in CTBA were low collaboration in some simple, close-ended and routine tasks plus inadequate time allowed for task completion in classroom sessions. To balance both weaknesses, the researcher suggests the extra application of project works into lesson plans. Project works are considered an activity that promotes collaborative learning, student centeredness and language acquisition through authentic communicative language use (Warschauer, 2001). According to Richards and Schmidt (2002: 428) a project work is "an activity which centers around the completion of a task, and which usually requires an extended amount of independent work either by an individual student or by a group of students."

In general, projects works are possibly conducted outside the classroom, so it would not negatively affect limited classroom instructional timeframe. However, it does not mean that students were abandoned to struggle to learn unaided; the instructor would guide them in project planning as well as monitor

and review the performance and outcomes during and after the project. Moreover, with characteristics of large and complex tasks in project works, which the results in this study revealed that they cognitively engaged students the most, project works possibly enhance collaborative learning, while at the same time, solve the problems that students completed small and simple tasks, individually or cooperatively.

2. Hybrid courses

A major weakness found in the NBLT implementation was the Internet distraction in the classroom. Despite being undergraduate students, they were unlikely to control themselves not to be distracted by the Internet. Some solutions are needed to correct such a problem. With assistance from a network technician, the network gateway or proxy could be set up to control student access to the Internet but this might contradict the notion of collaborative learning. The other solution is establishing a hybrid classroom, which is a combination of a traditional classroom in which face-to-face instruction and communication exist together with outside classroom online elements such as online content and communication within some course management software (Lindsay, 2004).

The hybrid courses could be implemented in order to incorporate the advantages traditional classroom, such as face-to-face instruction, explicit explanations and low distraction, while students still obtain the advantages of NBLT such as digital literacy. For example, students might listen to lectures and have closed-ended language exercises in classroom for a week before they move to the computer laboratory to complete assigned tasks and project works in the following week. With this management, students could focus on content with less distraction, while at the same time they could have hands on experience with digital literacy and collaborative online projects. Many studies presented the positive affective engagement (El Mansour & Mupinga, 2007; Yudko, Hirokawa & Chi, 2008) and behavioral engagement (Riffell & Sibley, 2004) in students who enrolled in hybrid courses.

3.1.2 Points to be considered: Students

The researcher of this study recommends that CTBA with NBLT would be more effectively implemented for students with active learning habits and immediate the English proficiency level. However, as mentioned that it is the academic personnel's responsibility, more interesting topics, tasks with less complexity, flexible timeframe, and grades as an extrinsic motivation could be applied to tailor course for specific needs, levels, and learning habits of individual group of students while the concept and framework of CTBA with NBLT is still maintained.

3.2 Recommendations for future research

For researchers who are interested in conducting further studies related to CTBA with NBLT, the recommendations are as follows.

- 1. Further study should be conducted with a large number of subjects so that the results could be applied to the larger population.
- 2. In this study, the developing trends in behavioral engagement were likely to occur, only if the study was conducted over a longer timeframe. To study trends in student engagement, it is recommended that the period of the study should be extended to more than a semester.
- 3. Further study should be conducted with other groups of students who possess higher English language proficiency and active learning habits. This is due to the effects of CTBA with NBLT are theoretically based on collaboration and the ability of negotiation of meaning in the target language.

4. Conclusion

The National Education Act was just legislated in 1999 and, similar to other reforms, educational reform requires budgets, effort and time before the Act would be

fully put into practice. When the Act was firstly legislated, students in this study would probably had been studying in grades 6 to 8, and had been dominated by rote and passive learning for many years by primary and secondary education. It is highly possible that CTBA with NBLT would have significant effects on student engagement and English language achievement providing the students were more accustomed to active, collaborative, and student-centered learning, or the philosophy in CTBA with NBLT were extensively implemented in other courses and for a longer period of time. Further studies on the effects of revised CBTA with NBLT on English language achievement and student engagement, with new groups of students who grow up with reformed education, would help test such a claim.

This study is just another tiny step in an evolution of educational reform. The reform takes time, but it is a necessity to move forward to secure better education for all Thais.

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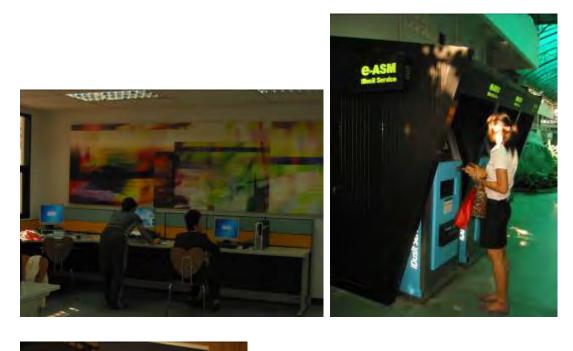
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APPENDICES

Appendix 1. The Research Setting: Suan Dusit Rajabhat University (SDRU)

SDRU is an ICT-enhanced University, in which ICT is implemented for both administrative and pedagogical proposes. (From right, clockwise: A student was checking her enrollment through an automatic machine, the screen of the machine, a e-learning administrative software, such as BlackBoard, is implement in university courses, a virtual library where students could access computers and connect to the Internet and data bases





Appendix 2. Digital Literacy and Learning Habit Questionnaire

The questionnaire is used to collects students' data related to their digital literacy and learning habit. The questionnaires were distributed and administered before the main study started.

แบบสอบถามนิสัยการเรีย	u		orname: D:			
คำตอบในแบบสอบถามจะได้รับการเก็บไว้เป็นความลับและจะไม่นำไปเผยแพร่ก่อนได้รับความเห็นซอบจากท่าน และคำตอบจากแบบสอบถามนี้จะไม่มีผลใด ๆต่อคะแนนของท่าน ดังนั้นขอให้ท่านตอบตามความเป็นจริง						าน
	ของทำ	น ดังนั้นชะ	าให้ท่านตะ	บตามควา	มเป็นจริง	-
ตอนที่ 1 ข้อมูลทั่วไป						
คำชี้แจง กาเครื่องหมาย (x) บนตัวเลขเพื่อตอบคำถามตามค	วามเป็น	เจริง				
 ท่านมีคอมพิรเตอร์ที่บ้านที่ท่านสามารถเข้าถึงได้หรือไม่ 	1.1			 1411 		
 ท่านมีอินเตอร์เนทที่บ้านที่ท่านสามารถเข้าถึงได้หรือไม่ 	1.4			 1411 		
 ท่านลามารถดันหาข้อมูลบนขึ้นเทอร์เนทได้ 	1. ทำ	12.		2. ทำไม่ได้		
 ท่านสามารถใช้โปรแกรม Word ได้ 	1. 11	18		2. ทำไม่ได้		
5. ท่านสามารถได้โปรแกรม PowerPoint ได้	1. 1	14		2. ทำไม่ได้		
 ท่านสามารถพิมพ์สัมมัลได้ 	1. 1	1.5		2. ทำไม่ได้		
ตอนที่ 2 นิสัยการเรียน						
คำชี้แจง กาเครื่องหมาย (x) ลงในช่องแสดงระดับตามความเ	ป็นจริง					
		พุกสรั้ง- แทบทุก ครั้ง	บ่อยครั้ง	บางหรัง	นัยยครั้ง	แทบไม่ เคย-ไม่ เคยเลย
	-	100-81%	80-6111	60-4 195	40-21%	70-05
 ฉันมีปัญหาในการทำร้อสอบให้เสร็จทันเวลา 			1.1.1	1.1	-	
 ฉัมแปงเวลาสำหรับศึกษาทางกนอกสน็เรียนทุกวัน 	-		1	-		-
 ก่อนที่จะอ่านบทเรียน ฉันถามคำถามตัวเขงว่าฉันกำลังจะเรียนเรื่องอะ 	lr		-			
 สัมรางแมนการเรียน และดามารถทำตามแมนที่วางไว้ได้ 	-				-	1
 ฉันขอมแพ้เมื่อได้รับงาน หรือการบ้านที่อากเกินไป 	-	-	-		-	
 ฉันมีปัญหาในการทัดสินว่าประเด็นใดในบทเรียนสำคัญหรือไม่สำคัญ 		-	1	-		-
7. ฉันทบทวนบทเรียนครั้งที่แล้วก่อนเร้าขั้นเรียน	-	_				
 ฉันเสียเวลาด้าหรับการศึกษาทบทรุนไปขย่างเปล่าประโยชน์ เพราะขา 	anna					
 ชัมตั้งใจจดจ่ออยู่กับงานเมื่อฉันศึกษาทบทวน 		1				
10. ฉันรู้สึกไม่สมายใจหากไม่ได้อ่านหัวข้อหรือบทลรุปก่อนอ่านบทเรียนทั้ง	NSAR					
 ชั้นไม่ได้จุดบันทึกระหว่างฟังค้าบรรยาย 	-	· · · · ·	-			
12. สันรู้ทึกง่างขึ้มขณะศึกษาทบทวน						
13) หลังเลิกเรียน ฉันอ่านทวนลมุดบันทึกเพื่อเติมคำที่ฉันจดหรือฟังไม่ทัน		-		· · · · · · · · · · · · · · · · · · ·	12	
 ฉันจับใจความสำคัญการบระยากรองอาจารย์ได้ 						
15. ฉันขอบเรียนหนังสือ	-	1	1	1		
 ก่อบจะเริ่มท้างาน สันประมาณเวลาที่ต้องใช้ และพยายามทำให้เสร็จท 	ชน		1	3		
		-				
17. ก่อนที่จะเขียนบทความ ฉันวางแผนก่อนว่าฉันจะเขียนอะไร			a second s			

	ทุกครั้ง- แทบทุก ครั้ง	บ่อยครั้ง	บางครั้ง	น้อยครั้ง	แทบไม่ เคย-ไม่ เคยเลย
	100 oB1%r	80-613/	60-41%	40-21%	50.0%)
 ฉันลามารถคาดเดาคำถามในข้อสอบได้ถึงร้อยละ 50 ถึง 60 จากการอ่าน สมุดบันทึกการบรรยายและหนังสือเรียน 					
20. ฉันคิดว่าฉันสามารถทำคะแนนได้ดีขึ้น					1
21. ฉันใช้เวลาศึกษาทบทวนทุกวัน					
22. ฉันพยายามบันทึกทุกอย่างที่อาจารยับรรยาย		0			1
23. ในแต่ละสัปดาห์ ฉันจัดเวลาศึกษาทบทวนวิชาต่างๆที่เรียนไปแล้ว					2
24. ฉันทบทวนบทเรียนที่ฉันเรียน		1			
25. ฉันพยายามทำงานให้เสร็จโดยเร็ว มากกว่าทำให้เสร็จโดยสมบูรณ์ถูกต้อง			1	1	
26. ฉันมักจะเสียคะแนนในการลอบเนื่องจากความละเพร่าของอัน		1			-
27. ฉันมักจะหาสถานที่เงียบสงบสำหรับการศึกษาทบทวน					
28. ก่อนออกจากท้องเรียน ฉันรู้ว่าการบ้านที่สั่งคืออะไร และต้องทำอย่างไร		1		-	-
29. ฉันมีปัญหาในการทำให้ตัวเองสนใจในวิชาที่เรียน			1		
30. คะแนนและเกรดมีความสำคัญสำหรับอัน		5			ł
 ฉันพูดทวนว่าจำอะไรได้บ้าง หลังอ่านหนังสือเรียนจบแต่ละตอน 					C
32. ฉันรู้ว่าเวลาโดของวันฉันสามาะกดึกษาทบทวนได้ดีที่สุด)	*	-	-
33. ฉันศึกษาทบทวนต่อเมื่อฉันรู้สึกอยากเท่านั้น		-			
34. ฉันอ่านคำถามท้ายบทก่อนที่จะเริ่มอ่านบทเรียน	-	§			-
35. ฉันมักมีปัญหาในการหาเวลาศึกษาทบทวนให้เพียงพอ		1.000	1	-	200
36. ฉันจำสิ่งที่ฉันเรียนได้เพียงเล็กน้อย		1	1		1
37. ฉันผัดผ่อนการศึกษาทบทวน					
38. เพื่อให้จดจำได้ดีขึ้น ฉันอ่านหัวเรื่องและบทสรุป ก่อนเริ่มอ่านบทเรียนทั้งหมด	1	1			-
39. แบบทดลอบทำให้ฉันรู้สึกวิตกกังวลว่าจะทำได้ไม่ดี		1.1			
40. ฉันรอถึงวันก่อนตอบ กว่าจะเริ่มอ่านทบทวนบทเรียน		1			
41. ฉันฟังอาจารย์อย่างตั้งใจ แต่ไม่ได้จดบันทึก					-
42. ฉันใช้เวลาทบทวนบทเรียนในหนังสือหลังจากอ่าน		1			1
43. ฉันเข้าใจอย่างดึกซึ่งถึงสิ่งที่ฉันเรียน					_
44. ก่อนเริ่มทำร้อสอบ ฉันวางแผนว่าจะได้เวลาสำหรับร้อลอบแต่ละส่วนอย่างไร		1			-
45. อันให้เวลาสำหรับบางวิชามากเกินไป ทำให้มีเวลาไม่พอสำหรับวิชาอื่นๆ		10.01			
46. เมื่อฉันอ่านหนังสือเรียน ฉันไม่ได้อ่านแผนภูมิ และดาราง	1	1			1
47. ฉันพบว่ามันยากที่จะรู้ว่าอะไรคือประเด็นสำคัญในบทเรียน					
48. ถ้ามีเวลาเหลือ ฉันทวนคำตอบในข้อสอบเพื่อหาข้อผิดพลาด					-
49. ฉันฟังค้าอธิบายในห้องเรียนอย่างตั้งใจเพื่อให้จำได้	-				
50: ฉันเหม่อลอยหรือผืนกลางวันเวลาเรียน		1			-

Appendix 3. The Research Setting: Traditional Classroom and Computer Laboratory

The images of a traditional classroom and a computer laboratory in which the control and experimental groups studies, respectively.



Traditional Classroom



Computer Laboratory

Appendix 4. The Lesson Plan for the English for Mass Media Course

The lesson plan of the English for Mass Media course which was designed based on the framework of CTBA. Horizontally, content and tasks are organized in order of open-endedness; vertically, content and tasks are in order of cognitive complexity.

Mode of communication		Interpretative		Interpersonal	Presentational
Skills focused in each mode	Li	stening/ Reading		Listening/ Reading Speaking/Writing	Speaking and Writing
Units	Schema	Controlled	Language	Tasks	Presentation
	building	practice	focus	D	D. C.
1. Parts in	Parts of Front	Parts of	Headlines	Parts of	Parts of
newspapers	Pages	Newspapers		Newspapers	Newspapers
		(controlled)		(free)	
	Introduce parts	Introduce	Punctuations	Have Ss look for	Presentation
	of newspaper	parts in		each part in the	
	front page	newspaper	Omission of	newspaper by	
			articles	giving guiding	
	Have Ss match			questions	
	names with				
	parts on front				
	page				
2. News	News	News	Headlines	Types of News	Types of
stories		(controlled)		(free)	News
	News reading	Definition of	Present tense	Have Ss find	Presentation
	comprehension	news		samples of news	
	exercise		Past	stories that match	
		Types of	Participle	the news types.	
		news			
	Values of news		Passive		
		Values of	voice		
		news			

Mode of		Interpretative		Interpersonal	Presentational
communication					
Skills focused	Li	stening/ Reading		Listening/ Reading	Speaking and
in each mode				Speaking/Writing	Writing
Units	Schema	Controlled	Language	Tasks	Presentation
	building	practice	focus		
3. Types of	News	Types of	Headlines	Types of	Types of
newspapers		Newspapers		Newspapers(free)	Newspapers
		(controlled)			
	News reading	Hard and	Present	Have Ss compare	Presentation
	comprehension	soft news	participle	English	
	exercise			newspaper and	
		Quantitative	To infinitive	other Thai	
		and		newspaper.	
	Hard and soft	qualitative			
	news	newspapers		Have Ss identify	
				whether they are	
				quality or	
				quantity	
				newspapers.	
4. News	Headlines	News	Headlines	News Writing	News Writing
writing styles		Writing		Styles	Styles
		Styles		(controlled)	
		(controlled)			
	News reading	"inverted	Headlines w/	Have Ss write a	Presentation
	comprehension	pyramid"	adjectives	headline and a	
	exercise	pattern	5	lead from	
		-	Headlines w/	information	
		Headlines	prepositions	provided	
	Mono syllabic	Leads	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	L	
	words	Bodies	Question		
		200100	headlines		
	Noun modified	5Ws 1H	nouunitos		
	nouns	questions	Quotation		
	nouns	440500015	headlines		
			neaumes		

Mode of		Interpretative		Interpersonal	Presentational
communication Skills focused	Li	stening/ Reading	:	Listening/ Reading	Speaking and
in each mode	<u> </u>			Speaking/Writing	Writing
Units	Schema	Controlled	Language focus	Tasks	Presentation
5.0	building	practice	Direct and	Orienteeting	Direct and
5. Quotations	Quotations	Quotations		Quotations	
		(controlled)	indirect	(controlled)	indirect
			speech		quotes
	News reading	Parts in	Direct and	Have Ss change	Presentation
	comprehension	quotations	indirect	direct quotes in a	
	exercise		speech	story into indirect	
		Quotes		quotes	
		Attributions	Present tense		
	Quotations	Sources	and past		
			perfect tense		
	Punctuations	Direct and	in indirect		
	for quotations	Indirect	speech		
	-	quotes	-		
		•			
6. Newspaper	Objectivity in	Interviews	Direct and	Interviews	Short news
objectivity	news stories	(controlled)	indirect	(free)	story
5 5			speech		
	News reading	Interview	Have Ss	Role-play;	Presentation
	comprehension		practice	Have Ss	
	exercise	Have Ss plan	writing	interviews news	
		questions to	direct and	sources and write	
		ask in a role	indirect	news story from	
		play	quotes	data obtained	
		interview			
7. Reliability	Reliability and	Facts and	Relative	Facts /opinions	Facts
and validity	validity of	opinions	pronouns/	Reliability/	/opinions
	news stories		Relative	validity	Reliability/
			clauses		validity
	News reading	Facts	Have Ss	Have Ss	Presentation
	comprehension	Opinions	combine	differentiate facts	
	exercise	Validity	sentences	from opinion and	
		,		1	

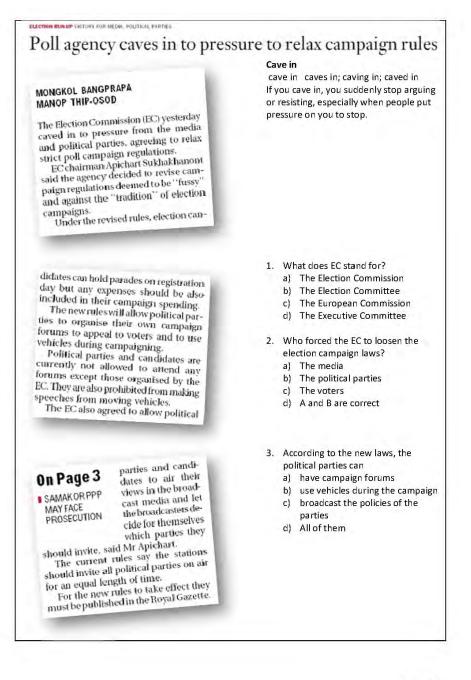
Mode of communication		Interpretative		Interpersonal	Presentational
Skills focused	Li	stening/ Reading		Listening/ Reading	Speaking and
in each mode				Speaking/Writing	Writing
Units	Schema	Controlled	Language	Tasks	Presentation
	building	practice	focus		
		Reliability		judge reliability	
				and validity of	
				news sources,	
				from two	
				different	
				perspective of a	
				news story	
8. Editorials	Editorials	Editorials	Relative	Editorials	Editorials
			clauses		
	Editorial	organization	Relative	From editorial	Presentation
	reading	writing	clauses with		
	comprehension	styles	and without	Compare/contrast	
	exercise	5	relative	advantages and	
			pronouns	disadvantages	
			Promoting	ansaa minages	
				Showing	
				agreement and	
				disagreement	
				disagreement	
				Supported with	
				reasons	
				Teasons	
9. Letters to	News	Commentary	Present	Letters to editor	Letters to
editor		and letters to	participle		editor
		editor	I ···· I ·		
	Reading	Writing style	Have Ss	Have Ss write	Presentation
	comprehension	- news	combine	letters to editor to	
	Exercise	- editorial	sentences	present their ideas	
		-		toward the social	
		commentary		issues	
		- letter to			
		editor			
		Cuitor			

Mode of communication		Interpretative		Interpersonal	Presentational
Skills focused in each mode	Li	istening/ Reading		Listening/ Reading	Speaking and
				Speaking/Writing	Writing
Units	Schema building	Controlled practice	Language focus	Tasks	Presentation
10. Featured	News	Soft news/	Past	Soft news/	Soft news/
articles		Featured	participle	Featured stories	Featured
		stories			stories
	Reading comprehension Exercise	Have Ss compare news stories and featured stories writing styles'	Have Ss combine sentences	Have Ss write news stories in featured news style	Presentation

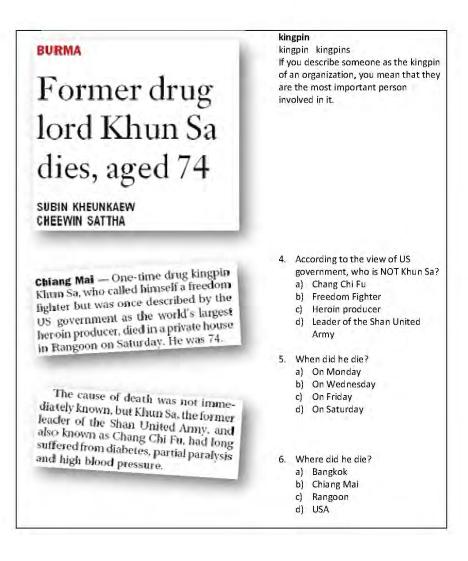
Appendix 5. Sample of the English for Mass Media Course Content

Unit 3: Types of Newspapers, is one form total 10 units in the textbook of the English for Mass Media course. Each unit is organized into five main parts: schema building, controlled practice, language focus, tasks and presentation. The organization is based on the framework of CTBA.

UNIT 3: Types of Newspapers I. Schema building Look at the front pages of the Bangkok Post issue of October 31, 2007 and November 1, 2007 and answer the questions. THE NEWSPAPER YOU CAN TRUS aki Coffe Bangkok P Sharif's Oledong return counting ordered down 15 6 **Courts** free re uspects Former drug lord Khun Sa Forced partic dies, aged 74 training 'defies right SUBIN NHEUNKAEN SUPAPONIS CHAOLAN Poll agency caves in to pressure to relax campaign rules MONCEOL BANGPEAN On Page 3



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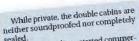
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S'pore Airlines imposes sex ban on users of Airbus double bed

dash

dash dashes dashing dashed If an event or person dashes someone's hopes or expectations, it destroys them by making it impossible that the thing that is hoped for or expected will ever happen. (LITERARY, JOURNALISM)

- 7. Do Singapore Airlines allow its customers to have sexual activities on board?
 - a) Yes, if they fly first class.
 - b) Yes, if they fly with the new Airbus A380.
 - c) No, if they fly economy class in the new Airbus
 - A380.
 - d) No, in all cases.
 - 8. According to the interviewed customers, the company...
 - a) should allow sexual activities for first class flyers.
 - b) should NOT allow sexual activities for all flyers.
 - c) should NOT ban customers from sexual activities.
 - d) should cancel the private, first-class double bed service.



class suites, which boast the world's first airborne double beds. "All we ask of customers, wherever they are on our aircraft, is to observe standards that don't cause offence to other customers and crew." the com-pany said in a statement. "Nothing different applies for our Singapore Airlines Suites customers."

AIR TRAVEL & 380 MILE-HIGH CLUB HOPES DASHED

Singapore — Singapore Airlines, the first operator of the new Airbus A380, has dashed the hopes of sexual thrill-seckers planning to engage in amorous activity aboard the world's biggest jumbo jet. The carrier said it would ask pas-sengers on the A380 to refrain from sex while ensconced in one of its 12 first.

sealed. Singapore Airlines started commer-cial flights of the A380 last week with its Singapore-Sydney service. "So they'll sell you a double bed, and give you privacy and endless cham-pagne and then say you can't do what

comes naturally?" Tony Elwood, who travelled with wife Julie in a suite aboard the inaugural flight, told The Times of "That second all."

London. "They seem to have done everything they can to make it romantic, short of bringing round oysters," Julie said. "T'd say they shouldn't really complain, should they?" REUTERS





amendment SRT boss promises to amendment amendments an amendment is a section that is added to a law look into all demands or rule in order to change it. POST REPORTERS Railway union members last night agreed to end their strike, clearing the way for the resumption of train services after the stoppage paralysed the rail network across the country. State Railway of Thailand chairman Siva Saengmanee came out from five-hour talks with the union saying the SRT agreed to look into all demands put forward by the union. The union's demands involved Central Inter Pattana Ple's lease of a prime plot on Phahon Yothin road, part of the Buri Ram station compound allegedly en-croached on by a politician, the corruption-plagued Airport Rail Link pro-ject, and the privatisation of its cargo service under the Japan-Thailand Eco-nomic Partnership Agreement. 9. What does SRT stand for? a) Singapore Repertory Theatre b) Shortest remaining time c) Special Rescue Team d) State Railway of Thailand 10. Have the SRT workers gone back to work nomic Partnership Agreement, The union accused the SRT manageyet? a) Yes, before the SRT talked to them. ment of trying to favour Central Inter Pattana in the lease deal. b) Yes, after the SRT talked to them. c) Not until the SRT agrees with all demands. d) Not until the SRT is privatized. 11. According to the news story, what demand Union representatives highlighted the do the SRT workers are worried the most? Union representatives sugningstea the privatisation grievance in their rallies at major train stations nationwide. Supichet Suwannachatri, head of the union's southern branch, said the gov-ernment was muching for amendments a) The Airport Rail Link project b) The Buri Ram station union's southern branch, said the gor-enment was pushing for amendmentis to the Thai Railway Act of 1951 and Highway Act of 1921 to allow the private sector to operate trains to comply with the Thai-Japanese free trade pact that takes effect today. Representatives of the labour union complained that it would make the SRT a service provider in the business and the state was pushing for the change without consulting SRT employees. c) The land lease with Central Inter Pattana d) The privatization plan

6

II. Controlled practice

Types of News: Hard and Soft

News can be categorized into various types according to the related contents in each news story as already mentioned earlier in this unit, such as home news, international news, politic news and business news.

However, news can be categorized into "HARD" news and "SOFT" news based on seriousness and timeliness in the news stories.

Seriousness

Seriousness refers to important topics that the newsreaders should know because they might affect their lives. For example, politics, economics, crime, war, and disasters are serious topics.

Timeliness

Timeliness refers to stories that cover current events and the newsreaders should be informed immediately. For example, the progress of a war, the results of a vote, the breaking out of a fire, the occurrence of earthquakes and tsunamis, the terrorism and a significant public statement are timely topics.

Therefore, any news stories that have both seriousness and timeliness in their stories are considered **hard news**. Events in hard news have some effects to the newsreaders and should be reported as soon as possible.

On the contrary, **soft news** reports less serious topics such as arts, entertainment, sports, celebrities, and lifestyles. Because it is not serious, soft news is also not timely. Newsreaders read soft news mainly just to satisfy their curiosity; the events reported in soft news hardly have effects to the newsreaders' lives. Samples of soft news include two-headed snake, superstitious numbers for lotteries, or celebrity's love life. For some timely events happening in less serious subjects such as the results of sporting matches, movie releases, art exhibits, and so on are also considered soft news.

Types of Newspapers

Newspapers are also categorized based on the way they select and present news stories to the readers. There are quality newspapers and quantity newspapers.

Quality newspaper

The quality newspapers concern about the people and report the news that affects the people. They act as a 'watch dog' or 'gatekeeper' to investigate and dig for information of any corruption or wrongdoings in the governments, organizations or companies. Hard news is their main information presented by the quality newspaper.

Quantity newspaper

These newspapers want to have high sales, so they usually sell human-interest news or soft news. Controversial illustrations, stories, columns are printed to attract the readers to buy the paper.

Exercise

- 1. You have read news stories from the front page of the Bangkok Post, identify
 - the news types
 - the news value(s) with supporting reasons for such value(s)
- Discuss in groups to judge whether the Bangkok Post is a quality or quantity newspaper. Keep in mind that the result of your discussion is open-ended that means there is no right or wrong answer.



Former drug lord Khun Sa dies, aged 74	Rail union members agree to end strike
News type:	News type:
News values:	News type:
Supporting reasons for news values:	Supporting reasons for news values:
Is Khun Sa an important person that the newsreaders should be informed about his death? Why?	Are the strike of SRT union and their demands worth reporting to the newsreaders? Why?

III. Language focus Headlines



More than 200 want to move to Malaysia

MUHAMMAD AYUB PATHAN ANUCHA CHAROENPO

Yala — More than 200 villagers have migrated or planned to move from Bannang Sata district in this southern border province to Malaysia in what could be linked with the government's recently intensified crackdown on insurgents.

Bannang Sata district chief Methi Kanchanapuwa said 215 residents in the district had applied for passports for travel to Malaysia.

- 1. Who are migrating?
 - a) The soldiers
 - b) The insurgents
 - c) Thai people
- d) Malaysian people
- 2. Where are they moving to?
 - a) Malaysia
 - b) Bangkok
 - c) Bangnang Sata
 - d) Yala
- 3. The reported migration in the news story...
 - a) already happened in the past.
 - b) is happening at the moment.
 - c) will likely to happen in the near future.

CRIME PREVENTION CHILD SEX ABUSE

Police checking on foreigners

Police are making background checks on more than 1,000 foreigners, mainly teachers, working in Thailand after a spate of arrests for alleged child sexabuse, a senior officer said yesterday.

"It shouldn't be enough to wear white shirts and have a university degree. We need to know their backgrounds," said Pol Col Apichart Suribunya, head of the liaison office for Interpol.

Police would seek records of any convictions in home countries and from Thai immigration police before foreigners were hired as teachers. "We are scrutinising more than 1,000

we are scrutinising more than 1,000 foreign teachers working in Thailand," he said. "Until now, educational institutions would only look at their academic qualifications, but that is not enough."

allege (v)

allege alleges alleging alleged If you allege that something bad is true, you say it but do not prove it. (FORMAL)

- 4. Most foreigners whose backgrounds are being examined are
 - a) business persons
 - b) students
 - c) teachers
 - d) tourists
- 5. According to the police, what should be checked before hiring a foreigner?
 - a) Career background
 - b) Crime background
 - c) Education background
 - d) Traveling background
- 6. The background informatiion of foriegners in Thialand ... by the police.
 - a) was already checked in the past
 - b) is being check at the moment
 - c) will be checked in the near future

Reflection on Rules of Headlines I

From "Southern villagers migrating" and "Police checking on foreigners", both news stories report incidents that are occurring at the moment of reporting. The migration and investigation are still on process.

The verb in "Southern villagers migrating" is "migrating" and the verb in "Police checking on foreigners" is "checking". Both are "present participle". Normally, verb to be (is, am, are, was, and were) will be written before present participle to show active action such as "I am studying" or "She is watching TV." In headlines, verbs to be are USUALLY omitted so



What can you conclude about the rules in news headline writing? 1.

PTTEP and Chevron to boost production

YUTHANA PRAIWAN

The country's two major natural gas producers will increase output by 660 million cubic feet per day (mmcfd) in total after the Energy Ministry granted them 10-year production extensions.

The Department of Mineral Fuels formally signed the agreement yesterday to extend the concession for PTT Exploration and Production Plc (PTTEP) and Chevron Thailand Exploration and Production.

The extension for PTTEP covers Blocks 15, 16 and 17 in the Bongkot field in the Gulf of Thailand, which are expected to produce an additional 330 mmcfd starting from 2011.

In addition, Chevron plans to lift its

concession (n)

concession concessions A concession is an arrangement where someone is given the right to sell a product or to run a business, especially in a building belonging to another business.

- What is the product of PTTEP and Chevron mentioned in the news story?
 - a) Natural gas
 - b) Crude oil
 - c) Petrochemical
 - d) Coal
- 8. Whare do the PTTEP and Chevron get their product from?
 - a) Andaman Sea
 - b) Bay of Bengal
 - c) Gulf of Thailand
 - d) South China Sea
- 9. By signing contracts, the production of PTT and Cheveron
 - a) already increased.
 - b) Is increasing at the moment.
 - c) will increase in the future.

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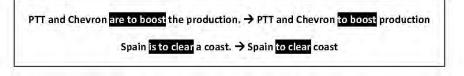
demolish (v) Spain to clear coast demolish demolishes demolishing demolished MADRID: The Spanish government plans To demolish something such as a building to demolish hotels, holiday residences means to destroy it completely. and housing on more than 700km of the Mediterranean and Canary Islands coastline to recover a landscape suffering residence (n) from environmental degradation, the residence residences A residence is a house where people live. daily El Pais reported yesterday. The Spanish coast is crammed with buildings linked to the tourism industry. Many buildings have been constructed without ade quate permits and often on stateowned land. AFP 10. What are going to be removed from Sapnish coast? 11. Why are the buildings to be torn a) bungalows down? b) hotels They are abandoned. a) c) houses b) They are dangerous. d) All are correct. They are old. c) d) They are ugly. 12. The Spanish government the buildings. a) have already moved b) is removing c) has future plan to remove

Reflection on Rules of Headlines II

From "PTT and Chevron to boost production" and "Spain to clear coast", both news stories report a possible plan or incident that will happen in the future. The actions "to clear" and "to boost" are not to happen yet.

The verb in "PTT and Chevron to boost production" is "to clear" and the verb in "Spain to clear coast" is "to boost". Both are "infinitives". Normally, verb to be (is, am, are, was, and were) will be written before infinitives with "to" to show future actions as in "I am to go to the library this afternoon."

In headlines, verbs "to be" are USUALLY omitted so



What can you conclude about the rules in news headline writing?

1.

IV. Tasks

Types of Newspapers

- 1. Study news articles on the front page of two newspapers at least (a Thai and an English one). In each news story on the front page, Identify 1) the news types

 - 2) the news values

Sample

Name of newspaper #1	Name of newspaper #2	
News 1	News 1	
Headline:	Headline:	
News types:	News types:	
News values:	News values:	
News 2	News 2	
Headline:	Headline:	
News types:	News types:	- L.
News values:	News values:	

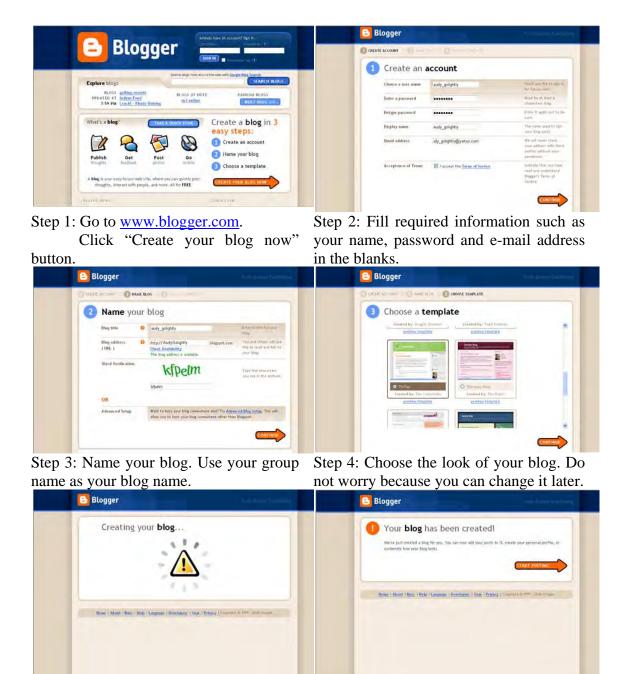
2. Judge whether the newspapers are quality or quantity newspapers.

Works Cited

Soft News. (n.d.). Wikipedia. Retrieved October 31, 2007, from Wikipedia.org Web site: http://en.wikipedia.org/wiki/Soft_news

Appendix 6: Instructions for Blog Construction

The students in the experimental groups received the instructions of how to create their group Web log in the very first weeks of the semester.



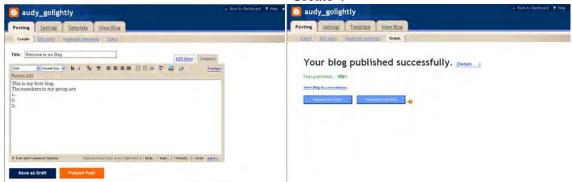
Step 5: Wait for a few seconds.

Step 6: Now, you have your own blog. Click "Start posting" button.



Step 7: Click a link of your blog name.

Step 8: Click tap "Posting" and then tap "Create".



Step 9: Now you can type your messages in the box. You can choose font, font size, color and so on like you do in Microsoft Word.

Step 10: You message will be published. Click "View Blog" button to see your posted message.

Click "Publish Post" button.

audy_golightly	
C Saturday, March 25, 2006	-
Wekome to our Blog	About
This is my first blog.	Sec. 1
The members in my group are	About Me
4	Namana and and
2.	A transfer and provide a period
4.	4 million and a second state
= pormul ling analy	Links
	· Groupe filmers
D Friday, March 24, 2005	# 2012ta
Audy Golightly and first time teaching and Hua Hin center: a reflection	- Linite
Terrection 1	Previous
The theoretical framework behind Mass Media English 2 at Hua Hin	

Step11: Your message is already posted.

Post a Comment On: audy_golightly	
"Welcome to our Blog" No connect yet - The WeathPost This any for Tuby The penders in my group are 2. 3. posted by and, polyticity at <u>1.15 million Her</u> 25 2004	Ver can us pase HTML tags tack is the star star Coogratiustication
	This Mag does not allow anonymous communits You've currently positing as audy_golightly or you can sign is <u>a a different user</u> .

Step 12: You can post your comment by clicking "Comment" link. Type your comment in the box and click "Publish" button.

Appendix 7. A Students' Blog

Blogs were used in the experimental group for two main purposes: a journal and a portfolio. The picture show a page from students' Blog in which a weekly news summary was displayed.



Appendix 8. Sample of Online Interactive Exercises

The online interactive exercises were created by an application named Hot Potatoes. The items in the exercise were similar to ones in the textbook, but the application could provide automatic feedback to students.

	Unit 3: Schema build _{Quiz}	ing
		Show questions one by one
1.	What does EC stand for?	
	A The Election Commission	
	B The Election Committee	
	C The European Commission	
	D The Executive Committee	
2.	Who forced the EC to loosen the election campaign laws?	
	A The media	
	B The political parties	
	C The voters	
	D A and B are correct	
3.	According to the new laws, the political parties can	
	A have campaign forums	
	B use vehicles during the campaign	
	C broadcast the policies of the parties	
	D All of them	
4.	According to the view of US government, who is NOT Khun Sa?	2
	A Chang Chi Fu	
	B Freedom Fighter	
	C Heroin producer	
	D. ? Leader of the Shan United Army	

Appendix 9. English Language Achievement Test for the English for Mass Media Course

English for Mass Media 2

Final examination test

This test consists of five main	parts, including 60 items in total 13 pages.
Part 1 Headline Structures	(Items 1-10)
Part 2: Noun Phrases in Headlines	(Items 11-20)
Part 3: Vocabulary	(Items 21-40)
Part 4: Reading Comprehension	(Items 41-45)
Part 5: Reading Comprehension	(Items 46-60)

Do every part by filling your answers in the answer sheet provided.

Part 1 Headline Structures

Instructions: Choose the most appropriate word to fill in the blank of each headline.

Fire prevention substandard at airport The fire prevention system at Suvarnabhumi airport is substandard, a team of engineers has concluded in a report. The report, completed by experts at the Engineering Institute of Thailand, is to reach the Airports of Thailand today.

1. a) finding b) finds c) found d) to find

Explosion _	(2.) in new Burma capital, 1		_(3.)
Rangoon An	explosion occurred in Burma's capital Naypyitaw	early Friday	morning,
killing at least of	ne person, according to local residents and civil servar	nts.	

2.a) occurringb) occurredc) occursd) to occur3.a) killingb) killedc) killsd) to kill

Technical expert ______ vote-buying video

The Election Commission (EC) will allow a technical expert to examine the controversial video CD featuring some of the evidence used to accuse Yongyuth Tiyapairat, deputy leader of the People Power party (PPP), of election fraud. Mr. Yongyuth said most of the VCD was bogus, saying it was made three days ahead of the meeting.

4. a) viewed b) viewing c) views d) to view

THAI ______both Boeing and Airbus jets

The board of Thai Airways International yesterday endorsed a plan to lease 14 Boeing 787 Dreamliners and 20 Airbus 321 jetliners in a revised fleet modernisation scheme. The resolution means the national carrier plans to use two types of aircraft for its future fleet and would rather lease aircraft than buy them.

5. a) leased b) leasing c) leases d) to lease

PPP coalition govt Saturday

(BangkokPost.com) – The People Power party (PPP) will unveil a six-party coalition government Saturday afternoon, the secretary-general of the party Surapong Suebwongless said.

6. a) unveiled b) unveiling c) unveils d) to unveil

Central bank ______ against baht speculation

(BangkokPost.com) - Bank of Thailand governor Tarisa Watanagase on Thursday advised against speculation on a stronger baht, saying that the situation is still highly volatile. She vowed to do everything possible to ensure that the Thai currency does not undergo any dramatic changes.

7. a) warned b) warning c) warns d) to warn

Bargain hunters Tokyo stocks

Tokyo (dpa) - Tokyo stocks recovered from a four-day losing streak to open Thursday trading higher as investors bought battered shares.

8. a) push up b) pushed up c) pushes up d) to push up

Police ______ three suspected bombers

(BangkokPost.com) – Three suspects have been arrested in connection with suspected involvement in a recent roadside bombing in Narathiwat province which left eight security patrol officials dead.

9. a) detain b) detained c) detains d)to detain

for teachers

Debt

(11.)

Education: The Education Ministry and the Federation of Savings and Credit Cooperatives of Thailand Limited have agreed in principle to disburse a five billion baht loan to help relieve debt problems affecting teachers and other academic staff.

10. a) help b) helped c) helping d) to help

Part 2: Noun Phrases in Headlines

Instructions: Choose the most appropriate phrase to fill in the blank of each headline.

under study

Commerce Minister Krirk-krai Jirapaet has ordered the Internal Trade Department to complete a study on free-float price adjustments, for products which rely on highly-volatile-priced agricultural crops.

- a) Adjustment price formula
- b) Formula adjustment price
- c) Formula price adjustment
- d) Price adjustment formula

(12.) Ministry _____ for now

Manufacturers have been ordered to delay any increases in product prices in the first quarter of this year as the Commerce Ministry plans to control inflation and cushion the burden on consumers amid soaring oil prices.

- a) to freeze price rises
- b) to freeze rise price
- c) to price freeze rises
- d) to rise price freeze

(13.)

further slips

Internal Trade Department revealed on Monday that the latest palm oil inventory is only 820,000 tonnes, raising the urgency to import the vegetable oil within this month.

- a) Inventory palm oil
- b) Oil palm inventory
- c) Palm inventory oil
- d) Palm oil inventory

down 40 satang on Thurs

All oil retailers are slashing their prices on Thursday, on continued slides in global oil prices in the recent days. After the cut of 40 satang per litre, octane-95 petrol will be Bt33.29, gasohol 95 will be Bt29.29, and diesel at Bt29.34

- a) Oil prices Retail
- b) Oil retail prices
- c) Price retail oil
- d) Retail oil prices

____ cut to 30,000 tonnes

The Commerce Ministry will halve to cut an imported value of palm oil from 60,000 tonnes to 30,000 tonnes as worrying impacts of importing to hit local price.

- a) Import palm oil
- b) Oil palm import
- c) Palm oil import
- d) Palm import oil

(16.)

(17.)

(15.)

(14.)

_____ tops the global ranking

Thailand's consumer confident has topped the global ranking with most people (51 per cent) anticipating a global recession in the next 12 months followed by Taiwan (47 per cent) and Italy (45 per cent) respectively, according to the latest Global Consumer Confident Study by Nielsen Company.

- a) Consumer confident Thailand
- b) Confident Thailand consumer
- c) Thailand confident consumer
- d) Thailand consumer confident

claims insurgency ending

Acra Thiproch, chief of information division of Fourth Region of Internal Security Operation Command (Isoc), claimed Saturday that insurgency in the deep South is ending.

a) Army Southern information chief

b) Information chief Southern army

c) Southern army information chief

d) Southern information chief army

(18.) Samak declares

People Power Party's leader Samak Sundavaravej declared on Saturday formation of coalition government with other five political parties.

- a) coalition formation government
- b) coalition government formation
- c) formation coalition government
- d) formation government coalition

(19.) _____ to rise

Upcountry coach operator Transport Company will raise fares by three satang a kilometre from February 16.

- a) Bus inter-provincial fares
- b) Bus fare inter-provincial
- c) Fare inter-provincial bus
- d) Inter-provincial bus fares

(20.) _____ question 15-year-old suspect in Bhutto's assassination

Authorities were questioning a 15-year-old boy on Sunday who has confessed to be being part of the team that killed opposition leader Benazir Bhutto, marking what could be the first major break in the investigation.

- a) Pakistan forces security
- b) Pakistan security forces
- c) Security forces Pakistan
- d) Security Pakistan forces

Part 3: Vocabulary

Instructions: Choose the most appropriate word to fill in the blank of each headline.

Thaksin (21.) Samak as PM

(BangkokPost.com) – Thaksin Shinawatra reiterated that there is no reason why Samak Sundaravej can't be prime minister since he is the leader of the People Power party. He told international reporters about the legitimacy of Mr. Samak being the new leader of Thailand on the sidelines of watching an FA cup match between Manchester City, the football team of which he is chairman, and West Ham United in the UK.

a) backs b) bars c) begs d) bids

Defence Minister (22.) _____ over APC (23.)

(BangkokPost.com) - Adm Bannawit Kengrian said on Thursday he is preparing to file charges against Defence Minister Gen Boonrawd Somtas over with the controversial purchase of armoured personnel carriers (APC) from the Ukraine.

Adm Bannawit, a National Legislative Assembly (NLA) member, told the media that he believes the 4 billion baht deal has gone forward despite breaking regulations at the Prime Minister's Office.

a) in cold waterc) in still water

b) in hot waterd) in sparkling water

a) deal b) deadlock c) drive d) due

UN council (24.) Burma for lack of reform New York (dpa) - The UN Security Council on Thursday criticized Burma's "slow rate" of progress to bring democratic reform to the country and called on the military government to hold new talks with UN envoy Ibrahim Gambari.

a) raps b) reaps c) rocks d) rules

(25.) (26.) 30 shop houses A fire destroyed about 30 shop houses on Maitri Chit Road in Pom Prab District yesterday.

a) Blaze	b) Blast	c) Blizzard	d) Bomb
a) gazes	b) glues	c) grips	d) guts

East German minister (27.) over spy charges Bonn (Reuter) – Eastern Germany's top politician, Lothar de Maiziere, resigned his Cabinet and party posts in united Germany on Monday after failing to disprove charges he had once been a communist informer.

a) quarries b) quakes c) quits d) quits

Interior in bid (28.) _____labor flow to capital A project to prevent labor migrating to Bangkok from 40 provinces hit by natural disasters has been submitted to the Cabinet for approval.

a) to halt b) to heal c) to hoist d) to host

Four firms (29.) _____ Thai nuclear power plant project

BANGKOK, Jan 11 (Reuters) - State-run Electricity Generating Authority of Thailand (EGAT) said on Friday at least four firms were interested in building nuclear power plants in Thailand.

a) ease b) earn c) end d) eye *

Junta (30.) _____ Thaksin's poll hopes

FIFTEEN months after Thailand's generals overthrew prime minister Thaksin Shinawatra, the election to reinstate democratic process is being undermined by military manipulation to prevent his return, says the international civil liberties watchdog Human Rights Watch.

a) fries b) flays c) flops d) foils

Talks on forming Thailand coalition hit (31.)

Talks to set up a stable coalition government in Thailand hit a difficulty after the party backing ousted premier Thaksin Shinawatra rejected all conditions set by small political outfits.

a) scam b) snag c) spark d) stall

Thai court (32.) on PPP victory

Thailand's Supreme Court is to rule on Friday whether last month's election victory by the People's Power party, loyal to the ousted prime minister Thaksin Shinawatra, should be nullified – a verdict that would be seen by critics as a second coup.

a) to rap b) to rule c) to rout d) to row

Thai prosecutors (33.) to arrest former PM Thaksin BANGKOK, Dec. 27 (Xinhua) -- Thailand prosecutors said they will not hesitate to arrest former Prime Minister Thaksin Shinawatra as soon as he arrives in Thailand, for his alleged involvement in a land corruption scandal, local media reported on Thursday.

a) vie b) view c) void d) vow

Thai student (34.) _____ by teenage gang A THAI student was punched and kicked by two teenage girls and a boy who stole her handbag.

a) moaned b) missed c) mugged d) muted

Thai Leader Says He'll Return but Forgo Politics

BANGKOK — With his backers claiming victory in a parliamentary election, former Prime Minister Thaksin Shinawatra, who was expelled in a coup 15 months ago, said Tuesday that he was prepared to return to Thailand in the next few months but that he would forgo politics.

a) Obeyed b) Objected c) Ordered d) Ousted

(35.)

Court rejects TITV staff's (36.) to keep broadcasting The Administrative Court yesterday decided not to grant TITV staff provisional protection against the Public Relations Department (PRD)'s order for the station to cease broadcasting.

a) pay b) place c) plea d) post

Critics (37.) gun named after controversial LAPD unit LOS ANGELES—City and civil rights leaders condemned a gun maker for naming a line of high-end pistols after the police department's Special Investigation Section, an undercover unit with a history of fatally shooting suspects.

a) aim b) allow c) assail d) axe

Lehman (38.) _____1,300 mortgage jobs

Lehman Brothers staged a further retreat from the troubled home-loan industry yesterday, saying it would cut about 1,300 mortgage jobs and reduce lending activities by its Aurora Loan Services subsidiary.

a) to aid b) to arm c) to ask d) to axe

Rangers (39.) Jennings to one-year deal Arlington, TX (Sports Network) - The Texas Rangers have signed pitcher Jason Jennings to a one-year contract.

a) ice b) ink c) irk d) iron

Fergie's old (40.) Keegan returns to the fray

One man who will have been smirking into his cornflakes as he read about the Kevin Keegan's shock return to Newcastle United is his nemesis, rival manager Sir Alex Ferguson.

a) fame b) fear c) foe d) friend

Part 4: Reading Comprehension

Instructions: Choose the most appropriate headline for each news story.

(41.) (BangkokPost.com) - Potjaman Shinawatra, wife of ousted premier Thaksin, will not give interviews until after she appears at the first court hearing on Jan 23, her lawyer Pichit Chuenban said Wednesday.

- a) Lawyer: Potjaman refuses to give interviews
- b) Lawyer refuses Potjaman to give interviews
- c) Potjaman interviews refuses to give lawyer
- d) Potjaman refuses lawyer to give interviews

(42.) (BangkokPost.com) - Ousted premier Thaksin Shinawatra issued a statement Tuesday pointing out three reasons why his wife Khunying Potjaman decided to return to Thailand this morning.

- a) Thaksin explains why wife returns to Thailand
- b) Thaksin explains wife why returns to Thailand
- c) Wife explains why returns Thaksin to Thailand
- d) Why Thaksin returns wife to Thailand explains

(43.) The cabinet has approved the procurement by the Royal Thai Air Force of six Swedishmade Gripen jet fighters with a cost of 19 billion baht.

Government spokesman Chaiya Yimwilai said the air force earlier planned to buy six USmade F-5E fighters but finally chose the Swedish jets for deployment as multi-role combat aircraft.

- a) Billions approves for Swedish Cabinet jets
- b) Cabinet approves billions for Swedish jets
- c) Swedish Cabinet approves billions for jets
- d) Swedish approves Cabinet billions for jets

(44.) Munich - Juergen Klinsmann, who led Germany to third place at the 2006 World Cup, was on Friday sensationally appointed Bayern Munich coach from next season onwards.

a) Juergen Klinsmann appointed Munich coach from next season

b) Munich coach appointed Juergen Klinsmann from next season

- c) Juergen Klinsmann coach appointed Munich from next season
- d) Next season coach appointed Juergen Klinsmann from Munich

(45.) London- Kevin Keegan says he wants Newcastle United fans to dream again, but has urged them to be patient and give him time to make a difference in his second spell in charge of the English Premier League for the second time.

- a) Keegan can dream but Newcastle fans must be patient
- b) Keegan says Newcastle fans can dream but must be patient
- c) Newcastle fans can dream but Keegan must be patient
- d) Newcastle fans says Keegan can dream but must be patient

Part 5: Reading Comprehension

Instructions: Answer each question by choosing the most appropriate answer.

More 'quality' tourists count

Tourism revenue last year surged 10 per cent to Bt530 billion, according to the Tourism and Sports Ministry.

Minister Suvit Yodmani said yesterday that of the total, Bt377.8 billion was generated by domestic tourism, up 17.14 per cent from the previous year.

"The number of domestic trips was only 81.99 million, or up 0.61 per cent from the previous year, but revenue rose significantly. This shows that we're on the right track in promoting quality tourism. Despite the fewer trips, revenue grew significantly," he said.

46. Which statement is correct?

- a) Domestic trips last year increased but people spent less money.
- b) Domestic trips last year decreased but people spent more money.
- c) Domestic trips last year increased sharply and people spent much more money.
- d) Domestic trips last year increased very little but people spent much more money.

Developers say rules will cut profits

Green law will offset power use with trees

Proposed changes to environmental impact assessments (EIAs) relating to green space and air conditioning have raised concerns among condominium developers who fear lower profit margins.

Teerachon Manomaiphibul, chief operating officer of the listed developer Property Perfect Plc, said the new proposed EIA measures require projects with more than 79 units to have one tree per tonne of British Thermal Unit (BTU) capacity of air-conditioning systems. He said the measure would increase costs by 10-20% due to limited space for unit development.

"Every new project faces this problem," he said. "Many need to revise plans by reducing units to have enough space to plant trees. This will increase prices per square metre or developers will need to have lower margins."

Meanwhile, to maintain a gross profit margin of 35%, the average price per square metre would have to be increased to 65,000 baht from 55,000 baht, said Mr. Teerachon.

"It's a trade-off for condominium buyers. If they buy a project that received EIA approval before new measures, they will pay lower prices.," he added.

Noble president Thongchai Busrapan said the EIA board suggested that any project with more than 100 units should receive EIA approval before selling units to customers to prevent a possible problem such as an adjustment in the plan.

"The board should consider applying international standards that allow developers to plant the trees elsewhere like in the park or allow them to contribute money to environment-related organisations," Mr. Thongchai said.

47. What is NOT Teerachon Manomaiphibul's opnion?

- a) Customers have to pay more for more green space in condominiums.
- b) New EIA will decrease the condominium builders' profits.
- c) New EIA will increase the condominium builders' costs.
- d) New EIA will give more green space to condominiums.

48. According to newly proposed EIA measures,

- a) the bigger a condominium is, the more trees it should have in its area.
- b) the bigger a condominium is, the more air conditioners it should have in its area.
- c) the bigger a condominium is, the more trees it should plant in the forests.
- d) the bigger a condominium is, the more money it should pay to environmental agencies.

Biodiesel squeezes palm supply

Palm oil prices have jumped sharply in recent months, leading authorities to consider a ban on exports. Palm oil is a raw material for cooking oil, the food industry and as an alternative fuel.

A Commerce Ministry panel that monitors palm oil prices yesterday recommended that the government import 30,000 tonnes of crude olein, the liquid component of palm kernel oil, to ease supply shortages. The proposal will be considered today by the Edible Oil Policy Board, chaired by Commerce Minister Krirk-krai Jirapaet.

But the Palm Oil and Oil Palm Association and the Palm Oil Crushing Mill Association have come out against the proposal as doing little to address current problems.

Thavee Srisukon, the president of the Palm Oil and Oil Palm Association, said crude olein in Malaysia was now quoted at 35 baht per kilogramme. After transport costs, insurance and tariffs are included, import prices differed little from domestic prices, which in any case had moved upward in line with global prices.

Charnchit Nawongsri, the general manager of Asian Palm Oil Co, said palm oil prices should ease over the next few weeks with the start of the new harvest season.

He cautioned that any move to import palm oil could affect local farmers if supply outstrips demand.

49. What is Mr. Thavee Srisukon's opinion to palm oil import?

- a) Palm oil should be imported to reduce domestic price.
- b) Palm oil should be imported from Malaysia because it is cheaper.
- Palm oil should NOT be imported because its price is not different from domestic one.
- d) Palm oil should NOT be imported because it will lower the domestic price.

50. What is Mr. Charnchit Nawongsri opinion to palm oil import?

- a) Palm oil should be imported to reduce domestic price.
- b) Palm oil should be imported from Malaysia because it is cheaper.
- Palm oil should NOT be imported because its price is not different from domestic one.
- d) Palm oil should NOT be imported because it will lower the domestic price.

False fare offers should be illegal

Is there any truth in advertising in your travel pages? I think not.

Many airlines and travel agencies advertise fares to Singapore for 2,500 to 4,500 baht, round trip.

Try buying at this price. I ended up paying 11,100 baht for a round-trip ticket. One discount airline ad says their one-way fare is \$29.95. Such claims are false and should be illegal.

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I know they're going to claim they have to add fuel surcharges, taxes, oh, and a seat, but they know what the real cost is going to be, so why aren't they being honest with the paying public and why are you letting them get away with this false advertising? Shame on you all.

THE TRUTH FAIRY

- 51. What kind of product/service did the "THE TRUTH FAIRY" complain of?
 - a) air ticket
 - b) boat ticket
 - c) bus ticket
 - d) train ticket

52. According to the writer, he or she bought the product/ service _____

- a) cheaper than it was advertised
- b) more expensive than it was advertised
- c) as same price as it was advertised
- d) that was NOT advertised

Chain can also make shopping less painful

I am very pleased to read that Tesco Lotus is going to at least attempt to use alternative, clean sources of energy for its stores and I hope that other large retailers will follow their example.

Now if they could ban the use of microphones and loudspeaker systems that blast shoppers with an unending sales spiel. While this might not save a huge amount of energy, it would make shopping in their stores a less painful experience.

SHOPPER

53. What does the "SHOPPER" want Tesco Lotus to do?

- a) to close the store earlier to save the energy
- b) to sell products in cheaper prices
- c) to stop using loud advertisement in their stores
- d) to use clean energy source

Abhisit might be too decent to get elected

I don't know if Mr. Abhisit should resign as Mr. Walpole suggests (Postbag, Jan 27), but it does appear that he needs to change his image.

Judging by the results of the last election, it appears clear that the majority of voters prefer a big-mouthed, authoritarian braggart who speaks before he thinks and has been involved in questionable financial activities in the past.

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As far as I can tell, Mr. Abhisit is none of these and needs to stop being so decent, honourable, gentlemanly and reflective if he ever hopes to appeal to a majority of the voters.

CYNIC

54. What was the opinion of "CYNIC"?

- a) He thought that Mr. Abhisit should resign from Democrat Party.
- b) He thought that Mr. Abhisit should change his personality.
- c) He thought that Mr. Abhisit should NOT change his personality.
- d) No He thought that Mr. Abhisit should NOT resign from Democrat Party.

55. According to "CYNIC", what is the personality Mr. Abhisit does NOT have?

- a) Decent
- b) Polite
- c) Quick-tempered
- d) Respectable

Vaccination is not an option

No one could envy the bird flu committee, caught as it was between chicken meat exporters up in arms over the proposed vaccination of chickens, and claiming that this would ruin the Thai chicken export industry, and an equally large number of fighting cock breeders and layer hen farmers demanding vaccination of their fowls against the killer H5N1 virus. The committee was asked to make a Solomonic decision able to satisfy both camps.

That was probably impossible, and the panel headed by Deputy Prime Minister Chaturon Chaisaeng opted yesterday against vaccination in dealing with avian influenza. That was the right decision given the circumstances, and the opponents will just have to learn to live with it.

While banning their use, the committee recognised the need for further experiments with vaccines and their possible use should there ever be a major outbreak of bird flu. There is no need for Thailand to introduce vaccinations against bird flu just now, especially on a large scale, and for a number of reasons.

First off, there is not the bird flu crisis now that there was in January, when millions of birds had to be killed across the country to prevent the spread of the disease. Although there have been occasional, repeat outbreaks in some areas so hard hit by the killer flu earlier this year, the authorities appear better equipped and more experienced in dealing with the situation. The disease has been kept under control.

Secondly, vaccinating the entire poultry population will place Thailand's lucrative chicken meat industry in wholly unnecessary jeopardy. Some importers in Europe and Japan have already warned that they might halt Thai chicken meat imports because there is no guarantee any "contaminated" meat is 100% safe. Domestic consumers might also shun the "contaminated" meat.

An even more disturbing aspect of general vaccination is the possibility, no matter how remote, that the virus will develop immunity against vaccines and mutate into something far more threatening. In Mexico, the virus mutated and became more deadly. In any case, it has been shown in countries that have vaccinated widely against bird flu that this has not stopped the virus from returning.

The World Health Organisation hit the nail on the head when it criticised Thailand's lax monitoring of poultry movements, especially fighting cocks, and the contribution this has made to fresh outbreaks of bird flu, and human infections of the disease. Most fresh cases have been in areas that had been affected earlier, which clearly indicates the H5N1 virus has not been eradicated as effectively as it should have been. This could be because the farmers did not destroy all of their bird stocks or because they did not clean their properties as thoroughly as recommended. Or they could have ignored the warnings not to introduce new stocks before a safe passage of time.

Instead of vaccination and the uncertainties that accompany it, especially on the safety aspects, more attention will need to be given to the health of birds. This means improving the environment in which the poultry are raised. Experts recommend a closed system in which the birds are housed in factories equipped with ventilation and temperature control systems. But a drawback to this system is that the birds lose their natural immunity and a single infection can spread quickly to an entire factory.

Bird flu poses a serious threat to poultry stocks and to human populations. Greater effort must be given to fighting the disease in whichever country it develops. In Thailand, the lax monitoring blamed for the re-emergence of the disease needs to be corrected. The raisers of poultry, especially fighting cocks, will have to understand that they must cooperate to defeat this disease – for their own safety and for the safety of the public as a whole. Failing that, they should be dealt with according to the letter of the law.

56. The editorial described the decision the bird flu committee had to make on vaccinations as "Solomonic" because

- a) it was not difficult to make
- b) the choices were very clear
- c) no decision could satisfy everyone
- d) the issues involved were complex

- 57. The editorial generally
 - a) opposed the committees decision
 - b) supported the committee's decision
 - c) refused to either support the committee's decision or oppose it
 - d) suggested a different way of dealing with the situation
- 58. Which one of the following groups most favour the use of avian vaccinations?
 - a) Owners of Thai fighting cocks
 - b) Thai Chicken exporters
 - c) WHO officials
 - d) Thai officials in the Agriculture Ministry.

59. All the following reasons were used to make the case against vaccinations except

- a) vaccinations are not needed at this time
- b) it could endanger the chicken export industry
- c) existing vaccines are not yet ready for widespread use
- d) it could result in dangerous mutations in the virus

60. The editorial recommended that two things must be done: (1) conditions affecting the health of poultry must be improved and (2)

- a) new types of chickens must be introduced
- b) fighting cocks must be kept in carefully controlled closed environments
- c) the H5N1 must be completely eradicated through spraying
- d) poultry movements within country must be closely watched and controlled

END OF THE TEST

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Appendix 10. List of Experts for Achievement Test Item Validation

The experts who validated the English test items were

- 1. Sittiporn Iamsen Ph.D. (Suan Dusit Rajabhat University)
- 2. Kanokwan Kunlasuth (Suan Dusit Rajabhat University)
- 3. Taddao Chirasawadi (Suan Dusit Rajabhat University)

Appendix 11. Content Validity of the English Language Achievement Test

For content validity, IOC index were applied to analyze content validity of test items. Any items that obtained IOC ≥ 0.67 were selected to use in the pilot study. Index of IOC in this achievement test is 0.978 and that could be interpreted that the test is valid.

Objectives	Items		IOC scores		Mean scores
		1 st	2 nd	3 rd	
		experts	experts	experts	
Students are able to	1	1	1	1	1
write news headlines	2	1	1	1	1
by using the	3	1	1	1	1
appropriate syntactic	4	1	1	1	1
features	5	1	1	1	1
	6	1	1	1	1
	7	1	1	1	1
	8	1	1	1	1
	9	1	1	1	1
	10	1	1	1	1
	11	1	1	1	1
	12	1	1	1	1
	13	1	1	1	1
	14	1	1	1	1
	15	1	1	1	1
	16	1	1	1	1
	17	1	1	1	1
	18	1	1	1	1
	19	1	1	1	1
	20	1	1	1	1
Students are able to	21	1	1	1	1
write news headlines	22	1	1	1	1
by using the	23	1	1	1	1
appropriate lexical	24	1	1	1	1
features.	25	1	0	1	0.67
	26	1	0	1	0.67
	27	1	1	1	1
	28	1	0	1	0.67
	29	1	1	1	1
	30	1	1	1	1
	31	1	1	1	1
	32	1	1	1	1
	33	1	1	1	1

Objectives	Items		IOC scores		Mean scores
		1 st	2^{nd}	3 rd	
		experts	experts	experts	
	34	1	1	1	1
	35	1	1	1	1
	36	1	1	1	1
	37	1	0	1	0.67
	38	1	1	1	1
	39	1	1	1	1
	40	1	1	1	1
Students are able to	41	1	1	1	1
read news stories and	42	1	1	1	1
answers	43	1	1	1	1
comprehension	44	1	1	1	1
exercises correctly	45	1	1	1	1
	46	1	1	1	1
	47	1	1	1	1
	48	1	1	1	1
	49	1	1	1	1
	50	1	1	1	1
	51	1	1	1	1
	52	1	1	1	1
	53	1	1	1	1
	54	1	1	1	1
	55	1	1	1	1
	56	1	1	1	1
	57	1	1	1	1
	58	1	1	1	1
	59	1	1	1	1
	60	1	1	1	1
Total IOC					0.978

Appendix 12: Difficulty Level and Discrimination Power of the English Language Achievement Test

Items in the English Language achievement test in the main study obtained item difficulty level (p = 0.20-0.80), and item discrimination power ($d \ge 0.15$). Some "poor" items were revised, before they were used in the main study.

Items	Difficulty	Discrimination
	level	Power
1	0.20> <i>p</i> <0.80	$\mathbf{D} \ge 0.15$
1	0.25	0.25
2 3	0.55	0.45
	0.5	0.3
4 5	0.6	0.3
	0.3	
6	0.65	0.35
7	0.6	0.4
8	0.6	0.2
9	0.35	0.15
10	0.45	0.15
11	0.25	0.15
12	0.45	0.25
13	0.8	0.2
14	0.3	0.2
15	0.65	0.25
16	0.65	0.35
17	0.5	0.2
18	0.45	0.15
19	0.75	0.25
20	0.75	0.15
21	0.55	0.15
22	0.3	0.2
23	0.55	0.35
24	0.35	0.15
25	0.25	0.15
26	0.3	0.2
27	0.65	0.25
28	0.45	0.35
29	0.4	0.2
30	0.3	0.2
31	0.3	0.2
32	0.65	0.25

Items	Difficulty	Discrimination
	level	Power
	0.20> <i>p</i> <0.80	D ≥ 0.15
33	0.3	0.3
34	0.55	0.15
35	0.35	0.15
36	0.25	0.25
37	0.25	0.25
38	0.5	0.4
39	0.5	0.3
40	0.25	0.25
41	0.55	0.25
42	0.8	0.2
43	0.55	0.25
44	0.65	0.15
45	0.75	0.15
46	0.55	0.15
47	0.25	0.15
48	0.5	0.3
49	0.35	0.25
50	0.35	0.25
51	0.75	0.25
52	0.65	0.25
53	0.55	0.25
54	0.3	0
55	0.25	0.25
6	0.35	0.15
57	0.35	0.15
58	0.25	0.15
59	0.35	0.15
60	0.3	0.2
Mean	0.463	0.227

Note: Item #54 was revised for some ambiguity in item options before it was included in the main study achievement test.

Appendix 13. Reliability of the English Language Achievement Test

The English language achievement test results from the pilot study were assessed for internal consistency by applying Kuder-Richardson (KR-20). However, SPSS, a statistics processor, could calculate the internal consistency of the test by applying Cronbach's alpha and had the same result as KR-20 does (Best & Kahn, 1986), so the Cronbach's alpha was used to find reliability of the test instead.

The Cronbach's alpha = 0.898 means the test is reliable.

Cronbach's Alpha	N of Items
.898	60

Reliability Statistics

Appendix 14. List of Experts for Student Engagement Questionnaire Item Validation

The experts who validated items to assess student engagement were

- 1. Assistant Professor Kasamaporn Maneekhao (King Monkut's University of technology Thonburi)
- 2. Assistant Professor Kanjana Chattrakul, Ph.D. (Suan Dusit Rajabhat University)
- Associate Professor Sugree Rodpothong. Ph.D. (Chulalongkorn University)

All of them were qualified with the following characteristics:

- Held an M.A. or Ph.D. in English, Teaching English as a Second Language, Teaching English as a Foreign Language, Applied Linguistics, Linguistics, Mass Communication or related fields;
- Had at least 2 year experience in implementing collaborative language learning, task-based language teaching, or network-based language teaching in language teaching;
- 3. Were involved in academic research concerning collaborative learning, task-based language teaching, or network-based language teaching.

Appendix 15. Content Validity of Items to Assess Affective Engagement

The IOC index of these items = 0.97, so the items to assess affective engagement are considered to be valid.

Sub criteria	Items	คำถาม	E	xpe	rts	Mean scores
			1	2	3	
Emotions	1. I feel happy in this course.	 ฉันรู้สึกมีความสุขเวลาเรียน วิชานี้ 	1	1	1	1
	2. I feel bored in this course.	2. ฉันรู้สึกเบื่อเวลาเรียนวิชานี้	1	1	1	1
	3. I feel nervous in this course.	 ฉันรู้สึกวิตกกังวลเวลาเรียน วิชานี้ 	1	1	1	1
	4. I feel confused in this course.	4. ฉันรู้สึกสับสนเวลาเรียนวิชานี้	1	1	1	1
	5. I enjoy the work I do in class.	 ฉันสนุกกับกิจกรรมต่างๆใน วิชานี้ 	1	1	1	1
Attitudes	6. I like studying in the class.	6. ฉันซอบเรียนวิชานี้	1	1	1	1
	7. I like this course teacher.	7. ฉันซอบอาจารย์ผู้สอน	1	1	1	1
	8. The teacher is knowledgeable.	 อาจารย์ผู้สอนเป็นผู้มีความรู้ ในวิชาที่สอน 	1	1	1	1
	9. The teacher is friendly.	9. อาจารย์ผู้สอนเป็นมิตร	1	1	1	1
	10. The teacher is supportive.	10. อาจารย์ผู้สอนให้ความ ช่วยเหลือแก่ผู้เรียน	1	1	1	1
	11. The teacher is available.	11. อาจารย์ผู้สอนพร้อมและมี เวลาให้ผู้เรียน	1	1	1	1
	12. I feel I am a valuable person in my group.	12. ฉันรู้สึกว่าฉันเป็นบุคคลที่มีค่า สำหรับกลุ่มของฉัน	1	1	1	1
	13. Other students are friendly.	13. นักศึกษาคนอื่นๆเป็นมิตรกับ ฉัน	1	1	0	0.67
	14. Other students are	14. นักศึกษาคนอื่นๆ ให้ความ	1	1	1	1

Sub criteria	Items	คำถาม	Experts			Mean scores
			1	2	3	-
	supportive.	ช่วยเหลือฉัน				
	15. The activities in the class are interesting.	15. กิจกรรมต่างๆในวิชานี้ น่าสนใจ	1	1	1	1
	16. The learning environment is safe.	 สภาพแวดล้อมในห้องเรียนให้ ความรู้สึกปลอดภัย 	1	1	0	0.67
	17. The learning environment is supportive.	17. สภาพแวดล้อมในห้องเรียนมี ลักษณะช่วยเหลือซึ่งกันและ กัน	1	1	1	1
	18. I developed enthusiasm and interest to learn more about course content.	18. ฉันรู้สึกกระตือรือร้นและสนใจ ที่จะศึกษาเพิ่มเติมเนื้อหาที่ เรียนให้มากขึ้น	1	1	1	1
	19. I am confident that I can learn and do well in class.	19. ฉันมั่นใจว่าฉันสามารถเรียน วิชานี้ได้ดี	1	1	1	1
Values	20. I think I can apply theories and concepts from this class to practical problems.	20. ฉันคิดว่าฉันสามารถปรับใช้ ทฤษฎีและแนวคิดในวิชานี้ เพื่อแก้ปัญหาในจริงได้	1	1	1	1
	21. I think theories and concepts from this class will be valuable for my career in the future.	21. ฉันคิดว่าทฤษฎีและแนวคิด ในวิชานี้จะเป็นประโยชน์กับ งานในอนาคตของฉัน	1	1	1	1
Total IOC						0.97

Appendix 16. Reliability of Items to Assess Affective Engagement

Items to assess affective engagement are reliable. The internal consistency assessed by Cronbach's Alpha is 0.857.

	Cronbach's Alpha Based	
	on	
Cronbach's	Standardized	
Alpha	Items	N of Items
.857	.871	24

Reliability Statistics

Appendix 17. Content Validity of Items to Assess Behavioral Engagement

The IOC index of these items = 0.90, so the items to assess behavioral engagement are considered to be valid.

Sub-	Items	คำถาม	Ex	kpe	rts	Mean
element			1	2	3	scores
Attendance	1. I came to class on time.	1. ฉันมาเรียนตรงเวลา	1	1	1	1
Preparation	2. I came to class with readings in advance.	 ฉันอ่านหนังสือล่วงหน้า ก่อนมาเข้าชั้นเรียน 	1	1	1	1
	3. I think I can apply theories and concepts from this class to practical problems.	 ฉันคิดว่าฉันสามารถปรับ ใช้ทฤษฎีและแนวคิดใน วิชานี้ เพื่อแก้ปัญหาในจริง ได้ 	1	1	1	1
	4. I think theories and concepts from this class will be valuable for my career in the future.	 ฉันคิดว่าทฤษฎีและ แนวคิดในวิชานี้จะเป็น ประโยชน์กับงานใน อนาคตของฉัน 	1	1	1	1
Attention	5. I listened carefully in class.	 ในชั้นเรียน ฉันฟังอย่าง ตั้งใจ 	1	1	1	1
	6. I took good notes in class.	 ในชั้นเรียน ฉันจดบันทึก ย่ออย่างดี 	1	1	1	1
	7. I willingly answered teacher's questions.	 จันตอบคำถามของ อาจารย์อย่างตั้งใจ 	1	1	1	1
	8. When I was in class, I just pretended I am working. (negative)	 เมื่อในห้องเรียน ฉันแกล้ง ทำเป็นว่าฉันกำลังตั้งใจ เรียนอยู่ 	1	1	0	0.67
Asking questions	9. I asked questions when I did not understand.	 จันถามคำถามเมื่อฉันไม่ เข้าใจ 	1	1	1	1

Sub-	Items	คำถาม	E	spe	rts	Mean
element			1	2	3	scores
Contribution	10. I complete my homework on time.	10. ฉันทำการบ้านเสร็จตรง เวลา	1	1	1	1
	11. I participated actively in small group discussions.	 11. ฉันเข้าร่วมการอภิปราย กลุ่มย่อยอย่างกระตือรือรัน 	1	1	1	1
	12. I tutored or taught other students.	12. ฉันให้คำแนะนำหรือสอน นักเรียนอื่นๆ	1	1	1	1
	13. I worked actively with other students on activities during	 ในขั้นเรียน ฉันทำงานกลุ่ม ร่วมกับนักเรียนคนอื่นๆ อย่างกระตือรือร้น 	1	1	1	1
	class. 14. I worked actively with classmates outside of class to prepare class assignment.	ขยางกระดขรขรน 14. นอกห้องเรียน ฉันร่วมมือ กับนักเรียนคนอื่นเพื่อ ทำงานที่ได้รับมอบหมาย อย่างกระตือรือร้น	1	1	1	1
Effort	15. I worked harder than I thought I could to meet an instructor's standards or expectations.	 15. ฉันทำงานหนักกว่าที่ฉัน คาดว่าจะทำ เพื่อให้ตรง กับเกณฑ์หรือตามความ คาดหวังของอาจารย์ผู้สอน 	1	1	0	0.67
	16. I had conversations with the teacher to review assignments or tests or to ask questions.	 16. ฉันคุยกับอาจารย์ผู้สอน เพื่อปรึกษาเกี่ยวกับงาน ข้อสอบหรือ เพื่อถาม คำถามในประเด็นที่ฉันไม่ เข้าใจ 	1	1	0	0.67
Total IOC						0.90

Appendix 18. Reliability of Items to Assess Behavioral Engagement

Item to assess behavioral engagement are reliable. The internal consistency assessed by Cronbach's Alpha is 0.765.

ſ		Cronbach's Alpha Based	
I		on	
I	Cronbach's	Standardized	
	Alpha	Items	N of Items
ſ	.765	.771	15

Reliability Statistics

Appendix 19. Self-Evaluated Rating Scale Questionnaires for Affective and Behavioral Engagement Assessment

This is a sample of a self-evaluate rating scale questionnaire to assess affective and behavioral engagement that was distributed to students in the control and experimental groups. The questionnaire was translated into Thai for better understanding.

แบบสอบถามเรื่องผลกระทบของการใช้และไม่ใช้เครือข่ายคอมพิวเตอร์ใน การสอนตามแนวคิดการเรียนรู้แบบร่วมงานต่อผลสัมฤทธิ์ในการเรียน ภาษาอังกฤษและสภาวะผูกพันของนักศึกษาระดับปริญญาบัณฑิต

แบบสอบถาม	มฉบับนี้แปงออกเป็นสามตอน ดังนี้
ตอนที่ เ	ข้อมูลทั่วไป
ตอนที่ 2	ลภาวะผูกพันทางอารมณ์
ดอนที่ 3	สภาวะผูกพันทางพฤติกรรม

คำตอบในแบบสอบถามจะได้รับการเก็บไว้เป็นความลับและจะไม่นำไปเผยแพร่ก่อนได้รับความเห็นชอบ จากท่าน และคำตอบจากแบบสอบถามนี้จะไม่มีผลโดๆต่อคะแนนของท่านในวิชาภาษาอังกฤษใน สื่อมวลชน ดังนั้นขอให้ท่านตอบตามความเป็นจริง

ตอนที่ 1	ข้อมูลทั่วไป
คำซี้แจง	กรุณาทำเครื่องหมาย (X) ลงในช่องแสดงระดับตามความเป็นจริง

	PISALOGT	NIL	ฉันขาดเรียน
 ในลัปดาห์ที่แล้ว ฉันมาเรียนวิชาภาษาอังกฤษใน สี่อมวลชน 			
 ในสัปดาห์นี้ ฉันมาเรียนวิชาภาษาอังกฤษในสื่อมวลชน 		-	

	ทุกครั้ง- แทบทุก ครั้ง 100-	ป่อยครั้ง	บางครั้ง	นัขย ครั้ง	แทบไม่ เคย-ไม่ เคยเลย
		80-61%	60-41%	40-	20-0%
and a start	81%		-	21%	-
 ฉันรู้สึกมีความสุขเวลาเรียนวิชานี้ 			_		
 ฉันรู้สึกเบื่อเวลาเรียนวิชานี้ 		· · · · ·		1	1
 ฉันรู้สึกวิตกกังวลเวลาเรียนวิชานี้ 					
 ฉันรู้สึกสบลนเวลาเรียนวิชานี้ 					
 ฉันสนุกกับกิจกรรมต่างๆในวิชานี้ 		1.1		1	
8. ฉันขอบเรียนวิชานี้		ÌI I I		ÌП	
 อาจารย์ผู้สอนเป็นผู้มีความรู้ในวิชาที่สอน 					
10. อาจารย์ผู้สอนเป็นมิตร				1	
11. อาจารย์ผู้สอนให้ความช่วยเหลือแก่ผู้เรียน				1	
12. อาจารย์ผู้สอนพร้อมและมีเวลาให้ผู้เรียน				1.1	
13. ฉันรู้สึกว่าฉันเป็นบุคคลที่มีค่าสำหรับกลุ่มของฉัน	17.1				
14. นักศึกษาคนขึ้นๆเป็นมิตรกับชัน	1.1.1	11			
15. นักศึกษาคนอื่นๆ ให้ความช่วยเหลือฉัน					
16. กิจกรรมต่างๆในวิชานี้น่าสนใจ				i i i	
17. วิธีการสอนในวิชานี้ทำให้ลับเข้าใจบนเรียนได้ดี				13.0	
18: สภาพแวดล้อมในห้องเรียนให้ความรู้สึก ปลอดภัย					
19. สภาพแวดล้อมในห้องเรียนมีลักษณะช่วยเหลือ				121	

ตอนที่ 2	สภาวะผูกพันทางอารมณ์
คำชี้แจง	กรุณาทำเครื่องหมาย (X) ลงในช่องแสดงระดับตามความเป็นจริง

2] Pāģē

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	ทุกครั้ง- แทบทุก ครั้ง	ปอยครั้ง	บางครั้ง	นัยย ครั้ง	แทบไม่ เคย-ไม่ เคยเลย
	100-	80-61%	60-41%	40-	20-0%
	81%			21%	
ซึ่งกันและกัน	1				
20. สื่อการลอนโนวิชานี้น่าลนใจ					
21. สื่อการสอนทำให้ฉันเข้าใจเนื้อหาได้ดียิ่งขึ้น				1	
22. ฉันรู้สึกกระตือรือรับและสนใจที่จะศึกษาเพิ่มเติม เนื้อหาที่เรียนให้มากจิ้น					1
23. ฉันมั่นใจว่าฉันสามารถเรียนวิชานี้ได้ดี					
24. การเรียนวิชานี้ช่วยพัฒนาทักษะภาษาอังกฤษ โดยรวมของฉัน					
25. ฉันคิดว่าฉันตามารถปรับใช้ทฤษฎีและแนวคิดใน วิชานี้ เพื่อแก้บัญหาในชีวิตจริงได้					
26. ฉันคิดว่าทฤษฎีและแนวศัตในวิชานี้จะเป็น ประโยชน์กับงานในขนาคตของฉัน					

3) Page

ตอนที่ 3 สภาวะแกพันทางพฤติกรรม

คำชี้แจง กรุณาทำเครื่องหมาย (X) ลงในช่องแสดงระดับตามความเป็นจริง

	ทุกครั้ง- แทบทุก ครั้ง 100-	บ่อยครั้ง	บางครั้ง	น้อยครั้ง	แทรไป เคราไป เคราเลย
	100- 81%	80-61%	60-41%	40-21%	20-0%
27. ฉันอ่านหนังสือส่วงหน้าก่อนมาเข้าชั้นเรียน					
28. ในขึ้นเรียน ลันฟังอย่างตั้งใจ					
29. ในขั้นเรียน ฉันจดเป็นที่กย่ออย่างดี		11			
30. ฉันตอบค้าถามของอาจารย์อย่างตั้งใจ		11.000			
31. เมื่อในห้องเรียน ฉันแกล้งทำเป็นว่าฉันกำลังตั้งใจเรียนอยู่					
32. ฉันถามคำถามเมื่อฉันไม่เข้าใจ					
33. ฉันทำการบ้านเสร็จตรงเวลา		11.7.1			-
34. ฉันเข้าร่วมการอภิปรายกลุ่มช่อของ่างกระดือรื่อรับ			1111		
35. ฉันให้คำแนะนำหรือลอนนักเรียนอื่นๆ		1.	1	TT H	
36. ในขึ้นเรียน ฉันท้างวนกลุ่มร้วมกับนักเรียนคนอื่นๆอย่าง กระตีอร์อรัน					
37, นอกห้องเรียน สันร่วมมือกับนักเรียนคนอื่นเพื่อทำงานที่ ได้รับมอบหมายอย่างกระตีอริอรัน					
38. ฉันพยายามท้างานที่อาจารย์กำหนดอย่างสุด ความสามารถ					
39. ฉันทำงานหนักกว่าที่ฉันคาดว่าจะทำ เพื่อให้ตรงกับเกณฑ์ หรือตามความคาดหวังของอาจารย์ผู้ตอน				-	
40. ฉันคุยกับอาจารย์ผู้สอนเพื่อปรึกษาเกี่ยวกับงาน ข้อสอบ หรือ เพื่อถามคำถามในประเดินที่ฉันไม่เข้าใจ			i i i i	1	

415100

Appendix 20. Content Validity of Items to Assess Cognitive Engagement

The IOC index of these items = 0.88, so the items designed to assess cognitive engagement in this study are considered to be valid.

Sub		Items	คำถาม	E	Experts		Mean
elements				1	2	3	scores
Remem bering	lea	ecalled what I rned in the past o weeks.	 ฉันระบุได้ว่าในช่วงสอง สัปดาห์ที่ผ่านมา ฉันเรียน เรื่องอะไร 	1	1	1	1
	WO	ecalled new rds I learned in past two weeks.	 ฉันระบุได้ว่าในสองสัปดาห์ที่ ผ่านมา ฉันรู้ศัพท์ใหม่ อะไรบ้างเพิ่มขึ้น 	1	1	1	1
Under standing	cor for	Immarized the Intents I learned in ms of tables or nd map.	 ฉันสรุปเนื้อที่ฉันเรียนในรูป ของตารางหรือรูปภาพ โครงข่ายความคิด 	1	1	1	1
	ma	ummarized the in ideas of the ws I read.	 ฉันสรุปเนื้อหาสำคัญของข่าว ที่ฉันอ่าน 	1	1	1	1
	stu wit	elated the content died this week h ones eviously studied.	 ฉันเชื่อมโยงเนื้อหาที่เรียนใน สัปดาห์นี้ กับเนื้อหาอื่นที่ เรียนไปก่อนหน้า 	1	1	1	1
	cor stu	xplained the ntents to other dents who did t understand.	 6. ฉันอธิบายเนื้อหาในบทเรียน ให้กับนักศึกษาคนอื่นๆที่ไม่ เข้าใจ 	1	0	1	0.67
	que fro tex		 จันสามารถแก้ข้อสงสัยต่างๆ ที่ฉันพบจากบทเรียน ได้ 	1	1	1	1
	que fro	ould solve estions I found m the news ries I read.	8. ฉันสามารถแก้ข้อสงสัยต่างๆ จากข่าวที่ฉันอ่านได้	1	1	1	1

Sub	Items	คำถาม	E	xper	ts	Mean
elements			1	2	3	scores
	9. I found others samples that could add up to ones in the learning text.	 ชันได้พบตัวอย่างอื่นๆที่ สามารถนำมาเสริมตัวอย่าง ในบทเรียน 	1	0	1	0.67
Applying	10. I adapted what I have learned in this class with other courses.	10. ฉันได้นำความรู้ที่ได้เรียนใน วิชานี้ไปปรับใช้กับวิชาอื่นๆ	0	1	1	0.67
	11. I wrote a news headline that is more appropriate than the original one.	 11. ฉันได้เขียนหัวข้อข่าวที่ เหมาะสมกว่า หัวข้อข่าว ของข่าวที่ฉันได้อ่านแล้ว 	0	1	1	0.67
	12. I interviewed people for writing my own news stories.	12. ฉันได้สัมภาษณ์บุคคลเพื่อ เขียนข่าว	1	1	1	1
	13. I wrote a short news story (a headline and a lead) to report the current event.	 13. ฉันได้เขียนข่าวสั้น ซึ่ง ประกอบด้วยหัวข้อข่าวและ ข่าวน้ำ เพื่อรายงาน เหตุการณ์ที่เกิดขึ้นรอบตัว 	1	1	1	1
Analyzing	14. I found discrepancies in a similar news story on different newspapers	 14. ฉันได้เปรียบเทียบข่าว เดียวกัน กับหนังสือพิมพ์ ฉบับอื่น แล้วพบความ แตกต่าง 	1	1	1	1
	15. From a news story I read, I differentiated facts out of opinions.	15. จากข่าวที่ฉันอ่าน ฉันได้แยก ข้อเท็จออกจากความคิดเห็น	0	1	1	0.67
	16. From the interview data, I differentiated facts out of opinions.	 จากข้อมูลของบุคคลที่ฉัน สัมภาษณ์ ฉันสามารถแยก ข้อเท็จจริงออกจากความ คิดเห็นได้ 	1	1	1	1
Evaluating	17. From a news story I read, I found it is	17. จากข่าวที่ฉันอ่าน ฉันได้	0	1	1	0.67

Sub	Items	คำถาม	E	Experts		Mean
elements			1	2	3	scores
	valid and reliable.	ประเมินว่าข่าวดังกล่าวมี ความเที่ยงตรง เชื่อถือได้				
	18. From a news story I read, I found it is invalid and unreliable.	ความเทยงตรง เชชถอเต 18. จากข่าวที่ฉันอ่าน ฉันได้ ประเมินว่าข่าวดังกล่าวไม่มี ความเที่ยงตรงและขาด ความน่าเชื่อถือ	0	1	1	0.67
	19. From the interview data, I found it is valid and reliable.	19. จากข้อมูลของบุคคลที่ฉัน สัมภาษณ์ ฉันระบุได้ว่า ข้อมูลดังกล่าวมีความ เที่ยงตรงและน่าเชื่อถือ	1	1	1	1
	20. I wrote a letter to editor to express my opinion toward current situation, supporting with concrete reasons.	20. ฉันเขียนจดหมายถึง บรรณาธิการเพื่อแสดงความ คิดเห็นต่อสถานการณ์ ปัจจุบันพร้อมด้วยเหตุผล ประกอบที่ชัดเจน	0	1	1	0.67
Creating	21. I wrote news stories to report current situations from valid and reliable sources completing with headlines, leads, bodies, cuts and captions.	 21. ฉันเขียนข่าวรายงาน เหตุการณ์ปัจจุบัน จาก แหล่งข่าวที่เที่ยงตรงเชื่อถือ ได้ ประกอบครบทั้งหัวข่าว ข่าวน้ำ เนื้อข่าว พร้อม ภาพประกอบ และคำ บรรยายใต้ภาพ 	1	1	1	1
	22. I wrote a commentary article that is well supported with critical reasons and concrete evidence.	22. ฉันเขียนบทความเชิง วิจารณ์ที่พร้อมไปด้วย เหตุผลและหลักฐานที่ ชัดเจน	1	1	1	1
Total IOC						0.88

Appendix 21. Reliability of Items to Assess Cognitive Engagement

Item to assess behavioral engagement are reliable. The internal consistency of these items assessed by Cronbach's Alpha is 0.978.

Reliability	Statistics
-------------	------------

Cronbach's Alpha	N of Items
.978	22

Appendix 22. Guiding Questions for Journal Writing

Guiding questions for journal writing to assess affective and behavioral engagement was distributed to students in the control and experimental groups. Similar to a set questionnaire to assess affective and behavioral engagement, the guiding questions were translated into Thai for better understanding.

คำถามสำหรับการเขียนบันทึก

คำชี้แจง

 กาเครื่องหมาย (X) ลงในช่องเพื่อตอบคำถามว่า ในช่วงสองสัปดาห์ที่ผ่านมา นักศึกษาได้ทำกิจกรรม ด้านล่างต่อไปนี้หรือไม่

ข้อ	ฉันได้ทำ	ฉันไม่ได้ทำ
1. ฉันระบุได้ว่าฉันเรียนเรื่องอะไร ในช่วงสองสัปดาห์ที่ผ่านมา		
 ฉันระบุได้ว่าฉันรู้ศัพท์ใหม่อะไรบ้างเพิ่มขึ้น ในสองสัปดาห์ที่ผ่านมา 		
 ฉันสรุปเนื้อที่ฉันเรียนในรูปของตารางหรือรูปภาพโครงข่ายความคิด 		
4. ฉันสรุปเนื้อหาสำคัญของข่าวที่ฉันอ่าน		
5. ฉันเชื่อมโยงเนื้อหาที่เรียนในสัปดาห์นี้ กับเนื้อหาอื่นที่เรียนไปก่อนหน้า		
6. ฉันอธิบายเนื้อหาในบทเรียนให้กับนักศึกษาคนอื่นๆที่ไม่เข้าใจ		
7. ฉันสามารถแก้ข้อสงสัยต่างๆที่ฉันพบจากบทเรียน ได้		
8. ฉันสามารถแก้ข้อสงสัยต่างๆ จากข่าวที่ฉันอ่านได้		
9. ฉันได้พบตัวอย่างอื่นๆที่สามารถนำมาเสริมตัวอย่างในบทเรียน		
10. ฉันได้นำความรู้ที่ได้เรียนในวิชานี้ไปปรับใช้กับวิชาอื่นๆ		
11. ฉันได้เขียนหัวข้อข่าวที่เหมาะสมกว่า หัวข้อข่าวของข่าวที่ฉันได้อ่านแล้ว		
12. ฉันได้สัมภาษณ์บุคคลเพื่อเขียนข่าว		
13. ฉันได้เขียนข่าวสั้น ซึ่งประกอบด้วยหัวข้อข่าวและข่าวน้ำ เพื่อรายงานเหตุการณ์ที่เกิดขึ้น		
รอบตัว		
14. ฉันได้เปรียบเทียบข่าวเดียวกัน กับหนังสือพิมพ์ฉบับอื่น แล้วพบความแตกต่าง		
15. จากข่าวที่ฉันอ่าน ฉันได้แยกข้อเท็จออกจากความคิดเห็น		
16. จากข้อมูลของบุคคลที่ฉันสัมภาษณ์ ฉันสามารถแยกข้อเท็จจริงออกจากความคิดเห็นได้		
17. จากข่าวที่ฉันอ่าน ฉันได้ประเมินว่าข่าวดังกล่าวมีความเที่ยงตรง เชื่อถือได้		
18. จากข่าวที่ฉันอ่าน ฉันได้ประเมินว่าข่าวดังกล่าวไม่มีความเที่ยงตรงและขาดความ		
น่าเชื่อถือ		
19. จากข้อมูลของบุคคลที่ฉันสัมภาษณ์ ฉันระบุได้ว่าข้อมูลดังกล่าวมีความเที่ยงตรงและ		
น่าเชื่อถือ		
20. ฉันเขียนจดหมายถึงบรรณาธิการเพื่อแสดงความคิดเห็นต่อสถานการณ์ปัจจุบันพร้อม		
ด้วยเหตุผลประกอบที่ชัดเจน		
21. ฉันเขียนข่าวรายงานเหตุการณ์ปัจจุบัน จากแหล่งข่าวที่เที่ยงตรงเชื่อถือได้ ประกอบครบ		
ทั้งหัวข่าว ข่าวน้ำ เนื้อข่าว พร้อมภาพประกอบ และคำบรรยายใต้ภาพ		
22. ฉันเขียนบทความเชิงวิจารณ์ที่พร้อมไปด้วยเหตุผลและหลักฐานที่ชัดเจน		

2. ถ้านักศึกษาได้ทำ ให้เขียนอธิบายลงในบันทึกพร้อมยกตัวอย่างที่ชัดเจน

Appendix 23. Example of the Experimental Group's Sophisticated Task Outcomes



Ms Kirsty, Teacher of Business English Curriculum said "I'm very impress everyone very professional and everyone very responsible also spend along time to make it"

Mr Nopphadol Thong dee one of winner of Ant Team said "I'm very glad. In fact I'm not expect and team captain told me that we are only to enjoyable and at least make me have confidence."

He added "We seen about team work. I can say that they prepare and to make everything perfect."

Mr Nopporn Pamonpol he is captain Ant Team said "I'm to be pround of ability not onlt this year but every last year. It's show potentiality of our B.E. It's show potentiality of teacher to teach student to have more potentiality and will be have ability that labour market in the future."



Ajarn Wilasinee, teacher of Business English Curriculum who the advisor this project said "I think they organize quit well. If ask about have improve, yes it have. It have a good manage."

She also talk about the competitor about students can practise English to Listen Question and who can't answer question will be back to learn about why they can't answer question.

Biography

Sarapol Chirasawadi was born on March 30, 1976 in Bangkok. He received a Bachelor's Degree of English from Chulalongkorn University. In 2001, he graduated with a Master's Degree of Arts in Teaching English as a Foreign Language from Thammasat University. During 1998 – present, he is a lecturer in the Business English Department of Suan Dusit Rajabhat University. His main interest is in ICT implementation in education.