

**THE IMPACT OF A SOCIAL NETWORKING ENVIRONMENT
ON THE DEVELOPMENT OF ENGLISH WRITING SKILLS
OF THAI UNIVERSITY STUDENTS**

Suchada Chaiwiwatrakul



**A Thesis Submitted in Partial Fulfillment of the Requirements for
the Degree of Doctor of Philosophy in English Language Studies**

Suranaree University of Technology

Academic Year 2015

ผลกระทบของสถานการณ์สร้างเสริมเครือข่ายทางสังคมที่มีต่อ
การพัฒนาทักษะการเขียนภาษาอังกฤษของนักศึกษา
ระดับมหาวิทยาลัยในประเทศไทย



นางสาวสุชาดา ชัยวิวัฒน์ตระกูล

วิทยานิพนธ์นี้เป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปริญญาศิลปศาสตรดุษฎีบัณฑิต
สาขาวิชาภาษาอังกฤษศึกษา
มหาวิทยาลัยเทคโนโลยีสุรนารี
ปีการศึกษา 2558

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Suranaree University of Technology has approved this thesis submitted in partial fulfillment of the requirements for the Degree of Doctor of Philosophy.

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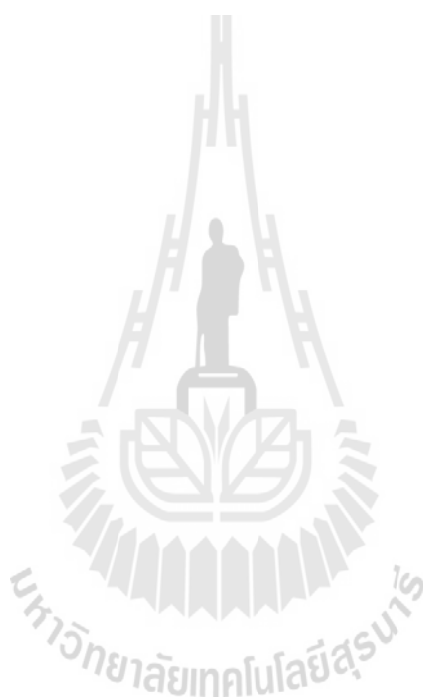
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สุชาดา ชัยวิวัฒน์ตระกูล : ผลกระทบของเครือข่ายทางสังคมที่มีต่อการพัฒนาทักษะการเขียนภาษาอังกฤษของนักศึกษาระดับมหาวิทยาลัยในประเทศไทย (THE IMPACT OF A SOCIAL NETWORKING ENVIRONMENT ON THE DEVELOPMENT OF ENGLISH WRITING SKILLS OF THAI UNIVERSITY STUDENTS) อาจารย์ที่ปรึกษา : รองศาสตราจารย์ ดร.ปิ่นฉัตร แสงอรุณ, 363 หน้า

ประสบการณ์ทางการใช้ภาษาของผู้เรียน และการจัดการการเรียนรู้ด้วยตนเองของผู้เรียนมีคุณค่าโดยทางหลักการ ทั้งในบริบทของการเรียนภาษาที่หนึ่งและการเรียนภาษาที่สองเพื่อช่วยพัฒนาผู้เรียนไปสู่การเรียนรู้ด้วยตนเอง งานวิจัยนี้ศึกษาประสิทธิผลของเครือข่ายทางสังคม (SNE) ที่มีต่อความสามารถทางการเขียนของนักศึกษาในระดับมหาวิทยาลัยของประเทศไทย ตลอดจนความคิดเห็นที่มีต่อการเรียนด้วยวิธีดังกล่าว งานวิจัยนี้ใช้เวลาในการรวบรวมข้อมูลทั้งสิ้น 8 สัปดาห์ โดยทำวิจัยกับนักศึกษามหาวิทยาลัยเทคโนโลยีสุรนารี จังหวัดนครราชสีมา ประเทศไทย ที่เรียนภาษาอังกฤษเป็นภาษาต่างประเทศ จำนวน 102 คน การวิจัยนี้เป็นการวิจัยกึ่งทดลอง ผู้เข้าร่วมการวิจัยนี้ได้รับการคัดเลือกมา 2 ห้องเรียน โดยแบ่งเป็นกลุ่มการเรียนรู้ด้วยตนเองแบบเต็มรูปแบบ (ปฏิสัมพันธ์ผ่านเครือข่ายทางสังคมโดยไม่ได้รับความช่วยเหลือจากผู้สอน) และกลุ่มการเรียนรู้ด้วยตนเองแบบกึ่งรูปแบบ (ปฏิสัมพันธ์ผ่านเครือข่ายทางสังคมโดยได้รับความช่วยเหลือจากผู้สอน) ประเมินผลการวิจัยจาก แบบทดสอบก่อนและหลังการวิจัยจำนวน 2 ชุด แบบสอบถามความรู้สึก การสัมภาษณ์แบบกึ่งโครงสร้าง ออนไลน์โพสต์ รวมทั้งแฟ้มบันทึกข้อมูลต่างๆ โดยผลการวิจัยจากชุดแบบทดสอบทั้ง 2 ชุด (แบบทดสอบทักษะทางการเขียน และแบบทดสอบทักษะอื่นๆ ทางภาษาอังกฤษ) ซึ่งให้เห็นว่า SNE สามารถช่วยให้ผู้เรียนทั้งกลุ่มการเรียนรู้ด้วยตนเองแบบเต็มรูปแบบ และกลุ่มการเรียนรู้ด้วยตนเองแบบกึ่งรูปแบบ ประสบความสำเร็จทางการเขียนภาษาอังกฤษ หลังเรียนด้วยวิธีดังกล่าว ผลคะแนนจากแบบทดสอบแสดงให้เห็นว่าผู้เรียนมีคะแนนสูงขึ้นอย่างมีนัยสำคัญทางสถิติ โดยก่อนการทดลอง กลุ่มการเรียนรู้ด้วยตนเองแบบเต็มรูปแบบมีคะแนนต่ำกว่ากลุ่มการเรียนรู้ด้วยตนเองแบบกึ่งรูปแบบอย่างมีนัยสำคัญทางสถิติ อย่างไรก็ตาม หลังการทดลองไม่พบความแตกต่างของคะแนนระหว่างกลุ่มการเรียนรู้ด้วยตนเองแบบเต็มรูปแบบ และกลุ่มการเรียนรู้ด้วยตนเองแบบกึ่งรูปแบบ นอกจากนี้ ผลการวิจัยยังให้เห็นว่าการเรียนโดยใช้ SNE ส่งผลกระทบในเชิงบวกต่อผู้เรียนในทุกระดับความสามารถทางภาษาอังกฤษ

ผลการวิจัยนี้ ซึ่งให้เห็นว่าการสอนของครูอาจไม่ได้มีผลกระทบในเชิงบวกเสมอไป หากต้องการเพิ่มความสามารถทางการเขียนของผู้เรียน การบูรณาการเรียนการสอนภาษาอังกฤษด้วย SNE มีแนวโน้มที่จะส่งผลในเชิงบวกด้วยการเน้นความแตกต่างระหว่างตัวผู้เรียน ความชื่นชอบ

ของผู้เรียน การสร้างประสบการณ์การเรียนรู้ด้วยตนเองเป็นสำคัญ งานวิจัยนี้ยังได้รายงานและอภิปรายเกี่ยวกับ ข้อจำกัด ข้อเสนอแนะ แนวโน้มงานวิจัยในอนาคต และการนำผลการวิจัยไปใช้ในเชิงวิชาการอีกด้วย



สาขาวิชาภาษาต่างประเทศ
ปีการศึกษา 2558

ลายมือชื่อนักศึกษา _____

ลายมือชื่ออาจารย์ที่ปรึกษา _____

ลายมือชื่ออาจารย์ที่ปรึกษาร่วม _____

SUCHADA CHAIWIWATRAKUL : THE IMPACT OF A SOCIAL
NETWORKING ENVIRONMENT ON THE DEVELOPMENT OF ENGLISH
WRITING SKILLS OF THAI UNIVERSITY STUDENTS.
THESIS ADVISOR : ASSOC. PROF. PANNATHON SANGARUN, Ph.D.,
363 PP.

SOCIAL NETWORKING ENVIRONMENT/SELF-ORGANIZED LEARNING/
WRITING SKILL/THAI UNIVERSITY STUDENTS

Learners' experience of language use and the notion of learner control have been valued in principle in the contexts of both first and second language learning and have been considered of value in assisting the development of autonomous or self-organizing learners. This study explored the effect of a social networking environment (SNE) on Thai university students' writing abilities, together with their perceptions of this environment. This study was conducted over an 8-week period with 102 EFL university students at Suranaree University of Technology in Nakhon Ratchasima, Thailand. In this quasi-experimental study, participants came from two intact classes that were selected and assigned to a fully self-regulated learning (SRL) group (SNE interaction without teacher mediation) and a semi self-regulated learning (SRL) group (SNE interaction with teacher mediation). The findings from two tests of pre-post measurements, perception questionnaire, semi-structured interview, and online posts as well as system log files were used to evaluate the impact of the SNE intervention. The findings from 2 tests (Writing and Other English Skills Test) indicated that the SNE brought a measurable increase in students' writing achievements after SNE

implementation. The students from the fully SRL group and the semi SRL group demonstrated statistically significant gains on test measurements. In the pre-test, the fully SRL group had statistically significant lower mean scores than the semi SRL group, thus placing them behind the semi SRL group. However, at the end of the experiment there was no statistically significant difference between the mean scores of the fully SRL group and the semi SRL group. In addition, results indicated that the SNE had a positive impact on students of all proficiency levels.

Results of this study ultimately suggest that teacher intervention may not always have a positive impact and that, in order to maximize students' writing potential, integration of the SNE into writing classes is likely to have positive outcomes by catering more effectively to students' individual differences and preferences and personalizing the learning experience. Limitations of this research project, suggestions for further research study and pedagogical implications are also reported and discussed.

School of Foreign Languages

Academic Year 2015

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ACKNOWLEDGEMENTS

There is no way that I could have completed this thesis without the contributions of a number of professional colleagues who wholeheartedly supported, encouraged and constructed a creative environment for me to do my research.

First, I would like to express my deepest gratitude to my supervisors, Assoc. Prof. Dr. Pannathon Sangarun and Prof. Dr. Andrew Lian for all of the doors that opened to me and for all of the intellectual support, advice and encouragement.

Particularly, I would like to express my genuine gratitude to Prof. Dr. Andrew Lian who stimulated me to work continuously with a countless number of invaluable hours dedicated to me. Without his support, my academic life would be miserable and this thesis would be impossible.

My heartfelt thanks go to all of thesis committee members; Dr. Dhirawit Pinyonattagarn, Asst. Prof. Dr. Harald Kraus, Asst. Prof. Dr. Arjuna Chaiyasena and Asst. Prof. Dr. Pham Vu Phi Ho, for their valuable guidance to complete my thesis and who contributed their mentorship and directions to me during my research.

My special thankfulness and appreciation goes to Assoc. Prof. Dr. Anchalee Wannaruk, Assoc. Prof. Dr. Chanarong Intraraprasert, Assoc. Prof. Dr. Jeremy Ward, Dr. Sirinthorn Seepho, Asst. Prof. Dr. Issra Pramoolsook, Asst. Prof. Dr. Burathin Khampirat, Dr. Ania Lian, and all of teaching staffs at School of Foreign Languages whose names might not be listed here. These people were key persons who gave me intellectual and information supports during my course works and my life at Suranaree University of Technology.

I would like to express thankfulness to all of the academic staffs, and Ph.D. and M.A. students of the School of Foreign Languages at Suranaree University of Technology for all kinds of support. I also would like to express my special thankfulness to Ms. Saruta Chantaros, and Ms. Suwimon Choncharound, who were willing to help me with official documents.

I would like to thank all of the experts from Ubon Ratchathani University who helped me check the quality of various instruments used in this research with patience. The teaching staffs, native speaker staffs, particularly Mr. Michael Gerard Smyth, Dr. Suphawadee Chaivivutrakul, Asst. Prof. Dr. Pornthip Waiwut, and Mr. Kantapat Trinant whose assistance throughout the whole process has been in the highest order.

Additionally, special thanks go to the president, all of my colleagues at Ubonratchathani Rajabhat University, especially Ms. Sasikarn Insawat, for their time, financial support, encouragement, and understanding along the process.

I would like to thank students at Ubon Ratchathani University and students at Suranaree University of Technology who participated throughout the process of data collection who generously gave their time to work in online institutions for this study.

Finally, I am all the time indebted to my dearest parents, my sister, my brother and all of my families for their years of unconditional love, encouragement and consistent support in everything I do. Without these people, this great distance could not have been achieved.

Suchada Chaiwiwatrakul

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LIST OF ABBREVIATIONS

AEC	=	The ASEAN Economic Community
ANCOVA	=	Analysis of Covariance
A-NET	=	Advanced National Educational Test
CALL	=	Computer-assisted Language Learning
CMC	=	Computer Mediated Communication
CMS	=	Content Management System
COI	=	Community of Inquiry
CU-TEP	=	Chulalongkorn University Test of English Proficiency
E1	=	Expert 1
E2	=	Expert 2
E3	=	Expert 3
E4	=	Expert 4
E5	=	Expert 5
EFL	=	English as a Foreign Language
ESL	=	English as a Second Language
ETS	=	Test and Score Data Summary for TOEFL Computer-based Test and Paper-based Tests.
EF EPI	=	EF English Proficiency Index
ICT	=	Information and Communication Technology
IOC	=	Index of Item Objective Congruence

LIST OF ABBREVIATIONS (Continued)

L1	=	First Language
L2	=	Second Language
LMS	=	Learning Management System
OES	=	Other English Skills
O-NET	=	Ordinary National Educational Test
OTPC	=	One Tablet Per Child
PIM	=	Practical Inquiry Model
PIM	=	Practical Inquiry Model
SNE	=	Social Networking Environment
SPSS	=	Statistical Package for the Social Sciences
SRL	=	Self-regulated Learning
SUT	=	Suranaree University of Technology
TOEFL	=	Test of English as a Foreign Language
ZPD	=	Zone of Proximal Development

CHAPTER 1

INTRODUCTION

1.1 Introduction

This research project is to contribute to enhancing the quality of self-organized learning of learners of English in non-native English speaking countries in general and in Thailand in particular. Specifically, writing ability is supported by virtual environments of asynchronous discussion. The general research aim is to investigate a blended virtual platform for enhancing the quality of interactive online discussion under social networking environments which takes into account embedded self-regulated learning values and amount of instructor support. Another aim is to examine the effectiveness of this environment in the Thai context. In other words, the current research project attempts to seek an effective approach, through the use of a blended learning approach based on social networking for improving the teaching and learning of English writing at the higher education level. That is to integrate an interactive approach proposed, namely “a social networking environment” to measure its effect to the writing performance of groups of undergraduate students taking an English course at Suranaree University of Technology.

This study is framed by the desire to enhance the quality of online self-regulated learning in higher education for non-native English speaking countries in general and for Thailand in particular. In an era of increasingly booming virtual higher educational settings, it is important for educationalists and authorities to be

able to demonstrate that their teaching and learning approaches to online environments as a medium of course delivery are well-established and effective. Along with this movement in the higher educational context, a number of e-learning, online learning, and blended learning national projects, such as the “UniNet infrastructure” project (Darasawang, 2007) and the “My English” project (Darasawang, 2010) had significantly amplified concerns relating to developing higher quality in online environment. There are also worldwide calls for enhancing the effectiveness of the online learning mode in general and in developing countries in particular. Despite these concerns and calls for enhancing online learning quality, little research has been conducted on the effectiveness of virtual environment of social networking in Thailand (Simasathiansophon, 2014). Acknowledging the lack of a high quality environment to enhance and assure quality of blended learning environment in the Thai context, the major aim of this study is to propose and, if possible, to develop a quality component of environment that is applicable to English courses focusing on writing skills within a virtual environment using a social networking platform to support learning to Thai learners.

The means for achieving this is to bring pedagogical issues of an online blended learning model and its application issues closer together. The strategy for achieving this is to draw on existing theoretical and practical concepts from the available literature on blended online learning in higher education. First, the researcher investigates what constitutes high quality online learning in higher education. Next, addressing social context dimensions are designed by examining how the component of the proposed environment is adapted to be used with existing environment to fit properly in terms of educational benefit. Lastly, the proposed and

developed for enhancing and assuring quality is validated through an online mode of education and validated and evaluated through an experimental approach.

1.2 Rationale of the Study

The underpinning assumptions of today's higher education have been indirectly affected and shaped by a number of unpredictable developments and changes around the world (Lian, 2011). These changes are connected to social changes that relate to globalization and influence significance of working skills and changes in knowledge-based society (Wattanapanit, 2013; Darasawang, 2007; Bhumiratana & Commins, 2012), mass higher education, and emerging Information and Communication Technology (ICT) initiatives (Lian, 2002). The emergence of ICT-based devices in higher education as supporting tools in the knowledge society is only a small part of a wider context of changes in today's higher education. It is believed that ICT advances are major actors that connect the world population together. Such globalization may be characterized as a "network society" with globalized knowledge wisdom in global interconnectedness contexts (Calderón & Rainer, 2013). It is recognized as a significant movement for sustainable development.

The "digital generation" or "net generation" is growing across the globe in the dimension of accessibility and implementation of ICT-based devices in developing countries, these developed countries finally have to adopt ICT-based tools as a sustainable and effective solution to educational challenges. Accordingly, globalization has a significant impact on educational policies, structures, and practices in a number of countries around the globe. In a similar perspective, educational

reforms in developing countries like Thailand can be associated with and be seen as the consequences of globalization. Once the freedom from time and space boundaries has been achieved, the expectations on online learning modes advance to meet rising demands of higher education and have significantly increased in the developing countries including Thailand. As a result of this phenomenon, an increasing number of higher education institutions in such countries are investing large amounts of money to meet the growing demands from a young population, future representatives of the country. A number of Thai universities have accommodated e-learning and online learning alongside the conventional face-to-face learning system (Wattanapanit, 2013). For instance, Darasawang (2010)'s "*My English*" project, a self-study homepage for improving writing skills of university learners studying an academic English course at King Mongkut's University of Technology in Bangkok, Thailand. This project is an out-of-class self-regulated learning environment that is created to support face-to-face instruction.

The recent globalization phenomenon has led to change at an unprecedented rate (Lian, 2011; Arunsirot, 2013). The current global event is now based on real time connectivity via the high speed Internet system transforming us from industrial-based economies to knowledge-based societies driven by increasingly fast changing technology (Bhumiratana & Commins, 2012; Wattanapanit, 2013; Darasawang, 2007). Rapid progress in the fields of information technology and the impact of globalization (Bhumiratana & Commins, 2012) highlight the value of English as an international language (Jindapitak & Teo, 2013; Sawir, 2005; Lian, 2002) in global contexts as well as in Thailand. English has been absorbed as a global language for international communication, education, culture, society, economics, and politics.

Since it was first introduced to Thai people in the 18th century (Methitham & Chamcharatsri, 2011), English in Thailand has emerged as the most important language, second to Thai (Baker, 2003; Arunsirot, 2013), and has been increasingly necessary for various aspects of life of the Thai people, including global communication, social contacts, and education and occupations. English as a foreign language for Thais is perceived as an essential language (Baker, 2012) due to the increasing number of investments from foreign countries globally and more recently in supporting for “The ASEAN Economic Community (AEC)” in 2015 (Lian, 2012; Bhumiratana & Commins, 2012; Katechaiyo, 2013; Arunsirot, 2013; Dueraman, 2012). High proficiency in English is required not only for further higher education but in order to obtain and maintain job security in 2015 and beyond. Thai learners are now required to have good competence in English to meet the global competition challenges (Puengpipattrakul, 2014; Wiriyaichitra, 2001). Thus, proficiency in English is one of the necessary factors for people to advance in life.

To respond to the need for English, considerable efforts in term of national education reforms and decentralization (Rie, 2011) have been made by the Thai Government to improve the English proficiency of the Thai population according to the 1999 National Education Act (Bhumiratana & Commins 2012). This began with English becoming a compulsory subject requirement of students from grades 1 to 12 (Ministry of Education, 2008; Katechaiyo, 2013). The English curriculum has been revised to require 12 credits instead of 6 credits at tertiary levels (Darasawang, 2007). Self-direction of learners is emphasized by policies. Thai lecturers are encouraged to integrate all skills, promote collaborative learning and thinking processes, and organize learning activities to help learners develop analytical and thinking skills. The

mobilization of resources at no cost (Ministry of Education, 2009) is one of many examples of high investment in English by the government for Thai education improvement. An example of this is the Thai e-learning project on higher education supported by the development of a high cost “UniNet infrastructure” to connect universities to the Internet system for education and to support production of courseware and e-learning materials. Then, the project also offers grants to university staffs to produce CD-Rom materials and online courseware for language instruction (Darasawang, 2007).

Although English has become more important for Thai students at all levels of education, it had been found that English teaching in Thailand has not been successful enough (Kongpetch, 2006; Boonpattanaporn, 2008). For example, Wiriyaichitra (2002) noted that English instruction in Thailand had not prepared Thais for the changing world with English proficiency levels of Thais (from TOEFL scores) being lower than those of many neighboring countries, such as Malaysia, the Philippines and Singapore (Puengpipattrakul, 2014; Khamkhien, 2010; Wiriyaichitra, 2006). Recently, the TOEFL iBT score index up to December 2014 of Thailand was 74 points (out of 120 points) which had been found to be at “a very low level” and it was found to be lower than those of many of its regional neighbors, such as Vietnam, Malaysia, Indonesia, the Philippines, and Singapore (ETS, 2015). In addition, the most recent Education First English “Proficiency Index” (EF EPI, 2015) revealed that out of 70 countries of non-English natives, Thailand was ranked in 62nd place, outdoing only one country in Asia i.e. Cambodia. Thailand was labeled as “very low proficiency”, meaning it was at the lowest level (Boonpattanaporn, 2008). Furthermore, Prapphal (2003) investigated the English proficiency of Thai graduates

undertaking the Chulalongkorn University Test of English Proficiency (CU-TEP) in 2001. She notes that the majority of graduates' scores did not meet the standard requirement for studying in the Graduate School at Chulalongkorn University.

The relatively unsuccessful learning of English in Thailand may result from numerous recurring problems and failure factors. For instance, Punthumasen (2007) explains that it is caused by unfamiliar lessons used (Todd & Keyuravong, 2004), unattractive teaching methods, inappropriate learning environments, and insufficiency in technological support (Todd & Keyuravong, 2004). It is reported that most English teachers in Thailand are non-native speakers (Khamkhien 2010; Baker, 2003); the students have few chances to interact with native speakers. Existing English teachers in Thailand are unqualified (Lian, 2002; Dueraman, 2012; 2015). Similarly, Noomura (2013) adds that there is limited class time for English, lack of English native teachers (Baker, 2003), and inadequacy in teaching aids. In addition, the available teaching aids or text books are considered irrelevant to facilitate language learning of students and they do not prepare for workplace requirement (Wiriyachitra, 2002; Todd & Keyuravong, 2004).

Several researchers describe problems relating to Thai students' written work and in relation to the Thai educational system (Boonpattanaporn, 2008). For example, Hengsadeeikul et al. (2010) note that students lack confidence in using English and they also have language anxiety or negative perceptions of using English. Due to the fact that they lack practice in writing (Dueraman, 2015), many Thai students may not be confident enough to write and do not regard themselves as good writers of English. Furthermore, it has been found that Thai students have few opportunities to practice English writing skills. They hardly ever had the opportunity to use English outside

their classrooms (Honsa, 2013). They rarely had an opportunity to practice writing in the classroom (Dueraman, 2012) as well. At higher education, writing is an elective course primarily for students majoring in English. For the required courses or fundamental English courses, the emphasis is on the four skills but Thai students rarely write. If they write, grammatical structures are emphasized (Punthumasen, 2007). In most English writing classes in Thailand, the teachers paid attention to formal aspects of language, that is, the form, the format, the language use, more than the content (Promnont & Rattanavich, 2015; Kongpetch, 2006; Darasawang, 2007). Moreover, Thai students do not have enough practice in English writing whereas writing teachers have high workloads and do not have enough time to provide teacher's feedback and peer revision activities for students (Dueraman, 2012).

In addition, Watcharapunyawong and Usaha (2013; Petchprasert, 2013; Bennui, 2008; Kaweera, 2013; Pawapatcharaudom, 2007) found that the English writing of Thai students was usually influenced or interfered by negative transfer of their L1 or Thai language linguistic knowledge (Phoocharoensil, 2013; Mongkolchai, 2008) because Thai students employed direct translation from Thai to English whenever they wrote in English (Kaweera, 2013; Pawapatcharaudom, 2007; Thep-Ackrapong, 2006; Phoocharoensil, 2011; Boonpattanaporn, 2008). In more detail, Panumas et al. (2011) found that the direct translation from Thai to English was done in a word-by-word process that produced a written text which was both incorrect and unclear. Similarly, Phoocharoensil (2012) found that they also transferred the culture and pragmatic knowledge of the Thai native language to their English writing (Phoocharoensil, 2012). Several examples were described in previous research studies by Yumanee and Phoocharoensil (2013), Phoocharoensil (2013), Phoocharoensil

(2011), Mongkolchai (2008), and Boonyasaquan (2006) who analyzed students written work and reported that their work was found full of mistakes and misuses of English collocations resulting from their literal word-for-word translation strategy, without awareness of the correct use of those collocations. In conclusion, Bennui (2008) stated that three major focus of interference errors were found in Thai learners' writing: a) L1 syntactic interference, b) L1 lexical interference, and c) L1 discourse interference.

Apart from L1 interference problems, other major groups of errors were found in Nimnoi (2011)'s analysis. She described five types of errors made by Thai university students in their writing: a) errors in use of words b) errors in use of words and literary styles c) errors in sentence structure d) errors in the use of punctuation marks and e) use of spelling. Similarly, Arunsirot (2013)'s analysis of Thai university students' written texts discovered that their work was full of various types of problems, particularly confusing themes, including mistakes of conjunction uses, cohesion and coherence in students' writing. Under a different name but in a similar perspective, Kaweera (2013) reviewed types of Thai university students' writing errors. These errors included a) interlingual errors, b) lexical errors, c) syntactic errors and d) discourse errors.

Regarding the above problems of English teaching in Thailand, Thai researchers have attempted to seek an effective approach to improve English education particularly the difficult skill of writing (Wimolmas, 2013; Watcharapunyawong & Usaha, 2013; Benchachinda, 2012; Boonpattanaporn, 2008; Nimnoi, 2011; Pawapatcharaudom, 2007). Learning theories and practices are integrated with the support of communication and information technologies to

facilitate the creation of learning environments for the self-regulated learning of language learners. For instance, Kritsuthikul et al. (2013) suggest that one of the effective methods for successful English writing is to enable learners to develop their own thinking abilities and have more practice in writing. In addition, Boonpattanaporn (2008) adds that a supportive classroom environment is necessary in order to provide opportunities for instructors to give feedback, advice, and assistance regarding students' written work. Methitham & Chamcharatsri (2011) recommend that the integration of the Internet and media in language learning can immerse students in the cultures of native speakers' to assist them to become fluent in both speaking and writing skills. Wiriyachita (2002) suggests that Thai lecturers should apply technologies such as E-learning systems, web-based programs, and open access websites to facilitate their language instruction (Darasawang, 2007; Wiriyachita, 2002). As a result, the increasing trend for Thai researchers to integrate technology as one of many learning aspects to enhance foreign language proficiency implies that technology may convey certain potentials to foster the improvement of English learning environments in Thai contexts. Recently, a number of studies indicate that the use of self-regulated learning with technology to facilitate learning environments for EFL learners promote satisfied perceptions, positive reactions, and self-regulated learning, to today's learners (Simasathiansophon, 2014; Sucaromana, 2013; Wattanapanit, 2013).

With respect to self-regulated learning, the learner is considered as someone actively shaping his or her own learning with the purpose of self-development. Moreover, they should be aware of and be able to manage their own learning whereas constructivism states that the learners focus on the process of constructing,

reorganizing and sharing knowledge (Reinders, 2010). These two theories can be supported by IT or ICT-based technologies, including social media technology or social networking sites. The social network is an emerging technology of web 2.0 technologies, which widen and deepen students' reach of information offering a new way of creating a "knowledge-building ecosystem" (Darasawang, 2007). Putting together anyone who shares the same interests, no matter the location they are in, will transform every space into an environment where learning is natural as well as powerful. It connects people in ways that are consistent with how they naturally interact in the real world. Social networking sites encourage knowledge/information transfer, help students learn quickly, innovate fast, share knowledge extensively, and engage the learners with their peers, business partners and everyone who shares the same interest. Diverse backgrounds and learning styles of the learners determine what they have learned and how they learn. Social networking environment supported learning centers on information sharing, collaboration and co-creation of the social networking community the students engage in (Ballera et al., 2013; Ozdamli, 2013; Romero-Frías & Montaña, 2010).

This supports the views that meaning is an individual internal creation (Lian, 2001; 2004; 2006) and it is negotiated socially to construct learners' own knowledge. This environment is characterized by real-world tasks which approximate the real world situations. Collaborative knowledge is constructed by discussion and reflection leading to negotiation of meanings. The learners, as members of a community of practice with differing levels of knowledge and expertise from novice to expert, will share or distribute descriptions of knowledge amongst group of members. Learners in the community are expected to work together to generate deeper levels of

comprehension and critical evaluations of the material/media enabling them to generate new knowledge, creative thinking and critical thinking (Abawajy, 2012). This leads to the conclusion that learning in a community of practice within social networking sites is genuinely based on the notion of authentic tasks, situated learning, and also authentic social communication.

Accordingly, to support self-regulated learning, a social networking site could be employed to provide flexible and highly supportive links of online resources relating to each learner's choices of interest and selection (Lian, 2001). A social networking site refers to online materials generated by the public with the support of social technologies for communities (such as Facebook), communication (such as blogs), collaboration (such as wikis), multimedia (such as YouTube) etc. (Bozarth, 2010, p. 11). It would act as an online pedagogical society or community of practice or collaborative learning that helps improve students' retention and facilitates online synchronous and asynchronous discussion. Further, it is a real world phenomenon that provides a range of media so it increases the flow of information and learning as well as corresponding to each student's interest, and satisfaction. This social networking platform is viewed as a place where learners actively control their own learning, such as their behaviors, strategies, and progress. Therefore, this brings us to the conclusion that online social networking platform is likely to play a crucial role in fostering self-regulated learning to the learners if they are effectively and carefully integrated into the learners' educational contexts.

In this context or virtual learning, the teacher roles should be reconfigured with control being transferred to the learners (Lian, 2011). The learners are expected to be more proactive in their learning (Darasawang, 2007; Phungphol, 2005), that is,

to function as self-motivated, self-directed, collaborative participants in their own learning experiences (Nonkukhetkhong, 2006; Phungphol, 2005). Learners are responsible for their own learning by having individual freedom of choices, for example, making the decisions about what and how to learn. Group communication facilitated by social networking platform offers learning from peers, experts, and community by generating ideas, comparing ideas, modifying ideas, and negotiating ideas where dimensions of social and emotional support also exist. Nurturing learners through this social interactional context, a strong sense of community will help improve learners' retention, increase information and enrich linguistic repertoires as well as result in deep and meaningful learning. In short, online social network group communication consists of affective interaction (expressing feelings, emotions, mood, warmth, attraction, humor, etc.), cohesive interaction (building and maintaining group commitments) and interactive and/or critical interaction (analyzing/ re-analyzing critically, reflecting critically, negotiating meaning critically) (Swan & Shih, 2005; Collin et al., 2011).

In addition to its benefits, apparently positive research findings from certain fields particularly the business fields indicate that social-media platforms increase interest in the study of learners. Furthermore, we are currently educating the “digital native” generation whose technical skills are at a relatively high level and the nature of fundamental differences in learning styles of learners demands a different and wider range of technology support. This virtual interactivity or real world interaction is to provide an opportunity for reflection and genuine exchange of information/ideas between interlocutors, anytime and anywhere.

1.3 Purposes of the Study

The global aim of this work is to contribute to developing a higher quality of blended virtual environment. To achieve this aim, three major objectives of this research project were proposed:

- 1) To compare the English writing achievement of each group of participants (experimental group 1; fully self-regulated learning group, and experimental group 2; semi self-regulated learning group) before and after learning through the social networking environment;
- 2) To compare the English writing achievement of students between the groups (experimental group 1; fully self-regulated learning group, and experimental group 2; semi self-regulated learning group) after learning through the social networking environment;
- 3) To explore students' perceptions of their writing performance after learning through the social networking environment (SNE).

1.4 Research Questions

In order to achieve the above research purposes, the following research questions were proposed:

1. How effective is the social networking environment (SNE) in supporting the writing performance development of EFL students?
2. Are there any significant differences between experimental group 1 (fully self-regulated learning group) and experimental group 2 (semi self-regulated learning group) in terms of writing performance? If so, what are these differences?

3. What are the students' perceptions of their EFL writing performances, as developed through SNE, and how do they access the value of social networking environment (SNE)?

1.5 Significance of the Study

The current study had potential implications in the following areas:

- 1) The findings from this research provided support for an alternative mode of self-regulated writing intervention to enhance students' English writing particularly that of Thai EFL students.
- 2) Processes from this research project could be used to develop self-regulated learning in students particularly for EFL learners to develop their writing skills.
- 3) Processes from this research project may provide insights into how writing instruction may be applied to the social networking environments.
- 4) This study could enrich the information currently available in Thailand for further studies in the development of English writing offered to Thai students. The same processes developed for the current study might be applied to any writing courses or any other courses.
- 5) The students' perceptions, opinions and attitudes toward this study might provide useful guidelines for learning environments for English courses or for other courses.

1.6 Definitions of Key Terms

- 1) **Social networking environment** refers to a learning environment that was designed by the researcher to foster self-regulated learning of English, particularly writing to communicate to students. This environment was embedded in the platform of “Schoology”, a social networking feature, a cloud-based platform, empowered by a learning management system (LMS) software that helps improve language skills and writing skills through assignments, tests/quizzes, discussions and links. It increased access to supplemental online contents. “Schoology” supported students’ collaboration and interaction with social networking looks and features, such as profiles, emails, instant messages, news feeds, forums, and online communities. It allowed all users to share ideas, pictures, posts, events, and personal interests with the community members in the network.
- 2) **Schoology** refers to a classroom management and social network application that was designed particularly for institutions that attempt to improve learning environment through communication, collaborative activities and increased access to supplemental materials (Biswas, 2013). It allowed teachers and students to create, manage, and share content. This cloud-based platform offered features for online classes which were functionally and visually similar to a social networking platform called, “Facebook”. Its service included time records for students’ attendance, grade books, tests, assignments and so on. Schoology offered free of charge for primary service that focuses on education to individuals, lecturers, classrooms and institutions. (Stand4LLC, 2014).

- 3) **E-learning** refers to a learning and a teaching environment that are fully undertaken online with ICT-based technology support. It provides the means of delivering a learning course totally distinct from face-to face teaching as a replacement of face-to-face teaching. It can be employed to support face-to-face teaching. E-learning environments can include course lessons or content, interaction function, administrative mechanisms as designed by instructors (Musa & Othman, 2012).
- 4) **Blended learning** refers to a combination of face-to-face and online learning. The goal of blended learning is to combine attributes of online learning or e-learning settings such as an efficiency or sufficiency or freedom to access course content anytime anywhere with minimal effort, with characteristics of traditional face-to-face learning such as physical interaction among learners, peers, and teachers in classroom as well as enabling learners to work on content presented mainly in class time (Graham, 2013).
- 5) **Self-regulated learning** refers to a self-regulated process that enabled learners to develop awareness of their own strengths and weaknesses in learning. The self-regulation of learners referred to the degree that the learners were motivationally and behaviorally active their process and control of their own learning (Lian, 2014; Mitra, 2012, 2013; Pinyonattagarn, 2012, p.36; Zimmerman, 1989; 1998a; Carneiro & Lefrere, 2011; Rahimi & Bigdeli, 2013).
- 6) **English writing** refers to the English writing proficiency or ability to express ideas or thoughts through a performance of written symbols with

content, discourse, and organization that a student had improved after participating through interactive online discussion activities via the proposed social networking environment.

- 7) **Reflection** refers to a process of writing and thinking in English where students engaged in giving feedback, opinions, or comments on posts of others through the social networking environment.
- 8) **Thai university students** refer to first year undergraduates, non-English major learners, who enrolled to study English 1 (203101) of the second trimester of the 2014 academic year (2/2014) at Suranaree University of Technology, Nakhon Ratchasima, Thailand.
- 9) **Perceptions** refer to students' positive attitudes, neutral attitudes, negative attitudes, complaints, suggestions, or other opinions and reactions toward the social networking environment to enhance English writing performance. The students' perceptions were gathered from questionnaire and semi-structured interview results.

1.7 Scope and Limitations of the Study

This research project was performed to explore the effectiveness of students' writing proficiency in English acquired through self-regulated learning delivered through a facilitated course empowered by a social networking environment. This investigation was achieved through comparisons of pretest and posttest scores, including information received from students' perception results collected from the questionnaire and semi-structured interview. The participants in this study were students studying the English 1 course at Suranaree University of Technology. These

limitations signified that the results of these performances might not be representatives of those of other courses and might not be applicable to students and teachers of the same course (English 1) and at the same level in other universities.

1.8 Structures of the Thesis

This research project was structured into six chapters as follows:

- 1) **Chapter one** introduces an overview of the thesis by presenting the rationale of the study, the purposes of conducting this research project, the research questions, the definitions of key terms, the significance of this study, the scope and limitations and the structures of the thesis. Specifically, this chapter describes research history, definitions, and problems in English learning and writing environments in Thailand in particular. This research project is further divided into other five chapters in addition to this introductory chapter.
- 2) **Chapter two** represents a comprehensive review of relevant literature on key aspects of related theoretical concepts, online writing, social networking environments, self-regulated learning, and related previous research studies integration into English language learning and writing. In this chapter, the theoretical knowledge is critically addressed in order to propose an interactive social networking environment as a form of blended learning environment.
- 3) **Chapter three** outlines a discussion of the key research framework concerning the methodology and approaches to be employed throughout the whole research. Detailed descriptions of the research setting, the

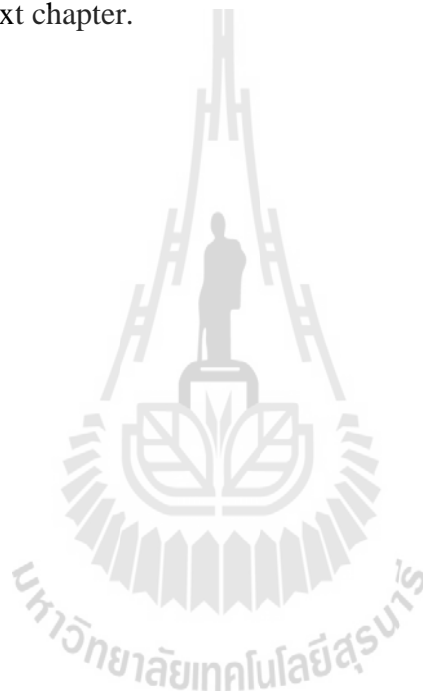
process of identifying participants, research instruments, and data collection and data analysis are reviewed with the detailed justification of choices.

- 4) **Chapter four** reports and discusses the quantitative analysis of research results and overall findings from the pretests, posttests, and questionnaire in relation to the use of the SNE.
- 5) **Chapter five** presents and discusses the qualitative analysis of research results from the semi-structured interview in relation to the use of the social networking environment, and students' perceptions of advantages and barriers concerning the SNE.
- 6) **Chapter six** summarizes the main findings, specifies how these findings answer the research questions, discusses the research results, provides pedagogical and methodological implications and makes recommendations for further relevant research, and concludes the entire study. To help the readers grasp an overview of this thesis, an extended summary is addressed in this final chapter.

1.9 Summary of the Chapter

This introductory chapter illustrates an overall view of this research project aiming at exploring the effectiveness of the proposed blended learning delivery mode through the social networking environment and self-regulated learning for improving writing performance of undergraduates studying an English 1 course at Suranaree University of Technology, Thailand.

The ideas in this chapter cover the introduction, the rationale, the purposes, the research questions, the research significance, the definitions of key terms, the scope and limitations of the research, and outline of the whole study. Next, the comprehensive review of related literature and prior relevant research of theoretical concepts, the writing situations, online discussion, self-regulated learning, the social networking environment, and previous research on social networking environments are discussed in the next chapter.



CHAPTER 2

REVIEW OF LITERATURE

2.1 Introduction

This chapter reviews literature relevant to this research project. It is categorized into sections. Initially, it defines the concept of blended learning and related theories and describes a proposed social networking environment in relation to a reflective discussion process leading to improvement in the writing of EFL learners. In addition to a review of blended learning, related theoretical knowledge are explored in this chapter. The reviews of related learning theories include constructivism, social constructivism, self-regulated learning, and rhizomatic theory. All may contribute to the enhancement of self-regulated learning environments for the learners. In addition, a review of literature on writing in Thai context, and asynchronous discussion were performed. Finally, certain prior studies on social networking environments, self-regulated learning and writing discussion were examined.

The educational systems in the Thai context could be divided into two broad areas: formal and non-formal. Regarding formal education in Thailand, it is offered in public and private institutions with two main types of 1) “basic education” and 2) “higher education”. Basic education consists of 3 years in the pre-primary level, 6 years in the primary level, 3 years in the lower secondary level, 3 years in the upper secondary level and 4 to 6 years in the higher education before the Bachelor’s degree

education. Previously, Thai compulsory education consisted of six years of study at primary level from Grades 1 to Grade 6. Then, the 1999 National Education Act added another three years at lower secondary school level, that was, Grades 7 to Grade 9. Recently, Thailand's compulsory education was extended to fifteen years according to the National Education Plan 2008-2022 (Office of the Higher Education Commission, 2013).

Higher education in Thailand is divided into two levels consisting of diplomas that are offered by college institutions and degrees that are offered by universities. It takes two years of study to receive a diploma and four to six years to complete a Bachelor's degree depending on field of the study. In Thailand, some fields of study such as architecture, and pharmacy require five years of study whereas the fields of medicine and dentistry require six years of education. The Thai education plan plays a major role in the development of basic education, vocational education, and higher education, aiming at transforming Thailand into a learning society through the creation of a knowledge-based society, and the promotion of continuous learning and lifelong education (Office of the Education Council, 2004; 2008).

In numerous countries on every continent, English is considered an official language. English as a major global language provides an important means of communication for several millions of people globally (Baker, 2012; Sawir, 2005). As a result of globalization, worldwide communication, and emerging technology of communication devices, English has been undergoing some significant changes (Lian, 2002) that influence both spoken patterns and written forms of communication. In other words, English, as a medium of communication, is broadly utilized by native speakers of English and by the world population that employs it as a second language,

a third language and a foreign language (Jindapitak & Teo, 2013). This situation is applicable to Thailand as well where Thais in various fields tend to use English to interact through spoken and written forms with people from other nationalities. In Thailand, English has received a prominent status. High proficiency in English leads to higher educational opportunities and professional advancement. Advanced skills in English are required for high-ranking positions in both government and private sectors. English has become increasingly essential to Thais and an awareness of the importance of English writing has emerged. However, Thai students have few opportunities to develop their writing performance to communicate effectively. This drawback may be caused by a requirement for the “O-NET (Ordinary National Educational Test)” as well as the “A-NET (Advanced National Educational Test)” or the entrance examinations that Thai students are required to take to study in the university. These examinations are centered on grammatical structures and reading comprehension rather than real oral and written communication.

In Thailand, English education has been addressed as a foreign language with its role being highlighted in the core curriculum of education as a compulsory course which learners from all levels from Grades one to twelve are required to take (Katechaiyo, 2013; Ministry of Education, 2008; 2009) whereas English writing has been taught as a part of the four macro-skills, consisted of listening, speaking, reading, and writing, in the context of English courses. When compared to the above three skills, the writing skill is likely to be less significant and it is not a key emphasis unless it is taught in courses for students majoring in English. Teaching of English writing in Thailand can be divided into two main approaches: a) a traditional writing approach and b) a process approach. For the traditional classroom offered in Thailand,

writing has been taught on the basis of language structures: a product-oriented approach. It was taught as a part of grammatical structures in class. Teachers provided drill exercises which were focused on the sentence level for practice and model sentences to be imitated. Controlled and guided writing were used in the classroom. In brief, Thai writing teachers, like teachers from certain Asian nations, focus on grammatical lessons (Sawir, 2005) and perceive writing as part of grammar instruction instead of teaching writing for communicative purposes (Yumanee & Phoocharoensil, 2013; Boonyasaquan, 2006).

Later, the “current-traditional rhetoric approach” or “functional approach” was integrated into writing instruction. For example, students were given knowledge about how each type of text functions, that was, the types of paragraph, such as cause-effect, comparison and contrast. In addition, the five-paragraph essay, consisting of introduction, body, and conclusion, was explained to the students. Then, the students were asked to compose an essay based on imitated format and language patterns depending on the purpose of their writing tasks. It was the purpose of language which was emphasized in the “functional approach”. In Thailand, the “current-traditional rhetoric” was commonly taught in the writing class at tertiary level, specifically to students majoring in English language studies. It was concluded that the traditional writing approach focused on the importance of language structures, rhetorical patterns, and language usage.

At the same time, technological development brings novel opportunities for how and when learners learn but educational researchers still struggle with how to provide more effective learning environments with the help of technology. Several presentations of online instruction and learning over decades has been linked with the

emergence of a new term “blended learning”, a modified/adjusted/enhanced/ learning environment typified as a hybrid learning environment, or a mixed-mode learning environment, that may be helpful for each individual learning setting. It is a combination of traditional learning approaches such as lectures and cooperative learning combined with new approaches of networked learning through social networking environments. It makes use of various forms of technologies to support learning and the emphasis is on learning not technology. It facilitates an individual learner, instructors, institutions to learn and to teach more easily. Lastly, hybrid/blended learning environments are more than just a combination of face-to-face and online learning environment. This research is moving away from the perspective and attempts to make educators realize that this is not just an old paradigm concept of blended learning with limited conceptual framework.

This research was designed to explore the effect of an interactive discussion provided online as a supplementary activity to the English writing achievement and self-regulated learning of undergraduate students. The reflective discussion that was employed in this research was a combination of knowledge construction, rhizomatic thinking, and a self-regulated learning in a blended learning community. Further, this research was intended to determine whether learners’ self-organization, the social networking environment, time on task, and the role of teacher were more or less related to the academic achievement of undergraduate students in an English course. The findings from this research were likely to provide insights to course coordinators, instructors, administrators, learning environment, and learners in utilizing concepts of self-organization and knowledge construction through social networking environments to improve learning environment, specifically in higher education institutions.

After the introductory part in section 2.1, the following section presented related literature review consisting of sections 2.2) learning delivery modes; 2.3) learning paradigms; 2.4) related theories and frameworks of social networking environment; 2.5) writing skills 2.6) EFL and EFL writing instruction in Thailand; 2.7) online discussion and asynchronous interaction; 2.8) learning design and environments; 2.9) collaborative learning; 2.10) self-regulated learning; 2.11) framework for promoting quality in online environments; 2.12) related research of social networking environment; 2.13) conceptual framework for present research; and 2.14) summary as follows.

2.2 Learning Delivery Modes

Large-scale classrooms, with a big number of learners, course designers tend to utilize ICT-based technologies to facilitate learning and teaching around the world, including Thailand. This advanced technology has more or less influenced the way today's teachers approach learning, the way the curriculum is organized and delivered, and the way the learning activities are adopted and assessed. In a similar way, current teaching and learning situations have influenced existing practice structures to change to use the advantages of ICT-supported learning in many forms, ranging from full online courses to blended courses, or face-to-face courses accommodated by online learning resources. A close look at the use of the online learning mode reveals three typical means by which ICT based learning is employed in educational systems, including a) e-learning, b) blended learning (hybrid learning), and c) mobile learning (Trakakis & Amirkhanpour, 2012; Koller, Harvey, & Mangnotta, 2008).

E-learning: e-learning environments are regarded as learning and teaching that are fully undertaken in virtual environments. In other words, ICT-based technologies provide the means of delivering a learning course totally distinct from face-to face teaching mode as a replacement of face-to-face teaching. However, this can be employed to support face-to-face teaching. E-learning environments can include course lessons or content, interaction function, administrative mechanisms for instructors and so on (Arkorful & Abaidoo, 2014).

Blended learning: blended learning environments are regarded as “complementary modes” to the traditional education of face-to-face system. In other words, blended learning, as Graham (2013; Jokinen & Mikkonen, 2013) noted, is a hybrid of face-to-face and online learning.

Mobile learning: mobile learning mode refers to a wide range of wireless connectivity embedded in mobile technologies (such as mobile phones, tablet computers, etc.) that provides another avenue for learning delivery and it is used to enhance education (McAndrew, 2009). This mode of ICT-supported learning may be accompanied by either e-learning or blended learning environments. Furthermore, mobile learning is typically used as an informal mode of learning and it is often associated with the concept of lifelong learning.

2.2.1 E-learning

Technology-supported learning comprises many different names and concepts that are used interchangeably or with slightly different meanings to address the implementation of ICT-based technologies: for instance, e-learning, blended learning, virtual learning, distributed learning, distance learning, web-based learning, Internet-based education, online learning, and so on. E-learning is one of a well-established

concept that is widely accepted as signifying all formats of technology-facilitated learning (Veerasamy, 2010). This term is somewhat difficult to define because it contains numerous meanings and interpretations with a variety of ways in which it is used by different individuals for variety of objectives. Accordingly, a huge number of definitions have been generated to address different and distinctive features of e-learning. One definition addresses e-learning so broadly that it includes any technologically- supported forms of education. Other definitions narrow the boundary limiting e-learning to merely online learning. In the broader sense, Mason and Rennie (2006) claimed that e-learning related to major designs of education that was empowered in some ways through Internet connectivity to distribute an extensive solutions with the objective to enhance knowledge and performance of learners (Mason & Rennie, 2006). Broadly speaking, however, almost all of the definitions emphasize nearly the same elements and features.

In conclusion, as indicated above, e-learning includes a wide range of technological devices to facilitate learning which has evolved as a solution for broadening access, and developing educational quality. It is obvious that there are a number of e-learning definitions that focus on interaction, some on technologies, and some on the kinds of contents in order to deliver teaching and learning settings at any time, at anywhere and through any paths. Apart from the technological perspectives of the term, it can be assumed that the definitions of e-learning cover a broad range of teaching and learning scenarios ranging from transferring knowledge to network-based learning and computer assisted collaborative learning (Veerasamy, 2010).

Due to the fact that the interest of the present study is based on the quality of online learning as a supplementary component and as a part of blended settings in

higher education, a review of these blended modes is outlined below to provide a context for the study.

2.2.2 Blended Learning

Blended learning is a term commonly employed to label teaching and learning practice that combine face-to-face learning with ICT-based learning systems. Garrison and Kanuka (2008, p.19) described the term by saying that *“the essential and appealing part of blended learning is that it contains the best component from face-to-face instruction and online learning designs”*. In a similar perspective, the goal of blended learning is to combine attributes of online learning or e-learning settings (such as an efficiency or sufficiency or freedom to access course content anytime anywhere with minimal effort) with characteristics of traditional face-to-face learning (such as physical interaction among learners, peers, teachers in classroom as well as enabling learners to work on content presented mainly in class time). Thus, it is evident that blended learning is applied in conventional universities and higher education institutions to offer more logistic flexibility to learners.

In addition to the above definitions, a wide variety of meaning had been attributed to the term “blended learning” by many researchers (Graham, 2013; Garrison & Kanuka, 2004; Liu, 2013; Adas & Bakir, 2013; Poon, 2013; Karimi & Ahmad, 2013; Djiwandono, 2013). However, there are three definitions which have been commonly utilized. They consist of: a) a combination of instructional modalities or delivery media, b) a combination of instructional methods or approaches, and c) a combination of face-to-face and online instruction (Bonk & Graham, 2006; Jokinen & Mikkonen, 2013).

These aspects provide valuable guidelines for designing or developing blended learning instruction. Blended learning may also be interpreted as an effort to integrate social aspects of face-to-face settings with information-access approaches of online environments. However, it is difficult to have a clear-cut measurement about how much or how little, what percentage or to what extent, online learning is embedded in a blended learning environment.

1) Alternative blended learning theories and designs

All forms of online learning have their roots in earlier distance learning (Means et al. 2009). From the late 1990s, the advent of the Internet and the rapid development of a new term “online learning” or “e-learning” has emerged to allow learners to learn lessons anytime and anywhere. Among the three generations of distance learning, blended learning has been identified as the third generation. It is a technology-enabled learning environment. The first generation consisted of correspondence courses or one-way delivery methods of education, such as mail, radio, and television. The second generation consisted of Internet-based courses, such as chat rooms, computer-based instruction, web-based teaching, and web-based learning (Moller & Huett, 2012). For decades, the researchers have been interested in the effectiveness of both online and blended settings, for example, a meta-analysis study conducted by Means et al. (2009) to survey 1,132 studies. The findings indicated that learners in online and blended learning environments performed significantly better than learners in the traditional settings. In addition, students in blended learning settings outperformed their peers in fully online setting. Means et al. (2009) stated that these results from the reflective approaches and time on task spent by the learners rather than from the effects of the media being used.

Blended learning is an approach designed to create learner-centered environments since it focuses on the dominant part of each model and combines multiple methods to accommodate learning environments for a course and deeper learning for an individual student. A misconception in blended learning is that it solely conjoins face-to-face and online learning. This may be true for surface understandings of the concept of blended learning while the potential of this kind of learning environment is that a blend of the strength of each method in order to create an entirely new method for each unique learning circumstance both theoretically and practically. Blended learning is defined with considerable variation of definition without existing universal agreement on its definition (Picciano et al., 2014; Tshabalala et al., 2014; Bliuc et al., 2007). For example, Graham (2013) defines blended learning as not merely concerned with online learning mode but as a blend of self-regulated learning and face-to-face learning by the use of technologies to enhance learning. Further, Osguthorpe & Graham (2003) suggest that blended learning refers to the use of mixed media or a variety of media. Then, Mason & Rennie (2006) and Bersin (2004) extend the definition to “other combinations of technologies, locations or pedagogical approaches”. In a similar way, Yen and Lee (2011, p.138) assert that blended learning integrates the best components of both online and face-to-face settings.

Even though there are several definitions of blended learning, the most common definition refers to an online learning and face-to face integration of learning modes (Jokinen & Mikkonen, 2013). The definition that will be used in this research is that it is a learner-centered method that integrates the strength of social networking features embedded in an online environment in order to support face-to-face

instruction to optimally combine a collaborative learning community of students together with individual self-regulated writing activities. The term “blended learning” is briefly explored solely to define the blended learning context employed in this research; an in-depth discussion of this topic is beyond the scope of this research project.

2) *Flipped Classroom*

A strategy employed in blended learning is known as the “inverted classroom” or the “flipped classroom”. In this approach, technologies are used to deliver the course content to learners outside the classroom so as to spend in-class time for active learning activities and more demanding tasks (Bates & Galloway, 2013). Online materials such as recorded lectures, podcasts, PowerPoint presentations, instructional videos are delivered as a flipping strategy to provide learners with self-regulated discovery and to provide time for them to reflect on it.

This is not to argue that technology should not be integrated to promote in class face-to-face instruction. In reality, a flipped classroom is designed to offer additional opportunities for the learners to review and reflect upon the contents studied outside class time. It is desirable to have students share and reflect their understanding with peers and others. It is evident that the online discussion with others gives students an opportunity to transform the individual understanding into shared conclusion under a nonlinear process of learning, such as asking questions, exchanging information, and defending solutions. Harding et al. (2005) point out that it fostered self-reliance, time management, and self-discipline for the students.

Regarding previous studies, Johnson (2013) reported that students perceived that they benefitted by watching lectures in video lessons. The students enjoyed

watching the self-paced video lessons out of class time. Goodwin & Miller (2013) suggested that the inverted classroom supported interactive learning and students' academic achievement. Lim et al. (2007) noted that the flipped classroom enhanced students' emotional engagement and support. The students preferred the flipped classroom to traditional lectures. Fulton (2012) added that both students and parents had positive perceptions of the flipped classroom.

3) Benefits of Blended Learning

Blended learning facilitates students' learning outcomes (Wai & Seng, 2014; Jokinen & Mikkonen, 2013; Lim & Morris, 2009; Williams et al., 2008; Ginns & Ellis, 2007), access flexibility, effective use of learning resources, learners' reflection, self-regulated learning and so on (Sharpe et al., 2006; Tshabalala et al., 2014; Smyth et al., 2012; Vaughan, 2007). The key aspect of the blended learning benefit is that it increases flexibility of access and provides outside class additional practice that reinforces the self-regulated learning to the learners. It facilitates reviewing of lessons and learning control of individual learners (Osguthorpe & Graham, 2003). It fosters online learning communities (Poon, 2013). Because blended learning setting contains a blend of face-to-face and online modes of learning, this format allows learners to learn both in class and outside class times. It allows them to work whenever and wherever they prefer when they can access the Internet and online courses without making any journey to the campus (Smyth et al., 2012). Moreover, it supports learners' ability to control their own learning progress and strategies (Zumor et al., 2013).

Regarding the review of research results utilizing blended learning as a delivery mode of instruction, the results were demonstrated that blended learning

contributed to higher learning outcomes of the learners (Allen & Seaman, 2011; Wai & Seng, 2014). The course design has resulted in learners achieving higher understanding of the course, better grades (Twigg, 2003; Dziuban et al., 2004), more reading opportunities (Zumor et al., 2013), vocabulary mastery (Djiwandono, 2013; Zumor et al., 2013), higher general motivation (Wattanapanit, 2013; Woltering et al., 2009), higher intrinsic motivation (Sucaromana, 2013), and higher satisfaction (Karimi & Ahmad, 2013; Woltering et al., 2009). Moreover, it promoted learning engagement (Donnelly, 2010; Sharpe et al., 2006), reduced dropout rates and improved examination scores (López-Pérez et al., 2011). Further, cost savings and resource effectiveness were also counted as advantages of blended learning (Vaughan, 2007).

2.3 Learning Paradigms

The shift in learning paradigms inevitably demonstrates a change from the notion transmitting of knowledge to the constructing and situating of knowledge as can be addressed by behaviorist to constructivist theories. The most prominent pedagogical constructs relating to this are reviewed and described with supported prior research. In order to address the theoretical issues at their roots, it is suitable to review the major theoretical dimensions. The multiple existing pedagogical perspectives may be framed in three major theoretical paradigms, namely objectivism paradigm, constructivism paradigm, and socio-cultural paradigm. However, this research studies had been conducted under the context of mixed educational paradigms. A brief description of each paradigm is described in sections 2.3.1 to 2.3.4 as follows.

2.3.1 Objectivist Paradigm

Objectivism is known in educational setting since the 20th century. Many traditional approaches of teaching and learning originated from behaviorist theory and cognitive theory. Both of these theories share similar philosophical assumptions which are fundamental in the objectivism (Vrasidas, 2000, p.340). Objectivism finds its roots in realism and essentialism (Jonasses, 1991), this paradigm is situated in a dualism between the knower and the known. This long tradition of objectivism in education may be traced back to the ideas of Aristotle. In this period, this traditional knowledge was regarded as “decontextualized” which can be learned, tested, transferred, and applied independently for specific contexts. Similarly, learners are regarded as passive receivers of knowledge. In a similar way, the idea of “transmission of knowledge” is a common concept of objectivist instruction (Jonassen, 1991). In other words, instruction is viewed as a matter of transmitting knowledge from experts to learners whereas learning is perceived as receiving, duplicating, transmitting accurately knowledge and then storing that knowledge and using it properly. The tutors’ roles are to help learners about the real world that is regarded as being objectively real. The objectivistic theories that are linked to positivism are significantly concerned with quantitative measurement. Thus, the learning effectiveness measurement should be done in terms of final outputs that are measured by way of cultural-free and objective models.

A number of traditional approaches, for example a linear programmed learning, are on the basis of behaviorist and cognitive theories when both of these theories share similar fundamental philosophy of assumptions that are basically found in the objectivist notion (Vrasidas, 2000). The notion of objectivism has been a

powerful approach in educational settings in the developing countries, including Thailand, for several years. However, the objectivist approach has been criticized by educational philosophers and educators globally. Many of them argue that this approach to educational settings promotes “mindless memorizing” and “decontextualized acquisition” of the facts. Regardless of all the criticism, this approach is still utilized as a dominant approach when designing online learning activities and environments, specifically in developing countries. Furthermore, the early forms of technology-mediated learning, for example, programmed instruction, and computer-based learning are also created on the basis of this approach.

2.3.2 Constructivist Paradigm

Rejecting the positivistic approach, constructivist tradition argues that learning is created by learners, it is not imposed by reality and it is not transmitted by direct instruction. Hence, the focus of constructivism is on “constructing knowledge” instead of “injecting knowledge” (Jonassen, 1991). This tradition comprises several theories consisting of cognitive theory, critical theory, radical theory, and social constructivism that all share the same notion of “centrality of the learners’ activities in creating meaning” and the teacher is not a transmitter of knowledge.

The following characteristics of assumptions inherent to the constructivist tradition are scrutinized by Jonassen (1991) and consist of: a) The world is structured by human minds based on experiences and interpretations when interacting within different contexts, b) Reality is determined by the knower and it is dependent upon each person’s mental activity, c) The individual mind is the “perceiver or interpreter of nature” by creating symbols, d) Symbols are the products of an internal reality that are utilized to construct reality, e) Individual thought is imaginative and it grows out

of physical experience, social experience and social interactions, f) Meaning is constructed and it is rooted in and indexed by individual experience depending on the knower's understandings and experiences (Jonassen,1991). Similarly, Driscoll (2005) postulates that five major principles may be scrutinized in the constructivist tradition consisting of: a) complex and relevant learning environment, b) multiple perspectives of strategies for learning, c) social negotiation, d) ownership learning or constructing own learning, and e) self-awareness and knowledge construction. Accordingly, learning in this tradition is regarded as recursive and interpretive construction of meanings resulting from actively interacting with and in the physical and social worlds. Jonassen (1995) adds that learning environments are constructivist only when they allow individuals to create their own meanings for what they experience rather than learning from the lecturer's interpretation of that content or experience.

Unlike the objectivist paradigm, learners in this tradition are not required to duplicate reality from outside objects; rather, the learners themselves construct that reality. Constructivists warn that knowledge transmitted from others may not be the knowledge that is constructed by the learners. They add that rather than prescribing learning outcomes, instructions should be focused on providing environments for enabling learners to interpret the world through numerous perspectives; therefore, the learners are able to establish their personal pictures of the world (Jonassen, 1991). This constructivist tradition designates a more significant role to active knowledge construction and learning by specifying meaning to learning experiences. This links the learners to construct knowledge, perform in learning tasks that are close to the real world tasks in conjunction with developing higher motivation, deepening understanding, promoting meta-cognitive skills, and increasing higher order thinking

skills for their learning performances. Furthermore, Jonassen (2006) affirms that it is possible to elaborate the constructivist tradition in the design of instructional environments that focus on creation of learning environments that support but, at the same time, do not mold learning. Doing this allows and reinforces personal learning experiences in one dimension by individual reflection, and in other dimensions, in collaborative experiences of learning depending on the basis of reality and contextualized environments that require problem solving skills.

Constructivism is becoming a dominant paradigm in educational environments in general and in blended learning in particular. At present, it remains to be viewed as a common theory used in higher education. However, it may be stated that constructivism is not a universal treatment for all of the instructional problems in teaching and learning scenarios, and at the same time, its quality is no more than other theories are.

2.3.3 Socio-cultural Paradigm

The last major paradigm to be reviewed is the socio-cultural paradigm or sometimes called socio-historical perspective. As in the objectivist tradition, it is argued that reality is situated outside of individual minds. In radical constructivism, reality is located in individual minds and individuals develop it in social interaction contexts. Hence, both of these traditions describe that knowledge as decontextualized and situated within or without individuals. Since then, the socio-cultural tradition has challenged the individualist perspectives. As in the socio-cultural tradition, it argues that knowledge is not accumulated in an individual head and is able to be acquired, transferred, and enriched but rather it is an activity that is constructed in the cooperative settings that is unable to be separated from the context in which it

appears. In other words, “knowledge is not solely accumulated in human minds but it rather circulates around us when people engage in contact with others in any specific activities” (Säljö, 1999, p.150). This paradigm is established on the belief that individual activities emerge in the social circumstances through the interaction among people and the environments that are accommodated by any forms of symbolic systems, for instance, the language, and it may best be understood when it is observed in the contexts of the historical development of those individuals (Lee, 2015).

In other words, the socio-cultural perspective is built on the assumption that learning and knowing are socially situated. Learning is socially situated in institutional practice that is associated with social values and norms concerning certain terms, such as knowing, learning, instruction, and education. In this tradition, learning is regarded as aspects of social practices in the society that involve learners and institutions. Learning can be separated into two levels. The first level is on social level when an individual participate in a social practice and then the second level is on an individual basis in the way that the individual make meaning when taking part in collaborative activities (Vygotsky, 1978).

As scrutinized by Cobb (1994), certain major features of this tradition are: a) The reality is situated inside the individuals’ mind through social communication, b) Learning is a process in a community of practice, c) Theoretical focus is on social and cultural processes, and d) The goal is for constitution of social and cultural process by active individual. Additionally, a basic assumption in the socio-cultural perspective is the notion of “mediated mind”, stating that the “human mind is mediated” (Lantolf, 2004, p.1). That is the reality we experience is “mediated to us with the tools that we act through”. These tools are “psychological matter” (Vygotsky, 1978, p.53) in nature

and incorporate a broad range of artifacts consisting of signs, languages, symbols, texts, mnemonic techniques, and so on. However, the most important socio-cultural tool or the “master tool” is the language that is regarded as “the tool of tools”. In the socio-cultural perspective, learning is situated and embodied in practical activities. It is achieved when participants increase appropriation and mastery of meditational methods as part of social practices. Additionally, learning is regarded as social and cultural apprenticeships into the community of practices that go beyond knowledge construction or knowledge acquisition. Instead, it is an “indispensable part of productive social practicing in the real world or lived-in world” (Lave & Wenger, 1991, p.35) that is fundamental in learning contexts.

Accordingly, learners may not accumulate knowledge outside themselves but they rather participate in activities that are distributed among them and the tools in the community. Similarly, Vygotsky (1978) claims that the experts employ tools to mediate learning in the learning processes. Hence, the cognitive development is not a direct product resulting from learning activities, but it is an indirect product. Moreover, other experts have to interact with the learners, use mediatory tools to mediate the learning processes, and then with this means, the cognitive development may take place. In a similar way, this can be achieved through Vygotsky’s Zone of Proximal Development (ZPD). In other words, the cognitive growth is accounted as a learning process in which intellectual tools provided by cultures are employed to support the development.

This “situative perspective regards learning as a process of enculturation into the community which can be reflected in various processes of participation in the community of discourse, practice and thinking”. Therefore, this approach to learning

is undertaken interdependently with both social and individual processes in a co-construction of knowledge (Hung, et al., 2004).

2.3.4 Mixture of Learning Theories

According to the above pedagogical paradigms, it is evident that multiple pedagogical perspectives can foreground online learning and blended learning environments. These pedagogical dimensions not only shape and influence the design of blended learning settings, they also construct the method that online environments can be assured. According to the literature, multiple existing theories are mostly located with two major trends of objectivism and constructivism. Similarly, the socio-cultural perspective is typically grouped within constructivism (Jonassen, 1991).

Despite this, attention is increasingly being paid to the socio-cultural notion when designing online learning environments. In the same way, in a broader spectrum, socially and culturally oriented approaches to learning are becoming increasingly significant in online and blended learning environments.

Numerous new and emerging theories, frameworks, and concepts, for instance, transactional distance theory, communities of practice, transformational learning theory, community of inquiry framework, information theory, rhizomatic theory, connectivism, personal learning environment, networked learning, virtual communities, and blended learning for the 21st century along with Web 2.0 and other emerging technologies signify a pedagogical shift of learning concepts in online learning environments.

Most importantly, the underlying assumptions and pedagogical notion of blended learning and online learning are not only to shape the design of learning environments consisting of purpose, the process of teaching and learning, and so on,

but they also form the frameworks for quality assurance that these environments can be placed, assured, and developed. That is, all these paradigms or theories try to make instruction become more meaningful and effective. It is obvious that learning occurs on the basis of any of these theories; therefore, the most effective learning theory may lie somewhere in the spaces between these positions. Thereafter, all of these theoretical paradigms and concepts can be complementary rather than oppositional (Jonassen, 1991).

2.4 Related Theories and Frameworks of SNE

Regarding the numerous reviews of literature concerning theories and frameworks applied in blended learning research, it is evident that various distinctive theories and frameworks are employed. Drysdale, et al. (2013) analysis of two hundred and five doctoral dissertations and master theses in the field of blending environments suggest that few researchers apply theoretical framework to designate research questions in their studies. They found that the most common theories reviewed include a) Garrison's Community of Inquiry, b) Moore's Transactional Distance Theory, c) Wenger's Communities of Practice, and d) Mezirow's Transformational Learning Theory. Furthermore, Graham (2013), who synthesizes research related to blended learning, adds a mixture of theory employed in blended learning research. For example, Bunderson (2003) and Xin (2002) suggested a theory named "engaged collaborative discourse" for analyzing blended learning environment. Garrison & Vaughan (2008) recommended a comprehensive design and analysis of blended learning on higher education environment by using community of inquiry framework. Other researchers such as Wheeler (2007) and Lim et al. (2011)

used the “transactional distance” theory in relation to self-regulated learning to analyze results in blended learning research. Some researchers used Rogers’ (1983) diffusion of innovations theory to analyze their results (Intharaksa, 2009; Fetters & Doby, 2011).

Even though there are various theories used in blended learning research, this research discussed underlying major theories related to online pedagogy to provide an overview of foundation of theories underground pedagogy and to connect to the occurrence of community of inquiry theory. That is to provide a description of behaviorism and cognitivism that are grouped together because of their relations and commonalities. Then, a description of constructivism theory is explored. Next, a section explains connectivism which is not a major learning theory but it extends these learning theories. Later, a connection is made between these theories and community of inquiry model; cognitive, social, and teaching presences. The final part identifies some significant previous studies related to the model of community of inquiry.

The three major theories that are commonly underpinned teaching and learning environments included behaviorism, cognitivism, and constructivism. The first theory, behaviorist theory is based on an observable change in an individual behavior whereas human mind is viewed as a black box; it ignores thinking processes that occur in mind. It may be useful in learning that requires specific procedure performing in sequence but behaviorism is not adequately enough for higher level skills of acquisition, for example, problem solving skill, and critical thinking skill. With the influence of empiricism, behaviorist relies on experience and individual-based assessments, for instance, the examination and quizzes are response-based

behaviorist instruments used to measure learners' achievement. This individualistic nature of behaviorism has never been associated with a "social presence" element of community of inquiry that the researcher discusses in detail under the section of community of inquiry framework.

On the contrary, the second theory, cognitive theory has been emerged to emphasize a significance of thinking process. This theory focuses on the importance of environmental conditions that play a role in facilitating learning. The cognitive theorists are not interested in what learners do but they are concerned so much with what they know. Cognitivism emphasizes a knowledge acquisition from a stimulus and believes that information is stored as a long-term memory so as to bring to a working memory when necessary. The cognitivists consider learning as an internal process that is a cognitive process and it is therefore not necessary to have observable response from the learners. Knowledge acquisition may occur during watching, listening or reading. Even though it is unobservable, the information is collected and used by the learners' mind later. The cognitivists explain that prior experiences are significant but argue that only environmental stimuli and response conditions are insufficient to explain learning. The additional required elements should consist of learners' beliefs, attitudes, and values as well. In order to develop the learners, encouraging the learners to determine beliefs, attitudes and values as a process of suitable learning strategies is considered important. They explained that learning elements involve perceiving and processing. Perceiving involves how the learners perceive and then absorb the information on the basis of their experiences or personal desire to make meaning of life. Processing is a culture-based uses that exists in a real-life situation applying with active experimentation of the learners so that they learn

from their experiences. As a result, the cognitivist theorists distinguish themselves from behaviorist theorists by paying attention to individual differences and learning styles.

2.4.1 Behaviorism, Cognitivism, and Constructivism

The two theories, behaviorism and cognitivism are closely related in certain dimensions. The emphasis of behaviorists is on creation of observable and measurable outcomes by determining specific objectives, task evaluation, and criterion-based assessments. Cues and practices are used to create stimulus-response association. Reinforcement from instructor feedback is used to stimulate the process. Hence, the instruction emphasizes on presenting a stimulus and providing opportunities for learners to practice. The ultimate objective of behaviorist instruction is to elicit the expected response from the learners. Several strategies employed by behaviorists are often employed by cognitivists but with distinctive reasons. A strategy of “feedback” is used to reinforce or modify behavior in behaviorism whereas the feedback is used to support an accurate mental connection in cognitivism. Another instructional strategy is an emphasis of stimuli-response assessment, for example, examination as stated in behaviorists while cognitivists focus on a real-life situation. Overall, cognitivist theories support organization and relation of new information to existing knowledge storage in memory of learners when behaviorist theories manage environmental conditions for learners to respond appropriately to the stimuli. These two pedagogies are associated in some ways with explicit learning outcomes of the learners and individual learning success.

Both behaviorist and cognitive pedagogy could be applied to certain aspects of recent online learning environment with a change of web-based pedagogy as a result

of technology revolution supported by web 2.0 capabilities as noted by O'Reilly (2005; 2006; 2013). These theories emphasize the practice on anywhere and anytime basis to generate a strong stimulus-response association to the learners. Feedback as an instructional strategy, as noted earlier, could be accomplished through an online course through discussion forum and blogs for individual development but these two theorists may not be applicable to the whole process of an online interaction or collaborative learning of learners and a social-based community phenomenon.

The third theory, constructivism has been developed to argue that a conventional teaching or learning is less important, the emphasis should be on communication and reflection with a belief that knowledge is constructed on a basis of learners' perceptions of their experiences. Constructivism is divided into cognitive constructivism and social constructivism (Atherton, 2013). The cognitive constructivism claimed that the learners as active participants construct their own knowledge and the understanding of the world by interpreting information according to their experiences. They learned through the methods of observation and interpretation, and then they construct individualized meaning of the information that is stored at their individual knowledge system. While social constructivism described that learning is created by social interactions and discussions. Learning in an authentic practical situation is also highlighted. This supports natural way of learning which is occurred through socialization.

Social constructivist advocated that the knowledge is created when learners collaborate on the normal problems and discuss them. For example, Schell and Janicki (2012) explained that an assumption of cognitive constructivist theory encourages an integration of online mode into learning environment to provide a context of social

interaction and collaboration to assist a knowledge construction of learners. Further, Swan (2005) adds that learners interact with learning contents and with other people online is a combination of individual and social aspects of knowledge construction that is best explained by social constructivism, developed by Vygotsky. Social constructivism learning theory emphasizes on social interaction, language and culture. Bronack, et al. (2006) recommends that pedagogy of online learning is generated on the basis of social constructivism. Sharing of online materials and virtual interaction through a diversity of perception processes promotes the development of individuals and group knowledge construction.

As noted in constructivism, learning involves mental construction without paying attention to instructional methods. It explains that learning occurs when an individual student creates and adjusts a mental structure to facilitate growing and changing stockpiles of knowledge. That is to state that learning refers to an active process and acquired knowledge is a unique characteristic of individual learners because of the difference in learning experience and contexts. Cognitivism and constructivism share the same belief that learning is a unique and personal occurrence of the individuals.

The two theorists that have a significant influence to constructivism are John Dewey and L.S. Vygotsky. They state that human conditions are influenced by social interactions. John Dewey (1916) claims that learners drive the inquiry on the basis of their own goals so they should control that inquiry. Thus, a critical role of an instructor is to teach them to connect relationships between various experiences, then they can store and test new information and knowledge. The key question is how these connections exist and an individual takes control and responsibility over them.

Dewey (1916) argues that knowledge and understanding come from experiences and the experience has its nature and implication beyond an individual first conscious connection to its meaning. Dewey (1938) specifies that a doubt is discovered by an individual within a unique and natural situation in an individualistic manner of each person. Dewey (1916) refers to an interaction as an explanation of a learning process. While a learner sends information to another learner, that learner constructs knowledge and adds a value to his or her learning system. Dewey's views of learning are asserted and valued by Moore's (1997) "Transaction Distance Theory", this theory describes interaction in several forms including 1) the interaction between learners and learners, 2) the interaction between learners and the contents, and 3) the interaction between learners and the instructor. Furthermore, active and collaborative learning are the predictors of learners' success. Moore's transaction distance theory is investigated in deeper detail in the next section.

In the similar way, Vygotsky views experiential learning in the same way as Dewey. However, Vygotsky (1978) views activities as a result of desired consequences. He describes that learning environment is planned. It is created by an instructor, and doubt is not discovered by an individual learner but it is brought by society through the control or the actions by the instructor. Accordingly, Vygotsky (1978) social development theory states that the potential for problem solving is developed through collaborative activities with higher capacity peers. Integration of Dewey's and Vygotsky's views together, Kolb (1984, p.38) describes learning as "*a procedure that knowledge is generated by transforming of experiences of learners*". Furthermore, Kolb (1984) adds that experiential learning can occur as personal knowledge and group knowledge. Personal knowledge is formed by a combination of

personal direct perception and socially acquired perceptions. This explains individual experiences and group experiences or knowledge that is based on social and culture contexts.

This research study is partly on the basis of a constructivist theory since it is designed to motivate, encourage and facilitate learners to construct their own knowledge that is primarily based on learners' personal experiences and to apply it to their environments. It is evident that scholars are interested in learning theories that emphasize interaction in order to develop cognition. In this case, constructivism has been highlighted (McInerney, 2005). Constructivism is constructed by a variety of philosophical thinkers from different disciplines such as Lev Vygotsky, John Dewey and Jean Piaget whose works contribute to constructivist thought (Morphew, 2009). The notion of constructivism is grown under the need to make sense of the world rather than passively receive the knowledge that is out there. The learners construct their own knowledge by integration of new information and experiences into their existing system or what they already known. Constructivism differs from other learning theories because it stresses the essential of learners' role in constructing their meaningful knowledge within social contexts.

Constructivist views rest on the assumption that learners construct the knowledge when they attempt to make sense of the environments or the world. Constructivism encourages learners' engagement in active learning atmosphere. Constructivist theorists believe that learners construct knowledge from their experiences rather than receive the information directly from the external environments or the outside world. In social constructivist perspective, learning is socially constructed (Vygotsky, 1978). Basic concepts of constructivist notions

include: a) the learners build their own personal understanding, b) the new concept of learning is depending on learners' understanding, c) the learning is promoted through the social interaction, and d) the meaningful learning takes places in real world learning tasks (Puntambekar, 2006).

Regarding many scholar views, there are several reasons support constructivism to be integrated in collaborative online learning environments. Constructivism may a) assist students to have deeper knowledge generation; b) encourage creativity and critical thinking; c) foster shared goals and a foundation of the learning community; d) accommodate all types of learning styles; e) support cultural differences in learning (Pallof & Pratt, 2005, pp.6-7). Accordingly, according to constructivism, the need for teachers to foster interactions to their learners should be acknowledged and learners should also be active participants.

2.4.2 Transactional Distance Theory

At the beginning of the 21st century, theoretical perspectives are contributing to deeper understanding between needs of the learners and spaces between learners and lecturers. One of these perspectives is a transactional distance construct that Moore took the concept of transactional distance from Dewey and Bentley (1949) who define this concept as “a learning process element”. As defended by Moore (1997), the transactional distance is “a communication and psychological space among learners and lecturers because of geographical separation”. The major concepts of transactional distance consist of the three elements include: a) the dialogue, b) the structure and c) the autonomy. The structure refers to the course design elements. The dialogue refers to the communication between learners and tutor. Autonomy refers to the control of learners on their own learning.

2.4.3 Connectivism

Although this research was underpinned by the constructivist philosophy with the developed framework called the community of inquiry in relation to self-regulated learning theory and learners' rhizomatic approach (Lian, 2011), it is interesting to explore this emerging concept as viewing learning in another perspective that is different from the concept of knowledge of the current research study. Connectivism, as an emerging theory that emphasizes the third generation of technology to extend cognitive, social, and teaching presence concepts (Anderson & Dron, 2011). These concepts are fundamental components of community of inquiry. The concept of Connectivism is firstly introduced by Siemens (2004) in the article, "*Connectivism: A Learning Theory for the Digital Age*". Siemens argues that technology advancement extends the learning definition to include learning from other's experiences. Siemens explains that learning theories that are often used in educational environments, such as behaviorism, cognitivism, and constructivism are developed when learning was not affected by the revolution of technology. He claims that within these two decades, technology has reorganized our lives, communications and our learning. The connectivist pedagogy relies heavily on an emerging technology. Connectivists argue that due to significant changes in recent technology from Web 1.0 to Web 2.0 that open numerous opportunities and challenges to the educational revolution. Connectivists pay attention to ubiquitous accessibility to the richness and availability of information and a construction of contact networks and resources. They assume that the learners' role is to generate a capacity to seek knowledge and apply the knowledge effectively whenever and wherever it is required. The learners may not have to memorize or understand the contents (Downes, 2008). Siemens (2004; 2005)

argues that most learning theories in the past focus on the learning that occurs inside the individual but these theories fail to address learning that occurs outside of a person, such as learning that is stored in the network. Essentially, connectivism acknowledges that learning is not the internal and individualistic skill but learning is a combination of personal knowledge management, organizational knowledge management, and the design of learning environment.

2.4.4 Rhizomatic Theory

The rhizomatic theory was conceptualized by the two French theorists, well-known twentieth-century thinkers, Gilles Deleuze and Felix Guattari. These two theorists wrote a book named, "*A thousand Plateaus*", in France and it was translated into English in 1987. This book presented the concept of rhizomatic thinking starting from the first chapter of the book.

In general, the notion of "rhizome" is a metaphor presenting the thinking process or the knowledge that grows unpredictably in all directions in contrast to the idea of "*tree of knowledge*" that proceeds in a predictable and hierarchical way, i.e. root to trunk to branch to sub-branch. This concept of rhizome had been adopted in the educational field and had been referred to by a number of educational philosophers. Rhizomatics is a thinking concept that destabilized the linear and fixed concepts of the power and social practices. The linear tree was compared to the traditional learning which was rooted in a singular and predictable pattern. Traditional learning rejected the multiple points of learning that could happen if learning was based on practice (Deleuze & Guattari, 1987) as happens in social networking environments.

In contrast to a singular unity represented by the tree, the rhizome is a grass-like network or a complicated de-centered network that spreads in every direction. *“The rhizome has neither beginning nor end, but always a middle from which it grows and overflows (Deleuze & Guattari, 1987).”* Rhizomes contain multiplicity rather than singularity through roots and branches emerging without structured order, and they can re-emerge at another point. They do not conform to any linear model. The non-linear, multiple growth of the rhizome associates it with different ideas and its lack of center provides it with a space to establish external networks (Deleuze & Guattari, 1987, pp.8-12). The idea of rhizomatic concept is opposite to knowledge building as a fixed end but it sees learning as a form of growth that proceeds along a continuously *“moving horizon”* of a smooth space (Deleuze & Guattari, 1987).

Rhizomatic learning builds links between preexisting gaps as Deleuze and Guattari (1987, p.7) noted that *“any point of a rhizome can be connected to any other things, and must be”*. The interconnection between in-class learning and real life experienced learning through practicing discussion in the real situation interaction caused pedagogical aspect of social networking environment to be significant. This research project employed the concept of rhizomatic thinking to view learners’ planning of ideas to post online in the SNE intervention. Rhizomatic concept in language learning should not be seen as a chaotic concept but be in the form of a self-regulated learning responding to learners’ needs (Lian, 2004; 2011) like the social networking environment that offered many areas for learning to respond to the different needs of diversity of learners. Rhizomatic theory is likely to illuminate a new way of thinking about language-learning practices and offers insightful concept about a diffusion of higher education learning.

2.4.5 Socio-cultural Perspectives

Distributed learning and distributed intelligence with technology integration potentially support more social communication and collaborative meaning-making into the foreign language classroom. Use of new technologies in language learning perspectives has been under investigation for several years. More investigation in terms of broader dimensions regarding individual and social influences is required to be undertaken to reconfirm and ensure the real potentials. Regarding the socio-cultural perspectives, understanding of an individual involves observing social circumstances and cultural means that shape beliefs, values and acting ways of a person. This perspective is viewed by Vygotsky's socio-cultural theory which claims that an individual cognition is formed by socialization (Vygotsky, 1986). Language learning is a part of socialization that an individual student acquires by using the language with speakers of that language through social interaction. Likewise, learning a language is a semiotic process as a result of participation in social activities rather than forming by an internal process of the individuals. According to Warschauer (2005), certain aspects of socio-cultural theory are associated with computer-assisted language learning (CALL) involving relationships between humans, computers and tools. Three major notions under socio-cultural perspectives in relation to technological use in language learning are the social learning, the zone of proximal development (ZPD), and scaffolding (Baleghizadeh et al., 2011) which are reviewed in the following sections.

1) Social Learning

A social learning aspect explains how technology plays a role in facilitating learning in social activities. The socio-cultural approach explains that foreign

language acquisition of learners is enhanced by technological supports to broaden social interaction. Technology-enhanced environments foster interaction and collaboration among learners and peers that reinforces positive motivation to language learning. In the foreign language classroom contexts, the target languages are not a means of students' interaction both inside and outside classroom; hence, language learners have less exposure to the target language. The application of communicative technology tools into foreign language learning context enables learners to engage in social interaction of target language communities. Those communicative technology tools; for example, e-mails, instant messaging, chat function, and video conferencing increase social interaction opportunities for social interaction of learners beyond the classroom. These tools foster real-world communication that allows effective language learning process. Many recent studies have displayed the effective benefits of collaborative learning environment using communicative tools. The integration of technology into language learning offers more language opportunities to the learners through interaction with peers and target language speakers (Lee, 2015).

2) Zone of Proximal Development (ZPD)

The Zone of Proximal Development (ZPD) is a second key notion of socio-cultural perspectives. It is a zone of potential that learners may achieve with the assistance from others rather than by themselves (Vygotsky, 1978). Language learners with different levels of proficiency and backgrounds interact with other interlocutors may encounter unfamiliar forms of language which require negotiation of meaning. This collaborative process creates a ZPD to language learners. Instructors are able to assist a ZPD of learners by giving them a specific academic task that assists them to connect between what is already known and what is to be known by the learners after

their task practices. The ZPD can be supported by utilizing computer mediated communication (CMC) tools that allow language teachers to construct a meaningful and collaborative interaction among non-native and native speakers or among non-native and non-native interlocutors of the target language. CMC tools are considered as an essential means to facilitate language development of learners. The different levels of expertise of the learners can provide various ZPDs among their peers or interlocutors when they collaboratively interact (Lui, 2012; Shabani, 2010; Schwieter, 2010).

3) Scaffolding

Scaffolding is a third significant notion of socio-cultural perspectives for network-based learning. It is a condition that more capable learners can support novices to extend their knowledge to be in higher levels of competence. The relationship of the assistance is from experts to novices. For successful collaboration, experts or teachers and novice learners should construct reciprocal and equal dimensions to overcome the tasks through socially negotiated interaction. The scaffolding involves limitation of learning context complexities for a novice learner. It also concerns gradually removing those limitations when learners gain more skills and confidence to solve the context complexities which eventually develop self-regulated learning of learners. It is suggested that teacher may use technological tools to engage students in the interaction and collaboration of learners as well as provides rich resources to sustain students' motivation. Communication tools as collaborative tools are used to facilitate learning context in which students perceive inputs, feedbacks and opportunities through negotiation of meaning in an interaction. Furthermore, a presentation of text-based discourse and feedbacks from experts facilitates learners'

development when they notice their linguistic problems leading to error correction and output modification (Santoso, 2008; Barnard & Campbell, 2005; Verenikina, 2004).

Learning theories that strongly influence educational rationale for blended learning or enhanced course are related to constructivist and social constructivist learning theories plus the concepts of collaborative learning and community of learners. The major concern is with the learning environments that are able to engage the learners and encourage them to construct their own knowledge through their internal meaning creation and social negotiation.

2.4.6 Community of Inquiry (CoI) Framework

At its core, community of inquiry is developed on the basis of a collaborative constructivism of learning theory. The community of inquiry is a well-known framework in blended context derived from a socio-constructivist perspective. It is grounded in the notion of practical inquiry of John Dewey's 1938 and its nature is social constructivist (Swan & Ice, 2010). It is originally developed by Randy Garrison, Terry Anderson, and Walter Archer 2000 (Zengele, 2013). It is explained by the three core components that sustain a collaborative constructivist environment including teaching presence, cognitive presence, and social presence. Social presence is conceptualized as learners' ability to connect affectively one to another through communication in the community as "real people" in that community. Cognitive presence is defined as learners' ability that is being constructed and the ability to confirm the meaning by the sustained reflection and discourses. The teaching presence involves the teacher's role as a guide or facilitator (Swan, Garrison, & Richardson, 2009).

The community of inquiry is developed to assume that learning occurs within the community through an interaction of the three interrelated presences. In the community of inquiry framework, a focus is on critical thinking and collaborative learning. Learning is depending on educational experiences gained in blended learning environments (Kucuk & Sahin, 2013). Garrison et al. (2000) proposed a community of inquiry model to identify relationships between the required elements for the learners to be successful in learning experiences. Learners collaboratively communicate to construct knowledge. The social interaction among learners and teachers supports deep and meaningful learning environments (Swann, 2010; Rourke, & Kanuka, 2009), particularly in online environments through the interaction of these three major elements as shown in Figure 2.1 (Kucuk & Sahin, 2013). This figure suggests that the educational experience in blended learning community is expressed by the interaction of these three presences.



Figure 2.1 Community of Inquiry Model (Garrison et al., 2000)

A study carried out by Akyol and Garrison (2011a) employed a community of inquiry framework to design a graduate course to investigate level of cognitive presence in online learning and blended community of inquiry. Development of

students' homepages and collaborative activities such as online discussion are assigned to encourage deep and meaningful experiences to students. The result shows that students in these two environments; both online and blended learning, had higher learning outcomes and higher levels of cognitive presence. In the same year, Akyol and Garrison (2011b) applied a community of inquiry model to assess metacognition, an indicator of human intelligence, of graduate students through an online discussion course. This research is organized for developing and validating a metacognitive construct to measure learners' metacognition in a collaborative community through online discussion approach. They discovered that the community of inquiry model was a reliable construct to assess metacognition in the online learning context (Lambert & Fisher, 2013).

1) Social Presence

Social presence means the degree to which learners feel connected when engaging in a community. The social presence theory is built from a social presence concept of Short, Williams, and Christie (1976). It is regularly used as a framework to support asynchronous interaction as a way to encourage critical discourses and critical thinking skills within technology-mediated environments. The social presence may be defined as *“participants’ capacity in the community of inquiry to emotionally and socially project themselves, as the “real” people (or their full personality), through the means of interaction they utilized”* (Garrison et al., 2000, p.94; Garrison & Arbaugh, 2007). More recently, a similar definition to social presence is defined by Kreijns et al. (2011) as *“the illusion degree that other people appear to become ‘real’ physical persons in either immediate (synchronous) or a delayed (asynchronous) episode of communication.”*

Concerning the significant role of interaction among participants in learning, researchers often use the theory of social presence to observe how individuals socially interact in online environments (Lowenthal, 2010). Several methods and approaches had been developed and adopted to measure social presence. For instances, Shea and Bidjermo (2009) employed a designed survey to measure social presence and other presences. The result indicated that the survey items were coherent with the intended constructs. The survey was determined through Structural Equation Modeling (SEM). It was concluded that this survey could be used as a model to measure social presence.

Learners' satisfaction is a significant variable for development of online courses since it is connected to perceived learning (Swan et al., 2000). Social presence is one of the indicators of satisfaction in online environments. It is found that social presence is strongly correlated with learners' perception of learning (Caspi & Blau, 2008; Swan & Shi's, 2005) and it is strongly related with learning outcomes of learners (Garrison & Arbaugh, 2007). Similarly, Richardson and Swan (2003) reported a significant role of social presence on both perceived learning and learning outcome. They found that social presence had strong correlations with learners' satisfaction with the lecturer, the perceived learning and the learning outcome in various activities including course discussions. In more detail, Swan and Shih (2005) confirmed the overlapping role of perceived presence with instructor and with peers as an indicator of learners' satisfaction. They noted that the instructor was a more influential predictor of learners' satisfaction than their peers. In addition, they found that strong social presence was an indicator predicting learners projecting themselves in online discussion.

2) Teaching Presence

A teaching presence acts as a binding factor of community of inquiry framework that affects the cognitive and social presence development depending on educational experience (Garrison et al., 2000). The teaching presence consists of three fundamental components; a) direct instruction, b) facilitating discourses, and c) instructional organization and design (Anderson et al., 2001).

3) Cognitive Presence

In the above section, the notions of social presence and teaching presence as constructs in the community of inquiry (COI) model are explored with related research. This section addresses the third presence, namely “cognitive presence” which is the last presence included in COI model. The original concept of cognitive presence in online discussion may be best explained by a general model of critical thinking (Gao et al., 2009), namely “practical inquiry model” (Garrison et al., 2000). This practical inquiry model (PIM) places four processes of cognitive presence for investigating community of inquiry consisting of a) the triggering event, b) the exploration, c) the integration and d) the resolution (Kanuka et al., 2007). The element of cognitive presence in COI is the stimulus for enquiry where learning occurs in situations that turn problems to enquiry processes whereby the problematic aspects are resolved (Koschmann et al, 2005). Therefore, a cognitive presence is the extent that learners construct meaning through critical reflection and discourses (Garrison et al., 2000). Critical thinking and enquiry may occur while reflecting in social contexts of shared understanding and personal meaning that exist during the process of reflection and communicative action (Garrison et al., 2000).

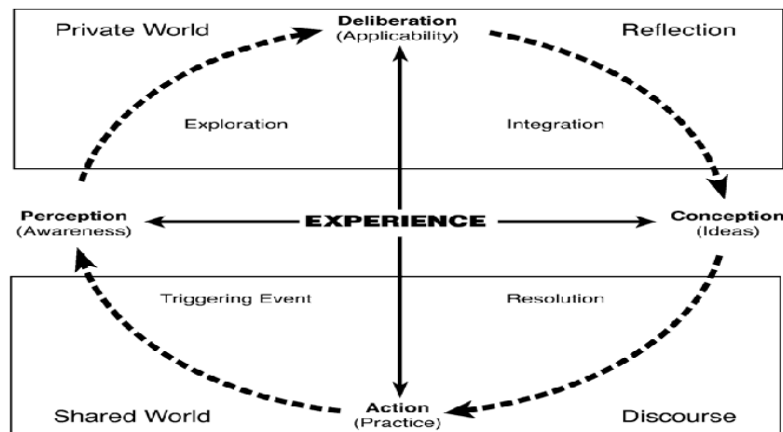


Figure 2.2 Practical Inquiry Model (Garrison, Anderson & Archer, 2001)

Kanuka, Rourke and Laflamme (2007) investigated five learner groups divided according to communication tasks to investigate the learners' participations in discussion activities provided online. These communicative activities consist of a) the nominal group technique, b) the WebQuest, c) the debate, d) the invited expert, and e) the reflective deliberation. Regarding this study, the cognitive presence construct was developed to explore the quality of critical discourses in online discussion. The finding suggested that instructional methods, such as some forms of interaction with peers and instructor, had an influence on learners' contributions in online discussion. It was also found that learners who participated in the debate activities and the WebQuest posted more numbers of messages and higher content proportion with the highest level of cognitive presence than when they participated in the invited expert, the reflective inquiry, and the nominal group technique activities.

2.5 Writing Skills

Writing in a foreign language is a productive and demanding skill that requires much practice to be developed. Writing is a skill that requires certain knowledge, experiences, and cognitive demands of the tasks. The term writing receives many definitions including online or computer writing recently, for example, Abou-Shaabab (2003) defines writing as “*complex processes of the construction of recorded messages, or on paper, and more recently, on a computer screen*”. Even though writing is one of fundamental skills like listening, speaking, and reading, the writer needs to write a clear, relevant and interesting information at the same time when written interaction may not always receive immediate feedback from the readers, unlike speaking skill or listening skill. Many researchers, for example, Giltrow et al (2005) agree that writing skill is significant but it is difficult for language learners to accomplish. Many researchers define writing as a straight forward behavior of saying what the writer means (Hyland, 2004).

2.6 EFL/ESL Writing Instruction in Thailand

In Thailand, English writing has been taught as a part of the four macro-skills: listening, speaking, reading, and writing in an English course context. Compared to the above three skills, the writing skill is less significant and it is not the key emphasis unless it is taught in a course for students whose majors is English. English writing education in Thailand is divided into two main approaches: a) a traditional writing approach and b) a process approach (Puengpipattrakul, 2014). For the traditional classroom offered in Thailand, writing education is provided on the basis of language structures: a product-oriented approach. Writing was taught as a part of grammatical

structure learning. Teachers provided drill exercises which are focused on the sentence level to practice and model sentences to be imitated. The controlled and guided writing were used in the classroom. In brief, Thai writing teachers focused on forms of grammatical lessons and perceived writing as a part of grammar instruction instead of the actual writing for communicative purposes (Dueraman, 2015; Chiramanee & Kulprasit, 2014).

Later, the “current-traditional rhetoric approach” or “functional approach” was integrated into writing instruction. For example, students are given knowledge about how each type of text functions, that is, the types of paragraph such as cause-effect, and comparison-contrast. In addition, the five-paragraph essay consisting of introduction, body, and conclusion, is explained to the students. Then, the students are asked to compose an essay with a limitation of formats and language patterns depending on the purpose of their writing tasks. It is the purpose of language which is emphasized in the “functional approach”. In Thailand, the “current-traditional rhetoric” is commonly taught in the writing class at tertiary level, specifically to students majoring in English language studies. It can be concluded that the traditional writing approach focuses on the importance of language structures, rhetorical patterns, and language usage.

Then, the process approach has been introduced and used in writing classrooms for more than fifteen years. In this approach, the teacher focuses on the process by asking students to write multiple drafts. The writing process instruction in Thailand consists of three major stages: a) the pre-writing stage, b) the writing stage, and c) the post-writing stage. In the pre-writing stage, the teacher will provide information and language that are needed for writing tasks to be completed. The

activities in this stage include brainstorming the ideas, outlining the content, drawing a mind mapping, and making oral discussion about the topic to be written about. Then, the writing stage refers to drafting of ideas based on information prepared in the pre-writing stage. The stage of writing will be assigned as a group work or an individual work. In the final stage or the post-writing stage, the students will be assigned to revise their writing. The activities in this revision stage include a) peer-review, peer-response, or peer feedback, b) revising or editing again, c) publishing the final draft and submitting the written works (Puengpipattrakul, 2014).

At the same time, many previous studies reviewed problems associated with Thai EFL learners, it had been found that the most serious problem for Thai learners was the writing skill of English (Puengpipattrakul, 2014; Ka-kan-dee & Kaur, 2014). This may be caused by Thai teaching and learning systems that place high emphasis on memorization even in higher institutions. Thai educational system does not cultivate learners' analytical and critical thinking skills that are considered crucial for today's knowledge based societies.

2.7 Online Discussion and Asynchronous Interaction

Since we are moving into the new millennium and novel learning pedagogies or the notion of “do-it-yourself” (Lian, 2014a), online learning including blended learning has evolved as an inevitable portion of educational landscapes whereas existing pedagogies across the educational paradigms or theories are reorganized and moving to reflect new designs of social and cultural contexts of classroom environments. Hence, the knowledge nature and how it is valued are likely to be a significant topic under discussion. The broad theoretical shift is towards

constructivism and socio-cultural perspectives with a focus of concepts that learning is interactive and situated. In other words, the conceptual development occurs through a process of practical experience, reflection, negotiation, meaning making, discussion, and so on that is facilitated through social interactions within particular environments and for certain specific purposes (Lian, 2008; Redmond, 2011; Lapadat, 2007; Garrison, Cleveland-Innes, & Fung, 2010).

Multiple research displays significance of online environments to foster pedagogical improvement and learning development designed regarding the constructivist and social constructivist theories (Parker & Chao, 2007; Zurita & Nussbaum, 2004; Du & Wagner, 2005; Ramanau & Geng, 2009; Taylor & Maor, 2000). However, in the rapidly changing educational phenomenon, exemplars of online environment designed regarding constructivist and social constructivist theories, and research into their effectiveness, are needed. Especially, there is a desire to explain the nature of online interaction in the form of synchronous and asynchronous discussions of learners as participants of online courses and how these kinds of discussion relate to their learning and other supported factors to learning. Additionally, it is suggested by Wang and Woo (2007) that asynchronous discussion is more likely to support learning than the face-to-face or synchronous discussion. The findings from Lin and Overbaugh (2009) also suggested that participants prefer the asynchronous discussion over the synchronous format because asynchronous mode offered more time on tasks to read postings, to reflect on posts, and to compose responses.

To date, research in higher education has applied the concept of blended learning or online learning rather than on any other levels, such as elementary and

secondary levels. Many of these studies have explored interaction patterns in synchronous (McDonald & Loch, 2008; Park & Bonk, 2007) and asynchronous discussion (Andresen, 2009; Abawajy, 2012; Noce et al., 2014; deNoyelles, 2014; Clark, 2012; Wever et al., 2010; Woo & Reeves, 2008). Other studies have described and surveyed how course participants construct identity, social presence (Garrison & Anderson, 2003), and community online. These studies assess the coherence of online discussion environment and track the nature of the depth of perceived learning (Wu & Hiltz, 2004; Yao, 2012; Wang & Chen, 2013).

Regarding gender aspects in online discussion, key findings have emerged from the studies. For example, Caspi et al. (2008) studied gender differences in the participation between face-to-face and online discussions. They found that male participants spoke more than female participants at the face-to-face discussion whereas females over-proportionally uploaded messages in the online discussion platform. It is recommended that female participants preferred the written forms of communication more than males do. Females also prefer written interaction more than spoken interaction.

Considering only written interaction in online discussion studies, some researchers report gender differences in discussion forum. Bostocka and Lizhib (2005) found that female groups posted more messages per student than the male groups of student participants. Im and Lee (2003-2004) also reported that females were more active than male pre-service teachers in online discussion activities. Anthony (2012) found different in level of participation. He found that females consistently participated at a higher rate than male university students. However, several researchers could not detect the difference in terms of gender of the

participants. For instance, Machado (2011) found no difference between male and female students when considering number of times and number of posts in asynchronous discussion. Rovai (2001) also found no gender difference in number of posts but found that female learners used more connected patterns (such as assertive remarks) and female participants also showed higher degree of perceived community than male participants. Topçu (2006) found no gender difference on discussion performance of male and female pre-service teachers even though they had different prior success background. Similarly, Yukselturk and Bulut (2009) also reported no difference in terms of self-regulated learning variables, motivational beliefs, and achievement with respect to gender in both online synchronous and asynchronous discussion activities.

Blended learning has been adopted by numerous higher education institutions with variety of forms. The blended learning is a mixture of face-to-face and online platforms to offer better educational lessons and methods delivery, such as lecture notes, additional resources, practicing platforms or discussion boards and so on. The online discussion boards are regarded as a widely used tool to facilitate learners' cognitive and skill development, such as writing skills, and critical thinking skills. The discussion boards provide two-way communication that allows participants to post messages that other people in the same online community can read and respond or reflect on those posts that enable communication between members who can access the online boards at any time and places (Santosa et al., 2005; Weisskirch & Milburn, 2003).

Online discussion boards provide electronic forum for participants to post messages that others can read and others can respond. Discussion forum enables

communication between members who are able to access the board at anytime. In other words, online discussion is regarded as a learning platform providing learners with the learning community where they share information, share experiences, and participate in the meaningful conversation in online community (Kupczynski et al., 2012). This discussion activity has contributed to learners' success in learning (Fasse, Humbert & Rappold, 2009). Yukselturk (2010; Davies & Graff (2005) found that learners who were active participants of discussion activities tended to be successful in online courses. Additionally, Johnson (2008) and Murphy et al. (2011; Kalelioğlu & Gülbahar, 2014) added that both synchronous and asynchronous online discussion activities contributed to learners' academic success. Moreover, online discussion enabled learners to establish some levels of social presence (Garrison & Anderson, 2003; Garrison et al., 2000; Lapadat, 2002) which was an indicator of learners' perceived learning (Caspi & Blau, 2008).

Blended and online learning environments are increasingly becoming a mainstream application supporting education (Power, 2008). Nearly a third of students studying in higher education level of the United States took at least one course online to support their education in 2012 (Allen & Seaman, 2013). A growing acceptance for blended and online learning with increasing use of discussion forums to support online part of the courses may be supportive for complicated understanding, divergent thinking, multiplex perspectives, and meaningful reflection rather than in face-to-face discussion environments (Pecka et al. 2014; Jones et al., 2009). These environments promote learners' interaction, engagement, satisfaction, and higher-order learning (Garrison et al., 2001). For example, online discussion environments provide text-based discussion that empowers learners to share

knowledge in straightforward and popular platforms (Wei et al., 2007). Online discussion platforms allow learners to work collaboratively in small groups, facilitate on-going discussions that focus on course content (Shih, 2013), and support presentation of group products to the whole class (Markel, 2001). Correlations between interaction and students' academic outcomes are obvious (Wu, & Hiltz, 2004). For satisfaction, Swan (2001) found that learners who reported high levels of interaction also reported higher satisfaction. Prior studies reported effectiveness of interaction in discussion activity and correlations between this interaction and students' satisfaction (Dziuban et al., 2007).

Specifically, online discussion facilitated students' writing and self-reflection (McNamara & Brown, 2008) on their learning that received interest in current higher education. Online discussion provided learners with opportunities to practice using the target language in writing and reflect on their understanding by exchanging and sharing their thought through written posts. The discussion methods that greatly promoted cognitive development to the language learners (Carrison & Kanuka, 2004; Lee & Kim, 2012; Abawajy, 2012; Shih, 2013; Wyss & Siebert, 2014) involved procedures, such as exchanging, explaining, clarifying, negotiating, elaborating, and evaluating ideas (Woo & Reeves, 2008). The effectiveness of online discussion is obvious since writing to interact requires elaboration before delivering meaning successfully and also through the process of knowledge construction that significantly improves learners' writing and learning competences (Nielsen, 2013; Wyss & Siebert, 2014). The following studies provide information regarding the quality of interaction in online discussion environment.

Concepts of constructivist theory, social constructivist theory and collaborative learning have strongly influenced asynchronous online discussions. The influential component of constructivist theory regards meaning as created by individual both internal and by social negotiation. It is proposed that teaching should be designed to develop learning environments to engage learners (Jackson, 2010; Jackson & Lawrence, 2009; Nandi et al., 2009) and advocate them to formulate their own knowledge. These kinds of environments are dramatized by the real world contexts that imitate as nearly as the real world settings for the learners to construct their knowledge by reflection within those contexts and collaboration among their peers (Shih, 2013). Learners should perform as self-directed, interactive, collaborative, and self-motivated learners in their own learning experiences (Tam, 2000; Mattar, 2010). Johnson (2001) adds that teachers should assist students to develop cognitive and metacognitive strategies of learning. Swan and Shih (2005; Wyss & Siebert, 2014) suggest that learners should be supported to have more proactive role.

Asynchronous online discussion is provided for cognitive development such as critical thinking and argumentation but may not always guarantee that development. A number of research reports results of higher-order critical thinking (Kalelioğlu & Gülbahar, 2014; Seethamraju, 2014; Arend, 2009; Cheong & Cheung, 2008; Yang, 2008; Perkins & Murphy 2006; Kanuka, 2005; Meyer, 2003) whereas some research reports uncertain results of promoting critical thinking. However, asynchronous online discussion provides a tendency for learners to share knowledge (Jones, 2010), to compare, and to construct knowledge when not all socially-constructed meaning requires higher-order critical thinking skills. Various reasons for

failure to reach higher-order thinking skills such as critical thinking are proposed. It is claimed that purely technical or the threaded format of discussion may work against an interactive knowledge construction (Gao et al., 2013). Another is the volume of interaction may be too low to generate advanced knowledge construction. It is accepted that the influential factors are complicated and involve learners' characteristics such as previous educational background, and motivation (Nakayama et al., 2007). The discussions may not have sufficient meaningful, relevant, challenging, or controversial components (Seethamraju, 2014). Learners may have opinions which are too similar whereas the difference opinions support argumentation. An alternative reason may be the lack of structure when more structure brings more cognitive processing (Schrire, 2006). Final reason is a task design for discussion that may not require synthesis, application, or any other higher levels of thinking.

Solutions commonly proposed to fix failure to reach higher cognitive development involve pre-structuring argumentation with scripts, restricted event sequences, and message starters. Ravenscroft and Mcalister (2006) recommends dialogue models and games to structure online discussion. However, Moor and Marra (2005) argue that such strategies give negative effect on argumentation, reduce debate and introduce other layers of difficulties to students. These situations commonly appear in online discussions to help students when students are unable to operate at higher knowledge construction that involves analysis, critical thinking, disagreements, and argumentations.

Outcomes of online discussion research are inconclusive and a number of empirical evidences in studies are required to reconfirm the effectiveness of this form

of learning. Previous research into online discussion seems to be unable to provide empirically-based design guidelines to practical instruction. Guidance for research related online discussion exists but it is insufficient. Inadequacy of instruments used to investigate online interaction cannot prove effective results.

2.8 Learning Design and Environments

A design of learning activity should follow the planned objectives to provide educational experience to learners. The objectives of activities may be designed to combine collaboration, reflection, and self-regulation concepts. After the objectives are determined, the learning methods are selected. A self-regulated learning of learners is the ability to personalize their learning on a recent environment of massive technological innovation. The self-regulated blended learning environment applied the idea of learner autonomy to support learners to become reflective self-determined learners.

2.8.1 Teacher Role

The dimension of teacher role may be ranged on a continuum from “didactic” to “facilitative”. The teacher role in blended or online learning may vary from being a facilitator of online environments to being a transmitter and source of the knowledge. The teachers’ didactic roles in a learning situation will strongly scaffold learners, and learning activities. On the other hand, students’ independent activity may be increased when the teacher stays in the background, as a facilitator in online learning environments. Although some instructors may shift their roles comfortably; most instructors in the Thai context pay a primarily didactic role that seems to be an unarguable necessity in blended or online environments (Wiriyaichitra, 2002).

2.8.2 Flexibility of Online Learning

Flexibility of online learning course ranges from “teacher-proof” and “unchangeable” to “easily modifiable” courses. In other words, the learning lessons and activities may be placed in a strict framework that should be followed precisely as in online instruction programming, or it can be adopted and modified on the basis of the learners’ needs or learning environments. For example, an activity like a discussion forum may allow students to lead the topic, ask questions or post their ideas initially without strict order or framework.

2.8.3 Learners’ Individual Differences

There are multiple dimensions of learners’ difference, such as ages, genders, learning styles, learning strategies, intelligence and aptitude, motivation and attitude, and personality. The individual difference is a critical issue in the effectiveness of educational success (Lim & Morris, 2009). Hence, in online learning environments, learners’ previous experiences, specific interests, and needs are taking into account when designing online learning lessons or activities. In contrast, learning environments that do not determine the individual differences of learners are designed in a way that disregards the needs for accommodation of individual differences (one size fits all) which may be contrast to the real contexts of learning environment.

Learners with different characteristics or personality type participate differently in their online discussion behaviors. Daughenbaugh et al. (2002) discovered that extravert learners like to participate in e-mail correspondences, chat function, threaded discussion, in the online courses whereas introvert learners contributed less to those activities of chats, and discussions. Similarly, Lee and Lee (2006) conducted a study with three groups of learners (extraverts, introverts, and

mixed groups) in threaded discussions. Results revealed that participants in extraverted and mixed groups of learners posted more numbers of messages than the introverted group. Moreover, the mixed groups and extraverted groups showed more social interaction, interactive interaction and cognitive interaction than the learners in the introverted group. However, learners in the mixed group displayed more metacognitive interaction than the learners of the extroverts.

On the other hand, Ellis (2003) explored the relationship between personality type and participation of learners in discussion in blended learning courses with small numbers of participants in the study. The result revealed that introvert learners posted a higher number of messages than extravert learners. Subsequent case study research (Ellis, 2006) explored in more detail the relationship between learners' personality types and their online discussion experiences. It was found that introverted types of learners needed personal spaces for reflection whereas extraverts thought that interactions with others were more essential in asynchronous text-based discussion.

2.8.4 Learners' Perception and Satisfaction

Basically, a term perception refers to a personal view of individuals and an interpretation of an environment around them. In the field of social sciences, researchers define "perception" in a number of distinctive ways. Hence, a selection of definitions for the term perception that is applicable to the present study is crucial. In addition to a review of the definition of "perception", this part discusses a relationship between perception and attitude, and perception and satisfaction. These three terms, perception, attitude, and satisfaction, are used interchangeably. Thus, the relationship between perception, attitude, and satisfaction raises the essential point of reviewing the definition of attitude and satisfaction as well.

Although the satisfaction of learners is not necessarily correlated with learners' achievement, according to statements from Moore and Kearsley (2005), satisfaction seems to be an essential key indicator of the success of courses (Askar et al., 2008; Kuo et al., 2013). As noted by Naaj et al. (2012), learners' satisfaction is an important issue for evaluating successful implementation or course effectiveness (Naaj et al., 2012; Askar et al., 2008). Learners' satisfaction can be regarded as a fulfillment of an enjoyment derived from an activity. Learners' satisfaction is defined as the learners' perceived value of educational experiences in educational settings (Astin, 1993; Kuo et al., 2013). The Sloan Consortium defines learners' satisfaction as "learners' success in their learning and they are pleased with their experiences" (Moore, 2002; 2009; 2011). Both definitions emphasize on accomplishment and success in learning and the pleasure or enjoyment with experiences. Moreover, satisfaction contributed to learners' level of motivation that is an essential factor indicating learners' success (Park & Choi, 2009; Rodriguez et al., 2008; Bollinger & Martindale, 2004; Sucaromana, 2013). Additionally, in blended learning environments, learners' satisfaction is associated with perceived interactive learning activities (Liaw, 2008), self-regulation (Ausburn, 2004), different assessment methods, instructor availability, and variety of learning resources (Ali, 2012; Ginns & Ellis 2007; Liaw, 2008).

In blended learning setting, environmental characteristics that support environmental satisfaction are; for example, the synchronous or asynchronous interaction that provides high level of communication to learning environment which assists learners to share their knowledge and experiences (Liaw, 2008).

2.8.5 Motivation

Motivation is accented as one of the primary factors in learning environments with a source that may range from “extrinsic motivation” or outside the learning environments and learners to “intrinsic motivation” or integral to the learning environment and learners. Even though the intrinsic motivation and the love to learn may attract a number of students to engage in learning environments, intrinsic motivation is always placed as a backseat to the extrinsic motivation that learners consider more important, for instance, high marks or good grades (Reeves & Laffey, 1999). As defined by Shunk et al. (2008, p.4), motivation is a process of goal-directed activities which is stimulated and sustained. An example of study concerning motivation and online environment is conducted by Sucaromana (2013) who found that blended learning supported higher intrinsic motivation to EFL students and fosters greater satisfaction environments.

2.8.6 Learner Control

Learner control refers to an opportunity in teaching and learning environments that allow learners to decide about what, where, when, and how they can pursue their learning. In this dimension, such as online learning mode, learners either studies along and within predetermined paths or they have partial or complete control over their learning place, time, path and progress. Along with the instructivism view or instructor-provided learning environments, learners are provided with the learning resources to be performed in their learning activities. On the other hand, a learner-generated learning environment is straightened with the constructivism approach which focuses on learners’ active engagement in creating, developing, and running a course to elaborate knowledge.

2.8.7 Centralized Educational System

In developing countries such as Thailand, education is highly centralized and it is controlled by the government. The central government designs and specifies policies and standards for all of the educational activities in all levels of education, such as the design of school or university financial supports, the curriculum, the textbooks, the assessment, and so on. Furthermore, the Thai lecturers are required to teach uniform content or the content set by the government following the curriculum. These contents are based on the standard with reference to teachers' guides. Based on this centralization, even the assessment of lecturers is defined by the system. It has to be noted that the centralized and hierarchical structure of higher education in the developing countries may have less value to the reality of education.

2.9 Collaborative Learning

An original concept of collaborative learning is from socio-cultural and activity theories (Vygotsky, 1978; Leontiev, 1978) and it includes social learning that has been mentioned by many researchers. It is claimed that humans learn through social interaction.

Even though a number of views are proposed to support and argue for collaborative learning processes, it is not easy to find consensus about the ideas they involved. One of the views states that it is associated with constructivist theory when students have more responsibility for their learning and interaction whereas similar term "cooperation" is more instructor-oriented. The term collaboration in this research project is employed for all types of collaborative or cooperative learning activities. For collaborating, learners are expected to work with peers to generate deep

understanding and critical evaluation of the material studied. Working together to enhance understanding and critical thinking (Kalelioğlu & Gülbahar, 2014) may be complicated in nature since collaborative learning involves socially contextualized approach of learning (Abawajy, 2012; Wever et al., 2010; Shih, 2013). It may consist of formation and reformation to post and answer to posts in order to move interaction forward. With this, learners have to share “mutual understandings” (Wilang, 2013) among their peers. It is therefore more complicated and cognitively based that involved in knowledge construction and argumentation. For interaction to happen, the idea of collaboration, knowledge construction, critical thinking, and argumentation should be integrated together. This provides a beginning path for the researcher to examine the effect of this important concept of the term “collaborative learning” in the environment using online discussions.

2.9.1 Collaborative Learning and Collaborative Knowledge Construction

Collaborative learning refers to learning approaches, methodologies, or environments in which learners negotiate and share meanings related to problems and issues arising (Dillenbourg, 1999). Further, the context of learning takes place socially as a collaborative knowledge construction. Many dimensional aspects of collaborative knowledge construction could be explored in online discussion, such as individual and group cognition, knowledge building and knowledge construction, reflection, and argumentation versus critical inquiry. Suthers (2005) notes that knowledge construction is created through interaction. Collaboration may be undertaken both asynchronously and synchronously in the interaction modes of online learning or blended learning environments.

2.10 Self-Regulated Learning

Self-regulated learning is a self-directed or self-organized process that enables learners to raise and develop awareness of strengths and weaknesses in their learning. The self-regulated learning (SRL) of learners refers to certain degree that the learners are motivationally, behaviorally, and metacognitively active in their own learning process (Zimmerman, 1998; Schunk, 2008; Carneiro & Lefrere, 2011; Rahimi & Bigdeli, 2013). Building on this definition, many researchers found that learners who have less SRL skills are dependent learners and who are less likely to be successful in any online courses (Tsai et al. 2011; Li & Irby, 2008; Ching et al., 2009). Through the use of SRL strategies, learners develop their abilities to navigate unfamiliar environments of learning such as online courses. Several researchers have explored the effects of SRL in new learning environments. Even though the application of SRL theories varies in approaches to develop SRL skills, they all seek to develop the SRL skills that optimize motivational, behavioral, and metacognitive processes of learners (Wolters, 2011; Zimmerman, 2000) through many strategies employed.

SRL strategies are the actions including the processes used to develop learning and skills. Due to the autonomous and self-directed nature of online learning environments, an effective use of SRL is necessary for learners' success in a computer-enhanced language-learning environment (Lian, 2014) and also any online learning environments. Unfortunately, not every learner who participated in online environments had SRL skills. Regarding research results, it was found that learners who have strong SRL skills and who were motivated intrinsically were likely to be successful in online courses (Hu & Gramling, 2009). However, not all learners used SRL skills and had the necessary motivation to be a successful online learner.

Learners who were not ready to manage their own learning in online courses were at risk of increased frustration, poor academic outcomes, and course withdrawal (Harrell, 2008). Since a number of prior research indicated that learners taking courses online were struggling to employ SRL strategies to facilitate their learning goals, an exploration of how learners could develop SRL skills remained a broad area for further studies (Barnard et al. 2008). The SRL concepts incorporated in this study were developed basically from the idea of learners' control over their own learning that they self-regulated their own learning behaviors, used their own learning strategies, and were motivated intrinsically by themselves or by their community or any other possible factors. These concepts were divided into two levels of autonomous degree. They were named by the researcher as 1) the Fully SRL group when learners had full control over their own learning 2) the Semi SRL group when learners had half control of their own learning together with the mediation from their instructor if they needed.

2.10.1 Definitions of Self-Regulated Learning

Self-regulated learning is claimed to subsume aspects of learning including cognitive strategies, metacognition and motivation in only one coherent construct. A number of definitions of SRL result from its multidimensional constructs that cause a difficulty for researchers to provide a precise definition to this term. Many scholars define the term differently ranging from autonomous learning to self-efficacy (Hiemstra, 2004). Self-regulation is defined as ability, or capacity, or process (Pintrich, 2000), or strategies (Pintrich, 1999) or thoughts, feeling and actions that are planned and adapted to each personal goal (Zimmerman, 2000). Zimmerman and Schunk (2001) define a conceptualization of SRL as a psychological construct that

explains how learners motivationally, behaviorally, and metacognitively improve their own learning and performance. They identify that self-regulated learners constantly regulate their own thinking and motivational beliefs and manage resources and learning environment effectively. That is to say they take an ownership of their own learning and do not always depend on teachers to provide information and guidance for them.

The definition of SRL in this research project refers to the process that the learners proactively use strategies to improve an English writing skill by managing their learning environment to achieve their learning goals. Hence, the operational definition of SRL in this study refers to a degree to which learners are dynamic participants in their learning consisting of elements, for example, motivation, metacognition, cognition, and behavioral and environmental variables undertaken by the learners to support their learning.

2.10.2 Models of Self-Regulated Learning

Self-regulated learning strategies as a process to assist learners in organizing their own emotions, thoughts, and behaviors, in order to navigate successfully the experiences of learning which occur when they engage in the purposeful actions and processes which are directed towards receiving of knowledge or skills. The models of SRL strategies are divided into three distinct phases consisting of a) planning b) performance monitoring, and c) reflections on performance (Zimmerman, 2000).

For more than two decades, many models of SRL have been proposed. For example, Winne & Hadwin (1998) proposed four stages of self-regulated learning model included: a) the task defining, b) the goal setting and planning, c) the operation of study tactics and strategies, and d) the metacognitively adapting study for the

future. In the same year, Zimmerman (1998b) developed a four-stepped model to help learners to self-regulate their learning which consists of: a) self-monitoring and self-evaluation, b) goal setting and strategic planning, c) strategy implementation and monitoring, and d) strategic outcome monitoring. Furthermore, Zimmerman (1998c) also proposed a social cognitive model with respect to processes of SRL that could be achieved in cycles. This model consisted of a) the forethought, b) the performance or volitional control, and c) the self-reflection.

2.10.3 Related Concepts of Self-Regulated Learning

Multiple and different designs of learning environments can take place within or without instructional contexts, incidentally or intentionally, informally or formally, and it can occur personally, in a small group, or in the community (Carneiro & Lefrere, 2011). Multiple existing different terms and concepts name a self-monitor and self-control of the learners as, for instance, metacognition, autonomy, self-directed learning, self-managed learning, personalized learning, self-organized learning and self-regulated personalized learning. These terms with the meaning related to self-regulated learning and other relevant concepts may be divided into three types of a) the narrow sense of SRL, b) the broad sense of SRL, and c) the personalized learning.

Over the decades, as many countries including Thai societies are attempting to turn into knowledge societies, therefore, the notion of SRL has become a significant topic of interest in the context of educational research studies. Therefore, it is the major focus of this research project.

2.11 Related Frameworks for Promoting Quality in Online Environments

With a growing demand of online environments, including blended learning environments, numerous initiatives, such as instructional designs, models, and studies, have been carried out to enhance and assure quality in these environments. Hence, this is striving for “excellence” decisive factor in determining future of online channels of education, particularly when there is a high competitive pressure to become more effective. Considering the advantages and disadvantages of online quality of frameworks reviewed, certain online frameworks were adapted. Accordingly, the following online frameworks developed to assure and enhance quality in the social networking environment of this study were provided afterwards. It should be noted that the frameworks need to be viewed as the online discussion environment.

With the increasing numbers of online learning environments and courses, the issues and concerns facing blended learning environments, in the dimension of their quality, are brought to the forefront and have received high interest (Hénard & Roseveare, 2012). In order to meet the demands of various online learning environments, the needs of institutions, administrators, faculty, teachers, learners, and also pedagogical technicians and techniques in online learning environments, a structured framework of online learning quality is required to ensure and guarantee the effectiveness of these online learning environments.

2.11.1 Empirically Oriented Quality of SNE

This section refers to online quality environments in terms of quality framework, and research studies that are grounded in empirical research in the forms of survey, interview, observation, and so on.

A study about online quality was organized by “The Institute for Higher Education Policy (2000)”. It was entitled “*Quality on the Line: Benchmarks for Success in Internet-Based Distance Learning*”. This was a famous study carried out by the National Education Association with the Blackboard, software for the online course delivery, as its sponsors. Regarding this research, an extensive review of literature was investigated. The finding from the review displayed 45 benchmarks to ensure the quality of online environments. The benchmarks were reduced to 24 benchmarks out of the list of 45 benchmarks that were considered significant for ensuring excellent quality of e-learning environments. These 24 benchmarks were divided into seven categories as in Table 2.1 below. This study was one of studies for assuring and qualifying online quality, e-learning quality, and web-based learning. Furthermore, the framework is addressed as a blended learning framework for learning quality assurance. It is a model framework for many studies across the world. The emphasis of the 24 benchmarks is placed on items, such as Technical training and support to students, students’ interaction with other students, and students engaging in higher-order thinking.

Table 2.1 Institution for Higher Education Policy's Framework for E-quality

Institutional Support Benchmarks	-A technology plan is documented. -A centralized system support is prepared for constructing and maintaining the infrastructure of distance education
Course Development Benchmarks	-The guidelines regarding the standards are taken in account for the course development and the course design. -The online courses are designed to engage learners in learning activities. -The educational materials are reviewed periodically.
Teaching/learning Benchmarks	-The learners interact with the faculty and other learners. -The student assignment feedback and the questions are constructive and provided periodically. -The learners are taught with the appropriate approaches from the efficient research and also the assessment of resource validity.
Course Structure Benchmarks	- The learners are advised about the course before starting any online courses. -The learners are provided with the course information that gives course outlines, course objectives, course concepts, and so on. -The learners have access to the enough library resources. -The faculty and learners agree on expectations regarding times for the assignments completion and the faculty responses.
Student Support Benchmarks	-The learners receive the information about the online courses, consisting of the admission, the requirements, the books, the supplies, and so on. -The learners are provided with the information to facilitate materials through online discussion.
Faculty Support Benchmarks	-The learners have access to the technical assistance throughout online courses, -The technical assistance is provided. -The lecturer training and assistance, including peer mentoring, are provided through the whole online courses. -The faculty members are prepared to cope with the arising issues from the learners' usage of online data.
Evaluation and Assessment Benchmarks	-The instructional effectiveness process is assessed by an evolution process using a number of methods and the applied specific standards. -The enrollment data and successful technology uses are used to measure the online course effectiveness. - The outcomes of the learning are usually reviewed to ensure the clarity, the utility, and the appropriateness.

(Adapted from the Institution for Higher Education Policy, 2000)

According to the above benchmarks, this study included a set of factors and benchmarks listed that should be accounted in any online settings. It could be concluded that we could not establish any framework for quality improvement and assurance without addressing educational values so as to define desired learning outcomes. This research project does not include all these benchmarks. Interestingly, the two experimental groups; the fully self-regulated learning (SRL) group and the semi self-regulated learning (SRL) group are assigned to receive different degrees of these benchmarks to investigate the effect of these benchmarks that seem to play a significant role according to the previous research findings. The semi SRL group

receives more benchmarks in terms of teacher's facilitation and evaluation and assessment whereas the fully SRL group receives less degrees of these benchmarks.

2.11.2 Theoretically Oriented Quality of SNE

After reviewing certain research oriented quality of online environments in the previous section, in another dimension, it should be noted that the following section addresses conceptual of online quality work that are models, guidelines and principles embedded in theoretical and practical knowledge of educational environments.

There are several models of good practice providing potential framework for online course evaluation. However, this research project is conducted on the basis of certain principles from “seven principles of good practice in undergraduate education” because the focus is on learning or learners. It is not depending on administrative issues. The “Seven Principles for Good Practice in Undergraduate Education” was firstly published in the AAHE Bulletin (American Association for Higher Education Bulletin) by Chickering and Gamson in 1987 for higher education as benchmark for effective instruction in higher education (Chickering & Gamson, 1987; Robertson et al., 2005). The seven principles of good practice were generated by many scholars from the review of fifty years of literature in education (Thompson, 2008). They indicated that a good practice emphasizes, encourages, or develops a) the students and the faculty contacts; b) the active learning of students; c) the cooperative learning among students; d) the immediate feedbacks; e) the time spending on tasks; f) the high expectation of communication; and g) the diversity of talents and means of learning (Chickering & Gamson, 1987, p.3; Chickering & Gamson, 1999, p.76). This model of good practice had been modified by including technology in teaching and learning (Chickering & Ehrmann, 1996). The model of good practice is a research-

based guidance for the design and delivery of face-to-face and online learning courses (Aydođdu et al., 2012). Thus, the roles of the teacher are to prepare courses with the potential “to encourage staff-student contact; to encourage learners’ cooperation; to encourage learners’ active learning; to give immediate feedback; to increase time spending on tasks; to communicate with the high expectations; and to respect learners’ diversity of talents and strategies of their own learning” (Bangert, 2004; Chickering & Ehrmann, 1996; Gamson, 1991).

Principles of Good Practice

1) Principle one: encourages staff-student contact. This principle encourages staff and student contact involving an interaction that happens between teacher or faculty and learners inside and outside classroom that assists learner motivation and engagement (Chickering & Gamson, 1987). Online delivery channels, such as LMS, CMS, and social networking platforms contain numerous built-in elements through which the learners and the faculty collaborate. For example, E-mail, live chat and asynchronous discussion board features promote contact between learners and academic staffs. The interaction among learners and academic staffs such as teaching staffs and non-teaching staffs outside classroom is well-documented and it is noted to be essential (Walker & Montes, 2011; Rocca, 2010; Alderman, 2008; Vito, 2007) to indicate learners academic outcomes.

2) Principle two: develops cooperation among learners. This principle refers to utilization of collaborative and group work environments that are designed to enhance learning activities (Chickering & Gamson, 1987). An activity such as online discussion may serve to offer learners with access to other learners so as to establish an online learning community. The interaction among a learner and the other learners

is an invaluable example and a good resource of guideline pattern of interaction for a number of learners to follow. This discussion activity could be utilized to facilitate collaborative interaction among learners and their classmates, teachers and learners, and groups of outsiders or experts who may add a valuable dimension to the learning online (Brinthaupt et al., 2011). Collaborative learning is a social function of group work or team work as cooperation among peers to enhance an intellectual intelligence of the whole community. Working in groups encourages exchanges of ideas and experiences among learners which facilitates developing of thinking and deep understanding of lessons (Puzziferro & Shelton, 2009). Cooperation among learners creates positive relationship and increases learning achievement. Good learning is like good working, it is social and collaborative but not isolated and competitive (Aydođdu et al., 2012). A successful online learning environment is noted to be related to the collaborative nature of learning. Hence, it is normal to find a number of literatures dealing with online courses that support the notion of collaborative learning environments (Meepian & Wannapiroon, 2013; Swan, 2003).

3) Principle three: encourages active learning. Active learning is defined as being involved in learning process including practices that are intended to allow the learners to apply and relate lessons to their daily lives by chatting, writing, or reflecting (Chickering & Gamson, 1987; 1991). In other words, learners apply knowledge learning in class or online course to interact with active engagement between learners and contents; learners and instructor; learners and learners; and learners and technology (Lawanto et al., 2014; Palloff & Pratt, 2011). Active participation is a critical component in educational environments because the learning can be best achieved by the learners' active involvement (Baldwin, 2014; Brinthaupt

et al., 2011; Prince, 2004). This principle is similar to a perspective of constructivist theory which states that learners construct the knowledge on the basis of their own experiences. Online learning by nature causes learners to be active participants because they require learners to interact, reflect, post, asynchronous chat, and search in order to complete learning tasks assigned.

4) Principle four: gives prompt feedback. This principle refers to providing learners with suggestions for their improvement or acknowledgements of satisfied performance in order to facilitate learners' understanding of their own performance and competence required (Chickering & Gamson, 1987). If instructors and peers are fully engaged, capabilities of LMS, CMS, social networking features are available for feedback such as discussion boards support asynchronous feedback whereas live chat sessions offer prompt feedbacks. Prompt and focused feedbacks by instructors are crucial for learning endeavors (Bento et al., 2005). In online environments, instructors take a more facilitative role (Hixon et al., 2011) including using more conversational online comments to enhance learners' participation and discussion (Young & Duncan, 2014; Noce et al., 2014; Bento et al., 2005; Brower, 2003). A high emphasis for instructor's role is on providing prompt feedback to learners regarding assignments and discussion in class (Balaji & Chakrabarti, 2010). The prompt feedback is an effective method to engage learners in learning tasks and to create connection with professor. Peer review is another effective method. The more learners engage with the content, the more they will master the course contents.

5) Principle five: increasing time on task. Prior studies indicate that time on task or time spent on task is a strong predictor of learning outcome. Time on task may refer to time management skills and abilities to complete necessary learning tasks

(Chickering & Gamson, 1987; 1991). Through online course, learners have flexibility and freedom to learn at their own space and time. This flexibility allows them to access learning environments when they are mentally ready and when they are willing to study (Grant & Thornton, 2007). The concept of increasing time on task has been connected with higher periods of time spending to the course, or frequency of logging on the online course. This implies that learners spending more time on the course are satisfied with the experience, take ownership of their learning, and increase their learning performance.

6) Principle six: communicates high expectations. This principle involves expectations for the learners to perform at their extra efforts (Chickering & Gamson, 1987). This is achieved by a course syllabus component including learning objectives, assignment rubrics, and expectations for learners' academic success. High standards and academic goals are set earlier at the beginning of each course. The importance of communicating high expectation to the learners is emphasized. Instructors should communicate clearly about their expectations through course objectives and explain how these expectations can be reached (Grant & Thornton, 2007).

7) Principle seven: respects diversity of talents and methods of learning. This principle is specified as the recognition and encouragement of different learning styles, different perspectives, and diverse talents of learners in the community or in the course (Chickering & Gamson, 1987). In detail, this principle refers to a variety of learners' characteristics including attitude, learning style, motivation, age, gender, ethnic, cultural background, and ability that the learners have and display when they interact online so as to express a variety of perspectives due to their multitude of experiences and backgrounds (Forman et al., 2002; Liu et al., 2010; Hartnett et al.,

2007). Each learner is unique in respect of opinions and experiences. Therefore, exposure to different styles of learning and points of view may increase learner's ability and versatility to apply in real world situations (Grant & Thornton, 2007).

2.12 Related Research Studies to SNE

The social networking sites that merged traditional media, such as television, film, newspaper, etc. with digital technology to create interactive and dynamic applications and tools. Some of the most important elements involve open access Internet resources; user-generated content, peer feedback, and community feedback. The educational system has been transformed by the impact of emerging theories and social networking technologies even though some educators do not fully understand how to use these technologies effectively. It should be noted that the transition of the 21st century is not concerned with adjusting the existing teaching/learning environment but instead, educators should be open to the new pedagogy focusing on learner self-organized learning, such as do-it-yourself communities (Lian, 2014a), and on demand assistance (Lian, 2014) in relation to technology enhancement to strengthen 21st century skills such as self-managed skills, critical thinking skills, and creative thinking skills (Lian, 2012). Learning theories and the notion of self-regulated learning for foreign language skills could be supported by the social networking environment, through the uses of messaging, Wiki, blogs, RSS feeds, videos, discussion forums and many other applications.

As supported by the social networking environment, the act of learning is more collaborative and more interest driven moving away from typical/stereotypical model. As a learning process, ways of learning and learner contents should be

generated by the learners and should not be defined at the beginning of the class. Hence, the roles of teachers are no longer focusing around the contents but the competence to contextualize the content to meet the needs of the new generation of these learners. Social networks have an impact on today's education because they connect people in a way that is consistent with natural interaction in the real world. This can therefore be applied to language learning by imitating the face-to-face interaction through online interaction instead. In addition, this encourages knowledge and information transfer, helps students learn quickly, supports on demand learning and information searching (Lian, 2014). It also supports distributing of knowledge and engages the learners in the community of learning with peers who share the same interest. Diverse backgrounds and learning styles of the learners determine what they have learned and how they learn. With various applications/ activities, social media supports the learners' personalized learning environment. There have been research studies about social networking environments conducted around the world to investigate this environment to learners' learning.

Regarding learners' engagement, self-confidence, self-esteem, the lack of physical presence component may increase interactive behavior to students. This means that the low confidence students can also interact/learn with others online through social media site anonymously or with no identity. This supports the willingness to participate with other learners and it is related to learning styles, learning proficiency, learning behaviors of the students such as low confidence, low self-esteem, low level of ability to learn, some cultural backgrounds (such as coming from an Asian countries) and personal background (such as coming from rural areas). Identity or sense of worth in society or sense of community is developed through

reflection and self-representation. As an example of research, a study was conducted by Wasoh (2014) who used a social networking environment in EFL writing classroom in Prince of Songkla University, Pattani Campus, Thailand. The results revealed a positive attitude toward using Facebook as an attractive tool for EFL discussion with teacher and peers. This environment supported higher confidence in writing of students.

Regarding motivation, there are countless advantages to implementing social media into education. Social media and social networking motivate students to learn independently (apart from school learning) and this helps them construct their own learning tasks, activities, knowledge, understandings and also the motivation to learn (Yunus et al., 2012; Johnson, 2009; Collin, et al, 2011).

Regarding satisfaction to social networking environment, there were a number of studies conducted to prove that this environment was likely to foster positive perception to students. For example, a study conducted by Rouis, Limayem, & Salehi-Sangari (2011) which was designed to investigate the effect of this environment on undergraduate students at Lulea University of Technology in Sweden. This research was based on “flow theory”. The instruments used were survey questionnaires distributed to 239 undergraduate students. The result of this research indicated that extensive use of the Facebook platform decreased academic performance of students but brought positive effects on student satisfaction of life events.

Apart from satisfaction, the social networking environment was able to reinforce the positive results to students’ writing performances and perceptions. For example, Shih (2011) conducted a blended approach based on “social constructivist theory” using a social networking environment to support English writing class. The

participants were 23 students majoring in English studying at a technological university in Taiwan. The participants were separated into 3 groups of high, medium and low proficiency on the basis of their scores in the 2010 entrance examination. The instruments consisted of pre-test, post-test, survey questionnaire, in-depth interview. The students were asked to write an essay on a given topic as pre-test and post-test. Writing was assessed on the basis of scoring criteria from the National College Entrance Examination which was used to evaluate these tests. The satisfaction questionnaire which was modified from Hsieh (2010) and was validated by two experts for content validity was employed. The interview questions ask about the advantage and disadvantages of Facebook on writing and some other questions were used to interrogate 6 students. During the 8-week experiment, the social networking activities included posting 7 assignments on Facebook in groups, assessing the writing of other group members by providing feedbacks and comments weekly. The researcher or the teacher evaluated, corrected, examined, and responded to students' comments, feedbacks, and assessments. The findings of this study suggested that students improved their writing abilities and enjoyed learning through social networking environment. The results also suggested that students with higher English proficiency tended to have more interactions with other participants.

Similarly, Shih (2013) explored the effect of a social networking environment and peer assessment in a business communication course with 111 students as the participants, studying at a public technological university in Taiwan. These participants were divided into 3 groups of English-majored undergraduate students, industrial management master program students, and business management master program students. The participants were assigned to post 4 writing pieces for the

entire course. The instructor posted 5-10 terminologies or phrases for each group to write about in their assignments. The assignments were posted on a social networking environment, embedded in the Facebook site waiting for other groups to post comments or give feedback. Then, each group corrected their written posts following the comments and feedback from peers. The instructor was the facilitator for each group to guide and check the comments. All instruments employed for this research included pre-test, post-test, Facebook sites, interview, self-efficacy scale questionnaire, and learning satisfaction survey questionnaire. In the post-test, two survey questionnaires and interview questions were administered after the experiment. The results indicated that this social networking environment fostered effective cooperative learning and learning outcomes for the ESP course as well as enhancing student motivation and interest.

Regarding the social networking environment research in Thai contexts to enhance writing skills, there have not been many studies conducted in the past. For example, a study conducted by Piriyaasilpa (2010) who incorporated the social networking environment supported by the “Facebook” platform into an English course to teach 134 Thai university students English for academic purposes (aimed at the 4 skills of English: listening, speaking, reading and writing). The researcher found positive results. It was suggested that IT training and proper design of the activity were important prior to social network implementation.

Another research study in Thailand, with emphasis on only the writing skills was done by Kajornboon (2012) at Chulalongkorn University, Bangkok, Thailand. Kajornboon (2012) employed a social networking environment to support the writing skill of 32 first-year Medicine students studying English. This research was based on

“social learning theory” which assumed that learning happened within a social context and that people in society learn from each other by processes such as learning by observation, imitation and modeling. The researcher assumed that the learners would learn from other participants in this social networking environment and empowered by “Facebook”. There were three phases for using “Facebook” both inside and outside classrooms: 1) Learners were asked to check other learners’ writing assignments. 2) After checking the writing assignment, they were asked to categorize the mistakes made and to correct all those mistakes. 3) Six of the students were selected and interviewed to evaluate the effect of using this environment in teaching writing. For the whole semester, the students posted four writing assignments on this online environment and received feedback from peers and the teacher. In correcting their friends’ works, the students coded grammatical mistakes they found. All the coded mistakes became the data to be analyzed so as to determine the most common mistakes. The result of this research revealed that the Facebook writing assignments were an effective tool for teaching writing. The most common grammar mistakes were 1) misuse of vocabulary 2) misuse of tenses 3) misuse of singular and plural nouns, respectively. The other common mistakes were errors in punctuation such as commas and periods, misuse of pronouns and possessive pronouns, misuse of articles, misuse of prepositions, misuse of verbs, misuse of nouns or adjectives, misuse of capital letters, infinitive or gerund and the last group of incorrect grammar found were misuse of superlatives and misspelled words. The result from the interview part also demonstrated that the social networking environment was useful and helpful. The researcher suggested that rules and guidelines for using social networking environments needed to be set appropriately so as to create successful educational conditions.

Similarly, in the same year in Thailand, Suthiwartnarueput & Wasanasomsithi (2012) also conducted a study to observe the effect of a social networking environment embedded in “Facebook” on low-intermediate EFL students’ writing performances. This research result also revealed positive use of this environment to enhance students’ writing and attitudes toward the course. This study was based on the “social constructivist theory” and Krashen’s affective filter theory. 83 undergraduates studying at a university in Nakhon Pathom Province, Thailand, participated in the study. This was an experimental design using pre-test and post-test as part of the experiment and also interview questions to collect in-depth information about students’ attitudes. The pre-test and equivalent post-test consisted of two parts; multiple choice for grammatical knowledge testing, and paragraph writing. The treatment consisted of the social networking environment which was an online area to visit outside class. It allowed students to leave messages, post their writing work, and enter into discussions with teachers and other users. The result showed that after the experiment, the posttest scores were significantly higher than the pre-test scores. It was concluded that students’ grammatical and writing competence had been enhanced by the experiment. The interview result also showed that students had positive attitudes toward using this environment to support classroom study.

2.13 Conceptual Framework for this Research Project

Regarding all of the above related literature review explored in this chapter, the conceptual framework for the whole study was developed as shown in Figure 2.3.

SNE Conceptual Framework

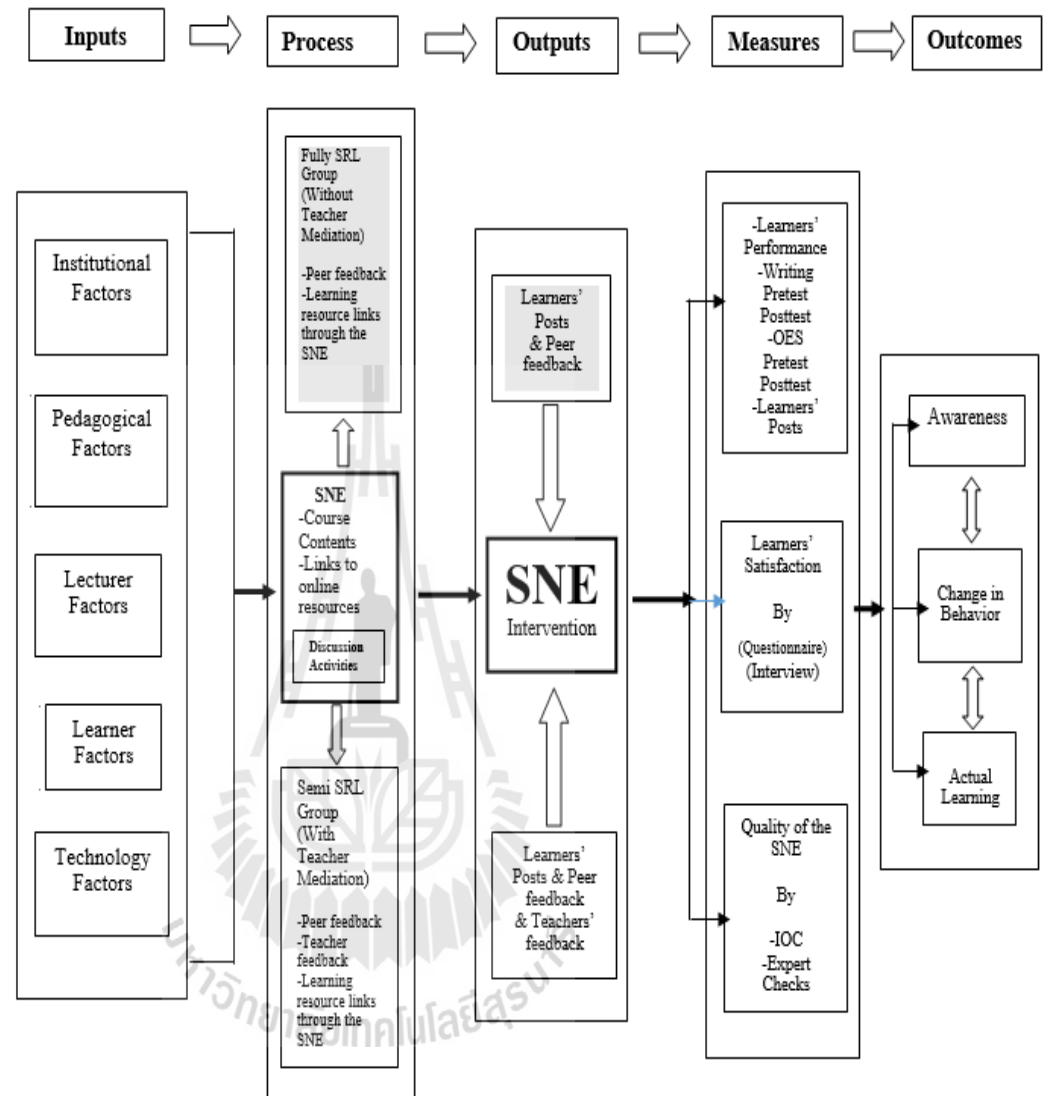


Figure 2.3 Conceptual Framework for the Present Research Project

(Designed by the researcher)

Figure 2.4 below represents the pedagogical concepts underlying the SNE supported course. The related literature review of each pedagogical dimension is described in previous section from 2.2 to 2.10. This model is illustrated to present the pedagogical concepts without any intention to prove the applicability of this model or

to propose the model. It is constructed for the readers to support the idea of the underlying pedagogical concepts.

SNE Pedagogical Concepts

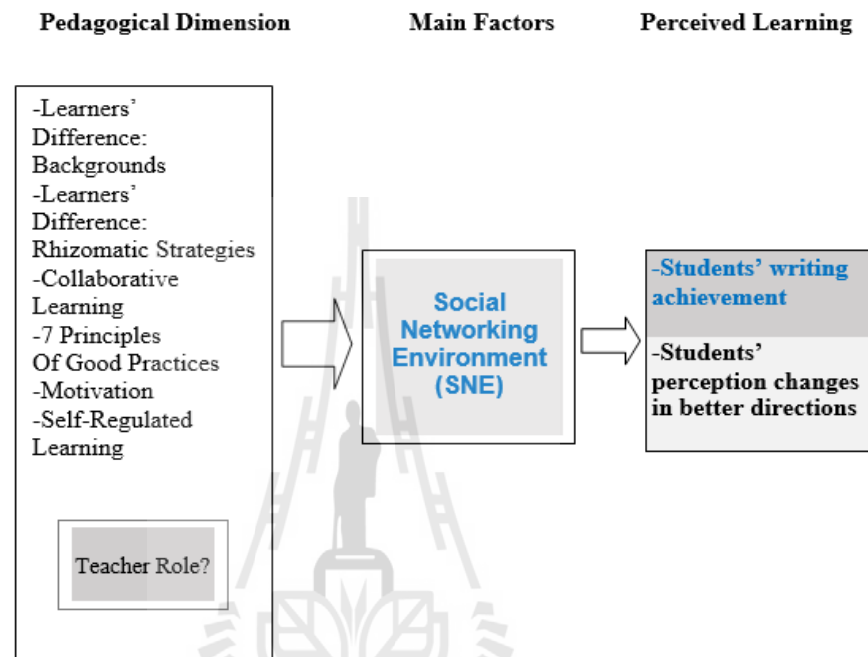


Figure 2.4 Pedagogical Concepts of SNE

2.14 Summary of the Chapter

This chapter has described a broad review of related literature to the current study. It provides a review of related principles, theories and previous research studies to blended learning, self-regulated learning, writing skills, collaborative online discussion, and social networking environments. Finally, the conceptual framework for this research study was proposed. In the next chapter, all the research methodology concerning this study is explained.

CHAPTER 3

METHODOLOGY

3.1 Introduction

The major purpose of this chapter is to provide a detailed description of learning intervention undertaken by the researcher to perform this study in attempting to answer all of the research questions proposed in Chapter 1. First, the methodology of this research is described. Then, the institutional context, selected participants, variables, research procedures, instruments, validity and reliability of research instruments are presented. Finally, the procedures of data collection, data analysis methods, and ethical safeguards are explained.

3.2 Research Methodology

The research questions determine the kind of approaches to be used i.e. data collection and analysis of an experimental research design with both quantitative and qualitative data resulting in a mixed-methods approach to data analysis. This study employed a quasi-experimental design (Rovai et al., 2014; Coolican, 2013) with two groups of participants pretest and posttest designs for undertaking the research (Creswell, 2009).

This research was designed to employ a mixed-methods approach to explain the finding resulting from different types of research instruments. Regarding the notion of method triangulation for seeking convergence across the quantitative and

qualitative methods (Greene, 2007), the integration of a variety of methods are likely to generate more reliable results. The mixed-methods research is associated with field studies, observations, interviews, and surveys. The different types of data received were helpful to analyze insight perspectives for better understand of the results.

3.2.1 Institutional Context

This research study was designed to be conducted at a Thai university where the social networking environment was integrated as complementing rather than replacing face-to-face education. In this university, face to face education was centrally supported but the design and management of the course was maintained by the course instructor, the department, the faculty, and the university. The current study was embedded in an undergraduate course in the disciplinary field of language arts that was a fundamental English course. The two classes of the course to be used were selected by the course organizer. The method of selection had been under consultation and agreement with the university experts.

3.2.2 Population

The population of this study was the entire set of students who were non-English major undergraduate students studying at Suranaree University of Technology and who were taking the English 1 course (203101) for trimester 2/2014. This research did not include the whole population for data collection and analysis. In general, the sampling design method was divided into two categories of probability and non-probability. The non-probability sampling includes, for example, convenience, purposive, snowball, and quota sampling. On the other hand, the probability sampling includes, for example, random, systemic, and stratified sampling (Blackstone, 2012). The current research used the non-probability sampling called the

convenience sampling to receive the target participants. The sample groups were the two intact classes that were selected by the School of Foreign Language, Suranaree University of Technology. Therefore, this could be the most appropriate representatives without any bias from the researcher.

3.2.3 Sample

The pilot sample (Tryout group) included 50 students at Suranaree University of Technology who were taking the English 1 course (203101) for trimester 1/2014. Then, the actual sample included 2 intact classes, consisted of 102 students with 51 students for each class, studying at Suranaree University of Technology who were taking the English 1 course (203101) for trimester 2/2014.

3.2.4 Research Procedure

This research employed quasi-experimental designs that were used with selection of the participants by the university that this study was conducted. Quasi-experimental designs include a) the time series, b) the non-equivalent control group design, and c) the counterbalanced design (Yount, 2006). The participants of the current research were two intact groups of students who were selected, they also belonged to the group of counterbalanced design. Two groups of participants were selected and assigned by the other person who was not the researcher or the teacher of these two groups to protect the reliability of the research. The participant group 1 or the experimental group 1 received test 1 (pretests) and treatment 1 (fully SRL) whereas the participant group 2 or the experimental group 2 received test 1 (pretests) and treatment 2 (semi SRL). Later, both groups were tested after treatment by receiving parallel test 2 (posttests).

The sample in the actual groups were given a pretest, and the results were collected. Then, the sample group participated in a social networking environment for a total of 30 hours on discussion activities spread over a one-month period up to 60 hours, including one week for the tutorial of how to use the SNE and another week for measurement sessions, for the maximum time spent on tasks. After that, the sample groups were measured for the participants' writing performance again with two parallel posttests. Finally, the results from the pretests and posttests were compared using statistical analysis to measure both groups' difference (Yount, 2006).

Table 3.1 Quasi-Experimental Two Groups Pretest and Posttest

Experimental Group	Pre-experiment	Experimental period	Post-experiment
Group 1 Fully SRL	2 Pretests -Writing test -OES test	Use of SNE (Treatment 1 without teacher's mediation)	*2 Posttests -Writing test -OES test *Closed-ended questionnaire *Semi-structured interview with written notes
Group 2 Semi SRL	2 Pretests -Writing test -OES test	Use of SNE (Treatment 2 with teacher's mediation)	*2 Post-tests -Writing test -OES test *Closed-ended questionnaire *Semi-structured interview with written notes

The following figure illustrates the research design procedures:

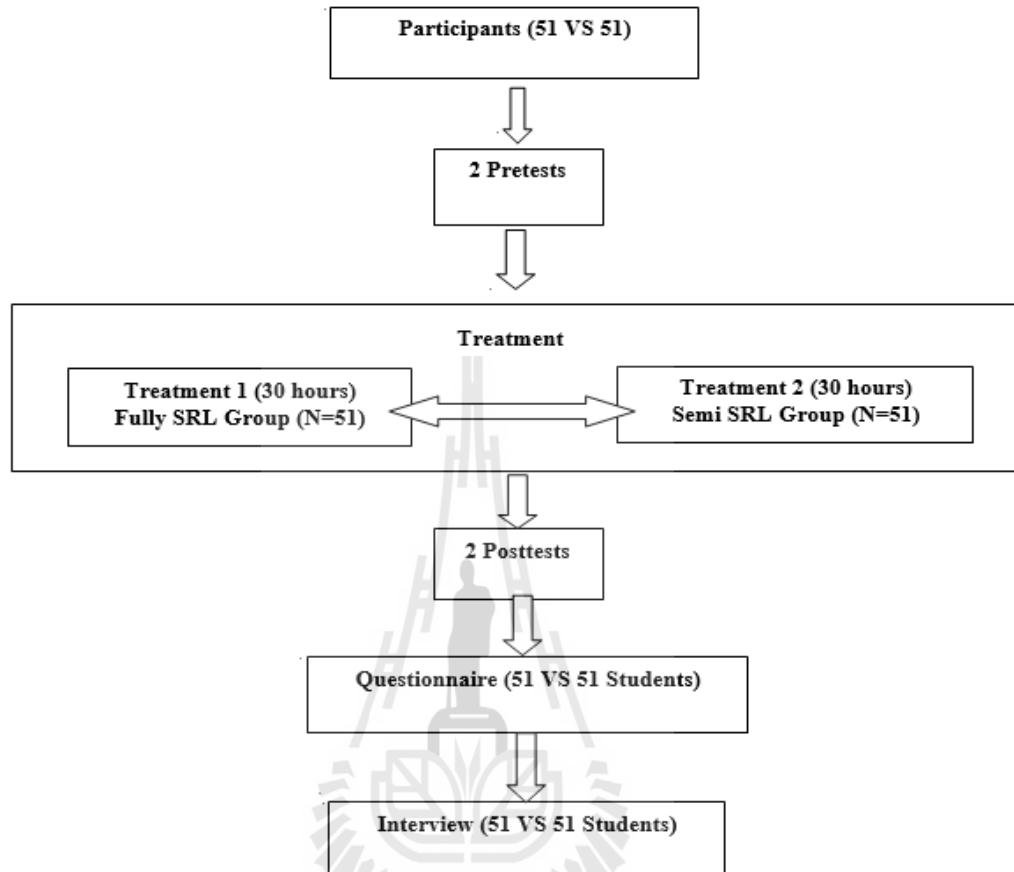


Figure 3.1 Overview of Research Design

3.2.5 Variables

Following the research questions and objectives of this research project, there were two kinds of variables that were required to be explored. First, 1) independent variables consisted of the social networking environment, the fully SRL group, the semi SRL group, writing pretests, writing posttests, OES pretests, OES posttests, questionnaires, and interview questions. Second, 2) dependent variables included participants' writing achievements, participants' other English skill achievements, and participants' perceptions toward the SNE.

3.3 Research Instruments

3.3.1 Social Networking Environment (SNE)

This environment was designed by the researcher. The instrument was designed to enhance writing performance for Thai undergraduate students of English at Suranaree University of Technology. This social networking environment was assigned to both groups of participants for a period of approximately 30 hours (about 1 month) for discussion online posts or for a period of approximately 60 hours (about 2 months) for the whole course of study, including pretests, posttests, questionnaire, and interview sessions. It provided an out-of-class mode of study activities in which the students were required to participate online for at least an hour per day. The students were assigned to study online materials, to post comments, and to give feedback to their peers' assignments or the discussion posts, and to update their events. The updated post pages were optional, they could post to share their daily events or post to share other things. If the students encountered any obstacles, they may 1) study the online materials by themselves 2) consult their peers 3) consult the teacher (for semi SRL group) and 4) consult the experts. Numbers 2-4 could be operated through certain options by using e-mail correspondence, instant messaging, chat functions, telephone, and personal appointment.

Although "Moodle" (Moodle, 2014) was commonly found to be integrated with a number of courses offered at Suranaree University of Technology, the most suitable tool for this research was likely to be the "Schooly" platform due to many reasons, such as no hosting requirement, simple of use, social learning platform, and easy application. The comparison of the two platforms is represented as follows:

Table 3.2 Comparison of Moodle and Schoology

Moodle	Schoology
-need server, support or pay hosting	-no server, no hosting required
-traditional LMS	-social learning platform
-difficult features of usage	-simple features of usage
-less media richness	-more media richness

The social networking environment (SNE) was developed by the website “www.schoology.com”. Schoology is a user-friendly LMS for institutions that is made simple to deliver online course content. This is an e-learning platform that is cloud-hosted, therefore, download or installation is not required (Gonen, 2014). “Schoology” is a free site known as a web-based LMS platform with features for students, teachers and parents. It has Facebook-like news feeds and social networking features that can be accessed from application of mobile devices. It contains assessment tools, quizzes, and so on.

This instrument aimed to develop the writing skills of first-year non-English major undergraduate students studying at Suranaree University of Technology. The detailed lessons to be applied in “Schoology” were related to the topics from the textbook or the *Four Corners* Level 3 by Jack C. Richards and David Bohlke. It was first published in 2012 by Cambridge University Press (Richards & Bohlke, 2014). The classroom lectures followed units 1, 2, 4, and 5 from the book that emphasized listening and speaking skill training. Therefore, the reading and writing skill training was offered to students through online lessons using the Schoology platform. The classroom contents covered the topics as follows: 1) Education; 2) Personal Stories; 3) Interesting Lives; 4) Our world.

The components of the social networking environment through Schoology, consisted of the two major parts: 1) listening, watching or reading news feeds, posts, online resources; 2) reflecting by writing to interact to those feeds, posts and online resources. The first part was to arouse students' attention and reflection to the topic. The second part was a real world interaction through written reflection that acted as a real world task for students to practice their English writing by 1) being aware of friends' posts or teacher's posts and reflections and 2) adapting some dimensions of other's posts 3) constructing ones' own posts or reflections.

3.3.2 Pretests and Posttests

1. Writing Tests

The parallel writing tests were employed before and after the experiment for both groups. Each test included an essay topic and instructions for the participants to write a paragraph for a narrative essay containing at least 120 words on the given topic within an hour. Before the experiment, both tests were examined for content validity by five experts in the field of English language education. Both pretests and posttests were examined with the tryout group of participants before the real experiment. The purpose of the writing pretests and posttests was to compare students' writing performance before and after practicing English writing in online discussion activities using the social networking environment. At the same time, the results of the two tests were compared between experimental group 1 and experimental group 2 to measure the difference of students' achievement between the two groups of fully SRL group and semi SRL group.

Table 3.3 Writing Topics for Pretest and Posttest

	Writing topic	Words	Time	Type
Pretest	An Impressive Moment	120 Words up	1 Hour	Essay Writing
Posttest	A Frightening Moment	120 Words up	1 Hour	Essay Writing

2. OES Tests

The parallel multiple choice tests for measuring other English skills (OES) were employed before and after the experiment for both groups. Each test included listening with questions, reading passages with questions, or dialogue completion with questions that were followed by multiple choice answers. Before the experiment, both OES pretest and OES posttest were examined for content validity by the expert team of university lecturers. The purpose of the OES pretests and posttests was to compare students' performance on listening, reading, grammar, dialogue completion, and vocabulary skills before and after practicing English writing in online discussion activities using the social networking environment. At the same time, the results of the two tests were compared between experimental group 1 and experimental group 2 to measure the difference of students' achievement on other English skills apart from writing skill between the two groups of fully SRL group and semi SRL group to investigate whether the SNE intervention would yield any impact on students' other English skills.

Table 3.4 OES Topics for Pretest and Posttest

	Test topic	Time	Type
Pretest	1) Education 2) Personal Stories 3) Interesting Lives 4) Our world	2 Hours	-Listening/ reading/grammar/vocabulary/ dialogue conversation with questions and selection from multiple choice answers
Posttest	1) Education 2) Personal Stories 3) Interesting Lives 4) Our world	2 Hours	-Listening/ reading/grammar/vocabulary/ dialogue conversation with questions and selection from multiple choice answers

3.3.3 Questionnaire

The perception questionnaire was developed by the researcher and it was adapted from the questionnaire from previous studies (Zumor et al., 2013) based on the review of literature about social networking environments. They were administered to students after the writing and OES posttests. The questionnaire for students consisted of 32 closed-ended questions asking about the SNE, the other 6 closed-ended questions, and the other 4 open-ended questions asking about students' demographic information. After revising the questionnaire, the questionnaire for students was then examined for content reliability by testing with the pilot participants from the group of tryout students. The purpose of the student questionnaire was to investigate students' perceptions about the use of the social networking environment through "Schoology" to increase their English writing performance.

3.3.4 Semi-structured Interview

The semi-structured interviews were carried out to gather in-depth information of the students' perceptions after they had practiced writing with online discussion tasks in the social networking environment. The interview was organized in a silent area and the interview conversation was recorded during the interview. The 51

participants from each group were interviewed individually using interview questions in the week after finishing the treatment, the posttest, and the questionnaire.

3.4 Construction and Efficiency of the Instruments

The instruments employed in the present study were constructed under the supervision of experts in the fields of language teaching and learning, educational technology, language testing, statistics, as well as social software in the field of computer sciences. The following section described the procedures and construction of the instruments previously mentioned, including a determination of efficiency of research instruments.

3.4.1 Social Networking Environment

The social networking environment (SNE) was selected, was designed, was tested, and was modified based on the theories, processes, and principles of English language study and self-regulated learning under the supervision from a number of the experts. The selection and development of the SNE followed these procedures.

- 1) The researcher reviewed the related studies in the field of SNE to enhance student's self-regulated learning from previous studies relevant to writing problems of Thai learners.
- 2) The researcher selected a suitable platform and modified the SNE for enhancing students' writing performance in English.
- 3) The designed SNE was examined for appropriateness by the experts in English writing and educational technology.
- 4) The SNE pages and activities were revised based on the experts' suggestions.

- 5) The SNE activities were piloted with the tryout participants and it was revised once more.
- 6) The brief processes of construction of SNE tasks were shown in Figure 3.2.

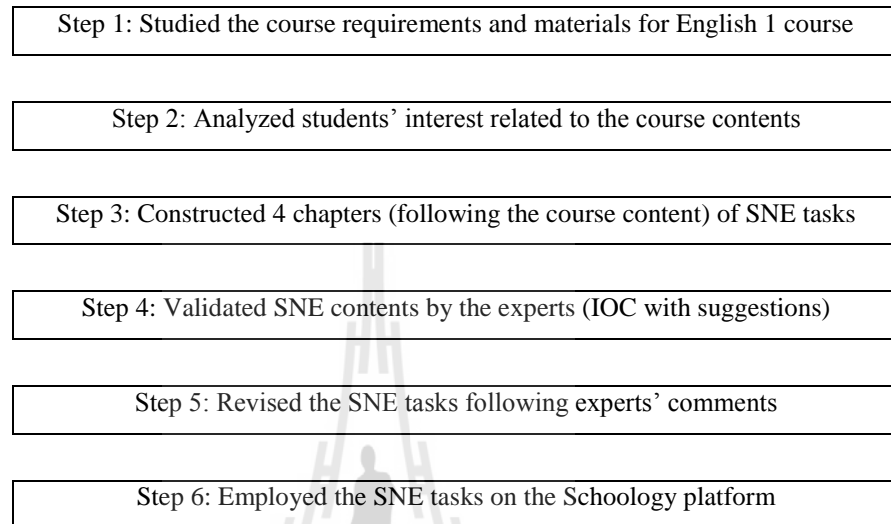


Figure 3.2 Process of Construction of SNE Tasks

3.4.2 Writing Pretests and Posttests

The present study used parallel questions for writing pretest and posttest. The test topics derived from the content of English 1 which were taken from Unit 1, 2, 4 and Unit 5 of “*Four Corners*” Level 3 (Richards & Bohlke, 2014). The tests were examined for validity and reliability by the five experts’ evaluation of the test topics, time, and word counts in writing the tests. Then the tests were tried out with the pilot participants.

The participants were asked to write an essay to test their writing performance before and after the experiment. The construction of the tests was performed as follows:

- 1) The researcher studied essay writing, measurement of students’ writing performance, and test construction methods.

- 2) The researcher reviewed related literature on essay writing, writing rubrics, English writing of Thai learners.
- 3) The researcher constructed the writing tests of the pretest and posttest.
- 4) The tests were checked by five experts in the field.
- 5) The tests were modified and revised following suggestions from the experts.
- 6) The tests were piloted with the tryout group of participants.
- 7) The brief processes of construction of pretest or posttest writing topic were presented in Figure 3.3 below.

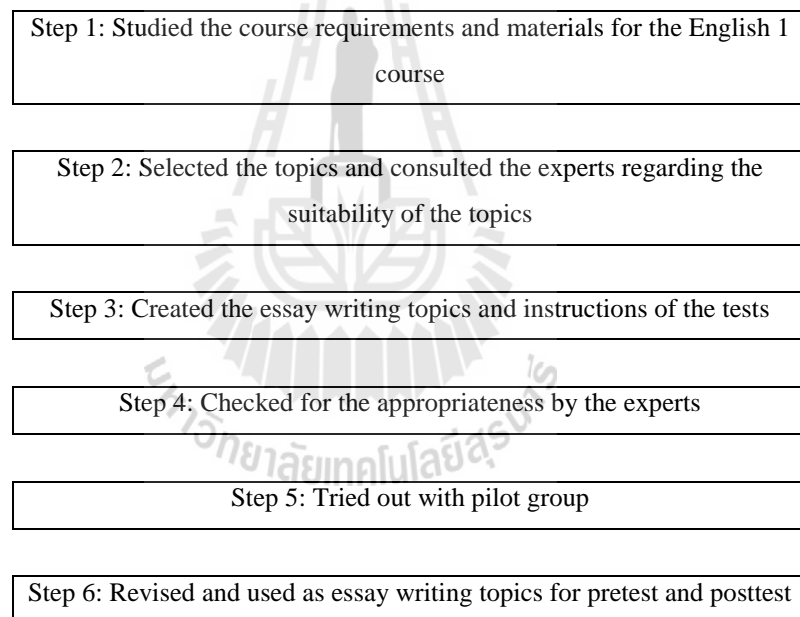


Figure 3.3 Process of Construction of Pretest/ Posttest Writing Topics

3.4.3 Questionnaire

The questionnaire questions were designed by the researcher, as adapted from questionnaire items of Zumor et al. (2013), to be used to investigate participants' perceptions toward the SNE that influenced learners' writing. The questionnaire was

composed largely of closed-ended questions asking about factors contributing to the use of SNE. This questionnaire consisted of two parts: 1) part one was about students' background information 2) part two was designed to elicit students' perceptions concerning 4 main categories of language areas, advantages, limitations, and suggestions after studying through the SNE by using the checklist of Likert rating scales. The questionnaire was constructed by the researcher as follows:

- 1) The researcher reviewed related studies in which questionnaires were administered to investigate perceptions, opinions, and attitudes of the learners as target users of SNE in improving English writing.
- 2) The researcher studied the research methodology on how to construct the questionnaire.
- 3) The researcher constructed the questionnaire items based on the research purposes and questions.
- 4) The questionnaire items were examined and reviewed by the five experts.
- 5) The questionnaire contained 32 closed-ended questions asking about the SNE, the other 6 closed-ended questions, and the other 4 open-ended questions asking about students' demographic information. The questionnaire was piloted using 5 pilot participants.
- 6) The internal consistency reliability was analyzed by the Cronbach's Alpha Coefficient (α).
- 7) The internal consistency reliability of the questionnaire was analyzed by SPSS for Windows.
- 8) The questionnaire provided the five rating criteria of the Likert scale to measure students' attitudes, opinions and perceptions as follows.

The 5 rating criteria for evaluation consisted of:

5	refers to	Strongly agree
4	refers to	Agree
3	refers to	Uncertain
2	refers to	Disagree
1	refers to	Strongly disagree

(Sahu, 2013; Lehman et al. 2013)

- 9) Those questionnaire items were revised following suggestions from the experts.
- 10) The revised version of the questionnaire was examined by the five experts in the field for the second round.
- 11) The questionnaire was revised again and it was tried out with 10 pilot samples.
- 12) The questionnaire items were measured for reliability using Cronbach's Alpha Coefficient.
- 13) The questionnaire items that reached the standard of Cronbach's Alpha Coefficient were selected.
- 14) To avoid misunderstanding of the language or any ambiguity that might cause confusion to the participants, the questionnaire was translated into Thai which was the participants' first language.
- 15) The brief processes of construction of the perception questionnaire were shown in Figure 3.4.

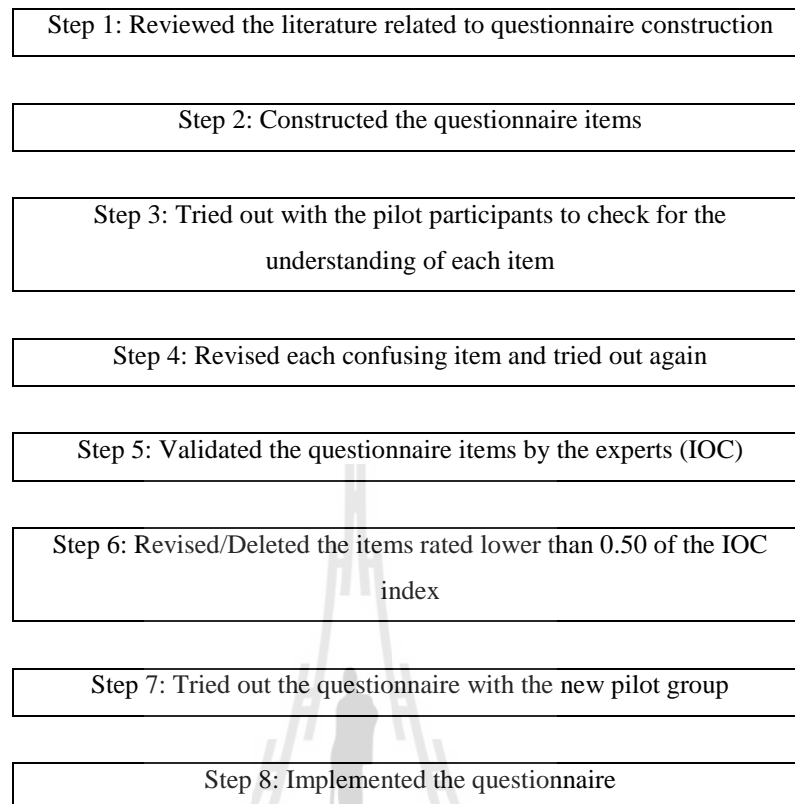


Figure 3.4 Process of Construction of Perception Questionnaire

3.4.4 Semi-structured Interview

The researcher selected 51 participants from both groups to be interviewed following tests and the questionnaire responses. All of the participants who participated in the writing and OES pre-post measurement and the perception questionnaires were interviewed and the participants who missed one of the tests and the questionnaire would not be selected to participate in the interview. The interview was a face-to-face interview since face-to-face interviews provided rich information including spoken languages and body languages. The data from the interviews were useful to confirm and triangulate the results from the preliminary findings of this research.

The researcher contacted the interviewees through E-mail correspondence or telephone to determine whether they were willing to participate in the current study. If the interviewees respond that they would not participate, other substitute interviewees that also meet the selection criteria were chosen instead. However, if the face-to-face interview was impossible with the chosen interviewees, the researcher might attempt to arrange a telephone interview, Skype chat, or e-mail interview.

The face-to-face interview was completed in approximately one and not more than one hour per one interviewee. The interview conversation was recorded by audiotape and the students were asked to write a brief information they reported in the interview to ensure about the messages they intended to communicate. Before the interview, the written consents from the interview participants were received prior to the interview. Once the interviews were completed, they were translated and transcribed from Thai language to be English transcription. After the transcription was completed, it was checked against the audiotape and any transcription errors were corrected. The semi-structured interview protocol was constructed through the following procedures.

- 1) The researcher studied and consulted experts about the research methodology on how to construct the interview.
- 2) The researcher listed the topics of opinions concerning online learning through SNE.
- 3) The researcher constructed the interview questions based on previously selected topics of opinion to be asked.
- 4) The interview questions were examined by the three experts.
- 5) Those interview questions were revised.

6) The revised version of the interview questions was examined by the three specialists in the related fields.

7) The interview questions were revised again and tried out with 5 tryout participants.

8) The brief processes of construction of semi-structured interview questions were presented in Figure 3.5 below.

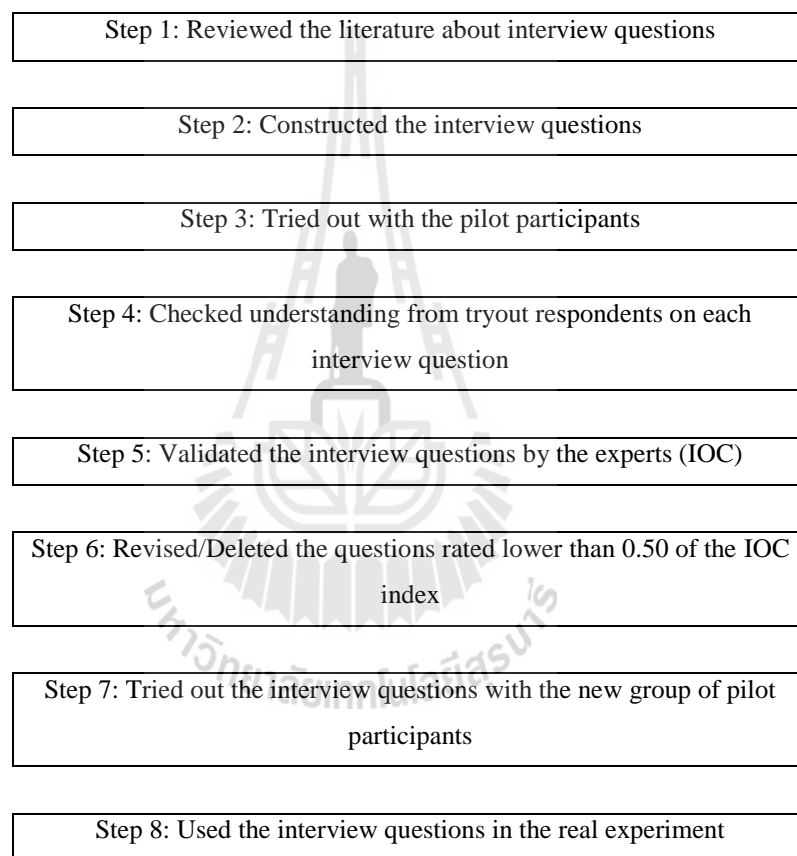


Figure 3.5 Process of Construction of Semi-Structured Interview Questions

3.5 Data Collection

This research was conducted under the course of 8-week period for each of the two groups. The detail of in-class and out-of-class online activities of the social networking environment (SNE) was represented in Table 3.5.

Table 3.5 Course Plan for Data Collection

Week	Experimental Group 1		Experimental Group 2	
	In-class Activities	Out-of-class SNE Activities (Fully SRL Group)	In-class Activities	Out-of-class SNE Activities (Semi SRL Group)
Before week No.1	-Essay writing (Pretest) -OES pretest	-Students' SNE application and logging in -Tutorial for application	-Essay writing (Pretest) -OES pretest	-Students' SNE application and logging in -Tutorial for application
No.1	Four Corners Book 3: Unit1 -Talk about routines -Express prohibition & obligation -Talk about feeling and reactions -Discuss advantages and disadvantages -Use of simple present vs. present continuous tenses -Use of zero conditional -Use of feeling and emotion vocabularies	-Students' choices of posts/discussion -Discussion task 1 -Student's reflection to discussion topics	Four Corners Book 3: Unit1 -Talk about routines -Express prohibition & obligation -Talk about feeling and reactions -Discuss advantages and disadvantages -Use of simple present vs. present continuous tenses -Use of zero conditional -Use of feeling and emotion vocabularies	-Students' choices of posts/discussion -Discussion task 1 -Student's reflection to discussion topics - Teacher's mediation and encouragement
No.2	Four Corners Book 3: Unit2 -Describe past events -Announce news -Close a conversation -Tell personal stories -Describe embarrassing moments -Use of past continuous vs. simple past tenses -Use of participial adjectives -Use of describing reaction vocabularies	-Student's choices of posts/discussion -Discussion task 2 -Student's reflection to discussion topics	Four Corners Book 3: Unit2 -Describe past events -Announce news -Close a conversation -Tell personal stories -Describe embarrassing moments -Use of past continuous vs. simple past tenses -Use of participial adjectives -Use of describing reaction vocabularies	-Students' choices of posts/discussion -Discussion task 2 -Student's reflection to discussion topics - Teacher's mediation and encouragement
No.3	Four Corners Book 3: Unit 4 -Talk about life experiences	-Student's choices of posts/discussion -Discussion task 3	Four Corners Book 3: Unit4 -Talk about life experiences	-Student's choices of posts/discussion -Discussion task 3
	-Check and clarify meaning -Describe details of experiences -Talk about memorable experience -Use of present perfect tense	-Student's reflection to discussion topics	-Check and clarify meaning -Describe details of experiences -Talk about memorable experience -Use of present perfect tense	-Student's reflection to discussion topics -Teacher's mediation and encouragement
	-Use of present perfect vs. simple past tenses -Use of experience vocabularies		-Use of present perfect vs. simple past tenses -Use of experience vocabularies	
No.4	Four Corners Book 3: Unit 5 -Compare human-made structures -Express disbelief -Say that you don't know	-Student's choices of posts/discussion -Discussion task 4 -Student's reflection to discussion topics	Four Corners Book 3: Unit5 -Compare human-made structures -Express disbelief -Say that you don't know	-Student's choices of posts/discussion -Discussion task 4 -Student's reflection to discussion topics

Table 3.5 Course Plan for Data Collection (Cont.)

Week	Experimental Group 1		Experimental Group 2	
	something -Talk about geographical features -Describe natural wonders in your country -Use of comparatives -Use of superlatives -Use of geographical feature vocabularies		something -Talk about geographical features -Describe natural wonders in your country -Use of comparatives -Use of superlatives -Use of geographical feature vocabularies	- Teacher's mediation and encouragement
After week No.4	-Essay writing (Posttest) -OES posttest -Perception questionnaire -Interview	-Informal interview by the researcher's team	-Essay writing (Posttest) -OES posttest -Perception questionnaire -Interview	-Informal interview by the researcher's team

Data collection for this research was taken from both quantitative and qualitative data. The quantitative data were collected from students' pretests, posttests, and perception questionnaires. The qualitative data were collected from and students' semi-structured interviews and discourses from online discussion posts. Table 3.6 below presented the research instruments and research objectives corresponding to research questions.

Table 3.6 Research Questions, Instruments, and Objectives

	Research Questions	Research Instruments	Research Objectives
1	Research Question 1: How effective is the social networking environment (SNE) in supporting the writing performance development of EFL students?	Pretest Posttest (Compared the difference before and after the experiment)	To compare, through pretest and posttest scores, the English writing achievements of students before and after learning through the SNE
2	Research Question 2: Are there any significant differences between Experimental Group 1 (Fully Self-Regulated Learning) and Experimental Group 2 (Semi Self-Regulated Learning) in terms of writing performance? If so, what are these differences?	Pretest Posttest (Compared the difference between group 1(Fully SRL) and group 2(Semi SRL)	To compare, through a pretest and posttest score difference between both groups, the English writing achievements of students after learning through the SNE
3	Research Question 3: What are the students' perceptions of their EFL writing performances, as developed through SNE, and how do they assess the value of SNE?	-Students' perception Questionnaire -Students' semi-structured Interview	To explore students' perceptions of their writing performance through the SNE

3.6 Data Analysis

The researcher organized and prepared both quantitative and qualitative data to be analyzed. The data were organized into types based on the sources of information. The quantitative data with close-ended items were assigned numerical values using computerized program analysis. In terms of qualitative data, all audio scripts from the interviews were transcribed into written forms and they were proofread by the experts.

In order to analyze the writing tests and OES test scores differences, there were particular types of statistics employed; 1) the writing pretest/posttest and OES pretest/posttest were analyzed using paired samples t-test for within group analysis, 2) the writing pretest and OES pretest were analyzed using independent samples t-test for between group analyses of students' performance before the experiment, 3) the writing posttest and OES posttest were analyzed using ANCOVA for between group analyses of students' performance after the experiment.

To distinguish the perception difference between groups, the questionnaire results of both groups were compared using independent samples t-test.

3.7 Validity and Reliability of this Research

There was little research concerning the integration of online learning modes using discussion tasks through social networking platforms in Thailand. The results of the current research were likely to contribute as one of the examples of online discussion activities under a blended learning design environment. This research like other research studies that were required to produce findings that were both valid and reliable. Validity and reliability could be measured by experts' checklist on the index

of item objective congruence (IOC) analysis from the experts, concerning the research conceptualization, the design, the collected data, the analysis and the interpretation. As part of its task, this research project had undergone certain methods to enhance its internal and external validity and reliability of the results.

3.8 Ethical Issues

The ethical considerations for doing this study consisted of participants' rights, sensitivity of personal information, personal experiences and attitudes. The participants were informed before the experiment about their rights to withdraw from the research study. The researcher had obtained an ethical approval from the School of Foreign Language, Suranaree University of Technology to gather the data from students who were taking English 1 course for conducting this research. The participants in the current study were first-year and some second-year and third-year students who volunteered to participate in the main study.

3.9 Inter-Rater Reliability

Whenever one person was working on correcting a task, it was likely to be criticized for being subjective opinion and subject to variations of interpretation, therefore, the reliability across raters were significantly required to be determined. Most importantly, it was explained that the relationship between the scores evaluated by an expert rater should be compared in order to receive a quantifiable sense of inter-rater reliability. In order to obtain reliable results from the students' pretests and posttests, the researcher, and the four raters, assessed and calculated the error rates. Raters 1 to 4, measuring writing pretests and posttest, were qualified university

lecturers who have been teaching English writing courses for over five years. Prior to analyzing and rating students' pretests and posttests, the four raters discussed for agreements and understandings, considered as a rater training section. The scores rated by the four raters were counted by error categories then compared, analyzed, and calculated using the statistical analysis.

3.10 Summary of the Chapter

This research was focused on the development of the SNE to enhance students' writing performance and to explore students' perceptions of this environment. This chapter presented the research methodology employed by the present research project. The group of participants, including pilot participants, was referred in order to increase reliability of this research project and the real group of participants was presented and discussed. The variables, instruments and procedures were described. Furthermore, the collection of data, the analysis of data, the consideration of ethical issues, the procedure of inter-rater reliability, and the research timetable were described. In the next chapter, Chapter 4, the quantitative findings from this research study are discussed.

CHAPTER 4

QUANTITATIVE RESULTS AND DISCUSSIONS

4.1 Introduction

This chapter reports quantitative results and analysis to interpret and compare the effects of a specific social networking environment for developing the writing abilities of students enrolled in a fully self-regulated learning (fully SRL) group in comparison to a semi self-regulated learning (semi SRL) group. It begins with a description of participants and then the findings from the three research questions as follows:

1. How effective is the social networking environment (SNE) in supporting the writing performance development of EFL students?
2. Are there any significant differences between Experimental Group 1 (Fully Self-Regulated Learning) and Experimental Group 2 (Semi Self-Regulated Learning) in terms of writing performance? If so, what are these differences?
3. What are the students' perceptions of their EFL writing performances, as developed through SNE, and how do they assess the value of SNE?

First, the statistical (quantitative) results and discussion are reported in Section 4.2 to Section 4.5. Section 4.2 observes reliability assessment on tests and scores. Section 4.2.1 shows reliability results of pretest and posttest using Cronbach's alpha coefficients for pretest and posttest scores to estimate the reliability of the test items.

Section 4.2.2 reports relationship of scores from writing tests and OES tests from each group of participants to check the reliability of the tests and reliability of the scores because they were corrected by two different groups of rater (raters from 2 different universities). Section 4.2.3 reports the results of inter-rater reliability, calculated by using Pearson' Correlation to find out the relationship of the scores given by the four raters within each writing test.

Second, Section 4.3 presents the results and analysis of writing skill tests. Section 4.3.1 reveals comparison of mean gain between writing pretest and posttest from each group of participants. Section 4.3.2 investigates writing pretest differences between groups before the experiment. Section 4.3.3 describes comparison of writing posttest means scores between groups. Section 4.3.4 provides result of test of homogeneity of regression slopes of writing test between groups.

Third, Section 4.4 reports results and analysis of the OES tests. Section 4.4.1 illustrates comparison of pretest and posttest scores within each group. Section 4.4.2 explains comparison of pretest difference between groups. Section 4.4.3 provides comparison of OES posttest score difference between groups. Section 4.4.4 presents result of test of homogeneity of regression slopes of OES test between groups. Section 4.5 presents discussion of the tests results.

Finally, Section 4.6 presents results from perception questionnaire. Section 4.6.1 reports backgrounds of the fully and semi SRL groups. Section 4.6.2 presents results of reliability of perception questionnaires. Section 4.6.3 reports results of the students' perceptions. Section 4.6.4 provides perceptions toward the SNE of fully and semi SRL groups. Then, Section 4.7 presents summary of chapter 4.

Self-regulated learning together with technology enhancement are not just neutral methods or instruments but, like other innovative artifacts, these ideas are built into specific contexts and, thus, are subject to situational influences. Introducing ICT-based technologies, such as social networking software, into the context of developing countries' educational settings may challenge their pedagogical values and expectations. Moreover, a number of scholars have argued that an important shift from face-to-face traditional education to online learning should involve a change in pedagogical orientations and dimensions, such as the nature of tasks, the time spent, the teacher's role and so on.

The teacher may be a key player in designing and conducting online environment for students particularly in cultures where a high degree of power is given to teachers e.g. as in Thailand. Similarly, the provision of appropriate support from teachers has been widely considered to be a determining factor in the success of online environments. Furthermore, in general, technological and administrative support is also recognized as a key area for ensuring the success of online learning. Teacher support roles could be envisaged to be as coaches, tutors, mentors, content producers, facilitators, etc. Student support, as addressed in this research project refers to a range of services for students individually and in groups that complement the course lessons and learning resources. In the current experiment, both groups of students were given support differently. The fully SRL group of students received only five minutes of teacher-talk about the value of the online component of SNE each time they met in the classroom explaining detail of homework required to be completed. However, the teacher teaching the fully SRL group was not necessarily required to answer or solve any problems or difficulties about the SNE tasks given.

On the other hand, the semi SRL group of students received around 10 or more minutes of teacher-talk about their online class performance, their homework, and discussion of problems. In addition to this, the semi self-regulated learning group of student also received on-demand (Lian, 2014) and off-campus support from the teacher in the form of just-in-time and on-time support either technical or educational. For example, students in this group were allowed to ask any questions they may have or asked for assistance from their teacher at any time through e-mail, instant messaging, telephone, and personal appointment.

4.2 Reliability Assessment on Tests and Scores

4.2.1 Reliability of Scores of Writing and OES Tests

Writing pretest and writing posttest were created by the researcher to assess English writing abilities of both groups of participants. The participants were required to write a paragraph with at least 120 words limit and within 60-minute time limit. At the same time, both groups of participants took two-hour multiple-choice OES pretest before the experiment and took the OES posttest after the experiment. These OES pretest and posttest were created by the university lecturers, who taught the course, to capture the development on listening skill, reading skill, grammar, dialogue completion, and vocabulary, excluding writing skill.

The result in table 4.1 indicates an acceptable reliability of the tests. In writing pretest, there were 102 students completed the tests and the result of Cronbach's alpha (α) was .781. For writing posttest, there were 102 tests collected and the result of Cronbach's alpha (α) was .778. At the same time, there were 102 answer sheets obtained from the OES pretest and the result of Cronbach's alpha (α) was .782. Then

102 answer sheets were collected from the OES posttest and the Cronbach's alpha (α) was .838. According to Churchill and Brown (2006) the accepted value of Cronbach's alpha is at least .7. Hence, the writing tests and the OES tests employed in this study with Cronbach's alpha (α) of .781, .778, .782, and .838 were considered reliable for this research project.

Table 4.1 Reliability of Scores of Writing and OES Pretest and Posttest

Test	Alpha (α)	N
Writing pretest	.781	102
Writing posttest	.778	102
OES pretest	.782	102
OES posttest	.838	102

4.2.2 Relationship between Writing tests and OES Tests of Both Groups

To investigate the relationship between the scores received from the two tests (writing test and OES test), the data received from these tests were analyzed by using Pearson Correlation Coefficient. The correlation coefficients were interpreted by using the following criteria (Evans, 1996).

- r=.00-.19** means “very weak”; the relationship between observed variables is at a “very low” level.
- r=.20-.39** means “weak”; the relationship between observed variables is at a “low” level.
- r=.40-.59** means “moderate”; the relationship between observed variables is at a “moderate” level.
- r=.60-.79** means “strong”; the relationship between observed variables is at a “high” level.
- r=.80-1.00** means “very strong”; the relationship between observed variables is at a “very high” level.

Table 4.2 Relationship of Writing Tests and OES Tests of Both Groups

Group	Pretest			Posttest		
	Writing test	Vs	OES test	Writing test	Vs	OES test
Fully SRL (N=51)	.622**		.622**	.528**		.528**
Semi SRL (N=51)	.683**		.683**	.562**		.562**

Note: *P < .05; **P < .01

As reported in table 4.2, the data shows significant relationships among all pairs of writing test in relation to the OES test at the significance level of 0.01. To investigate the relationship between the pretest of the writing test and the OES test, the findings appeared that these two tests had a relationship at the “strong” level for fully SRL group ($r=.622$) and also for the semi SRL group ($r=.683$). To investigate the relationship between the posttest of the writing test and the OES test, the findings revealed that these two tests had a relationship at the “moderate” level for both fully SRL group ($r=.528$) and also for the Semi SRL group ($.562$). Overall, it could be concluded that the scores received from both writing test and OES tests were reliable since their relationships were at the strong and moderate levels for pretest and posttest of the fully and semi SRL groups.

4.2.3 Results of Inter-Rater Reliability of Writing Tests

As explained previously in chapter 3, students’ written pretests and posttests were assessed by the four expert raters according to independent writing rubrics for TOEFL iBT (Educational Testing Service, 2014) that was provided and explained to the four raters before they graded students’ writing tests. Whenever more than one rater corrected a test that may be subject to variation of interpretation, the reliability across raters needed to be considered. The present study employed Pearson’s

correlation coefficient to find the inter-rater reliability for the pre- and post-test writing scores.

Table 4.3 Relationship of Scores by 4 Raters in Pretests and Posttest of Fully SRL Group

	Pre-test			Post-test		
	Rater2	Rater3	Rater4	Rater2	Rater3	Rater4
Rater 1	.759**	.734**	.748**	Rater 1	.770**	.756**
Rater 2		.908**	.755**	Rater 2	.953**	.787**
Rater 3			.634**	Rater 3		.767**

Note: *P < .05; **P < .01

Regarding the 4 raters' results for the fully SRL group in the writing pretest, the correlation coefficients ranged from .634-.908, and the correlation coefficients of the writing posttest ranged from .700-.953. It was concluded that the correlations among the 4 raters were significant at the 0.01 level accounting for all writing pieces of all rating tests. In conclusion, the scores for writing pretests and writing posttests as graded by the four raters were highly related and therefore they were reliable, they contained close relationship, particularly rater 2 and rater 3 with the high levels of correlations (pretest $r = .908^{**}$, posttest $r = .953^{**}$).

Table 4.4 Relationship of Scores by 4 Raters in Pretests and Posttest of Semi SRL Group

	Pre-test			Post-test		
	Rater2	Rater3	Rater4	Rater2	Rater3	Rater4
Rater 1	.821**	.807**	.812**	Rater 1	.750**	.768**
Rater 2		.945**	.751**	Rater 2	.953**	.622**
Rater 3			.733**	Rater 3		.562**

Note: *P < .05; **P < .01

Regarding the 4 raters results for the semi SRL group in the writing pretests, the levels of correlations coefficient ranged from .733-.945, and the levels of correlation coefficient of writing posttest ranged from .562-.953. It was found that the correlation coefficients of all 4 raters were significant at the 0.01 level accounting for all writing pieces of all rating tests.

In conclusion, the scores for writing pretests and writing posttests as graded by the four raters were highly related and therefore they were reliable, they contained close relationship, particularly rater 2 and rater 3 (pretest $r = .945^{**}$, posttest $r = .953^{**}$).

Accordingly, the correlation coefficient of all the writing test results for both groups and for pre- and post-tests among the four raters revealed positively significant correlated at the 0.01 level. Hence, it was concluded that inter-rater reliability for writing test results passed the minimum acceptability requirement of standard statistical significance for correlation.

4.3 Results and Analysis of Writing Skill Tests

4.3.1 Comparison of Means of Pretests and Posttests within Each Group

In order to determine whether the SNE had any effect on writing performances within each group, the mean scores for each group's writing pretest and posttest were compared utilizing paired samples t-test. The results were as follows.

As noted in chapter 3, students took two kinds of tests: writing tests and OES tests, a paired t-test was used to determine the difference of scores before and after the experiment within each group of participants. The writing test analysis was reported first to identify the difference between the writing pretest and writing posttest scores

of 51 students in each SRL group who regularly participated in the SNE. This was to ascertain if the SNE was an effective treatment for improving students' English written abilities which were the main factor to be observed for the current research project.

The mean scores of the writing pretest and posttest of the fully SRL group were compared by using paired samples t-test to determine whether there was any significant difference in the writing ability of the participants in each group after the experiment. Table 4.5 presented descriptive data of both groups and Table 4.6 reported paired t-test results showing the difference between pretest and posttest scores within each group.

Table 4.5 Descriptive Data of Writing Pretest and Writing Posttest of Fully and Semi SRL groups

Group	Writing Test	N	Min. (Full=30)	Max. (Full=30)	Mean	SD
Fully SRL	Pretest	51	1.25	25.00	8.049	4.023
	Posttest	51	2.75	26.50	13.485	4.317
Semi SRL	Pretest	51	3.75	25.00	9.857	3.973
	Posttest	51	8.00	26.50	15.823	4.251

Table 4.6 Paired t-Test Results Showing the Difference between Writing Pretest and Writing Posttest Scores of Fully and Semi SRL Groups

Group	Test	N	Mean	S.D.	MD	t	Df	P(Sig.)
Fully SRL	Pretest	51	8.049	4.023	5.436	<u>10.310*</u>	50	.000*
	Posttest	51	13.485	4.317				
Semi SRL	Pretest	51	9.857	3.973	5.966	<u>12.901*</u>	50	.000*
	Posttest	51	15.823	4.251				

Note: * $P \leq 0.05$; MD = Mean Differences

It was reported in table 4.6 that the fully SRL group of students received higher posttest mean scores (mean=13.485) than in the pretest (mean=8.049). The maximum score for the test was 30 points. This maximum score of 30 was obtained from TOEFL iBT converting scores (Educational Testing Service, 2014) (see appendix D: Converting writing rubric scores to scaled scores). The mean difference was 5.436 and the t-value was 10.310* with a degree of freedom of 50 (N=51). The result suggested that there was a significant difference between the mean scores from the pretest and posttest at a significance level of $P=.000^*$ ($P < .05$).

Similarly, it was reported in table 4.6 that the semi SRL group of students received higher posttest mean scores (mean=15.823) than in the pretest (mean=9.857). The total score was 30 points, the mean difference was 5.966 and the t-value was 12.901* with a degree of freedom of 50 (N=51). The result turned out to be that there was a significant difference between the mean scores from the pretest and posttest at a significance level of $P=.000^*$ ($P < .05$).

According to the data in Table 4.6, the fully SRL group exhibited a significant difference between writing pretest and writing posttest ($t = 10.310^*$, sig. = 0.00; $p < .05$). Similarly, the results of the semi SRL group also revealed a significant difference ($t = 12.901^*$, sig. = 0.00; $p < .05$). As a result, it could be interpreted that the SRL environment was helpful in developing the writing abilities of both groups of participants.

4.3.2 Comparison of Writing Pretests between Groups

The pretest mean scores of the fully SRL and semi SRL groups were compared by using the independent samples t-test to determine whether there was any

significant difference between the pretest scores of both groups. Table 4.7 demonstrated the pretest mean scores of both groups before the experiment.

Table 4.7 Independent Samples t-Test Results Showing the Difference between Writing Pretest Scores of Fully and Semi SRL Groups

Group	Test	N	Mean	S.D.	t	Df	P-value (Sig.)
Fully SRL	Pretest	51	8.049	4.023	-2.284*	50	.024*
Semi SRL	Pretest	51	9.857	3.973			

Note: * $P \leq 0.05$

As shown in Table 4.7, the pretest mean scores of the semi SRL group ($\bar{x}=9.857$) was higher than that of the fully SRL group ($\bar{x}=8.049$). Therefore, the results of the t-test of the pretest mean scores of both groups shows a statistically significant difference ($p=0.024$; $p \leq 0.05$). This means that, before the experiment, the participants of the semi SRL group were stronger than those of the fully SRL group in terms of writing abilities.

4.3.3 Comparison of Writing Posttests between Groups

Analysis of covariance (ANCOVA) was used to control the pretest difference of the fully and semi SRL groups that was to control an effect of this variable on the dependent variable. The variable in the data analysis was named as a covariate. The dependent variable was the writing posttest. ANCOVA was performed to examine between-subject effect of the SNE treatment on students' posttest writing scores and OES posttest scores of the fully and semi SRL groups.

In order to detect the difference between the performances of the fully SRL and the semi SRL in their writing posttests. The mean scores of these two groups were compared using ANCOVA as performed by using the SPSS program. This study

could not employ the independent samples t-test to compare posttest difference between groups because these two groups were significantly unequal at the beginning of the experiment. Therefore, to eliminate the covariate effect that may have on the posttest. It was suggested this study could employ the ANCOVA to estimate more accurate results. The results were illustrated in Table 4.10.

Preliminary checks were performed prior to the data analysis of posttest scores between groups to ensure that there were no violations of any assumptions of ANCOVA such as normality, linearity, homogeneity of variances, and homogeneity of regression slopes and so on (Field, 2013; Rutherford, 2011).

Analysis of covariance (ANCOVA) was used to compare the post-test results of the fully SRL group and the semi SRL group because the fully SRL group was significantly behind the semi-SRL group at the beginning of the experiment.

Table 4.8 Result of Homogeneity of Variance Test between Groups

	Levene's test of equality of error variances	
	F	P(Sig.)
Writing tests	.937	.335
OES tests	.437	.510

Before performing the ANCOVA analysis, there was an assumption of ANCOVA that needed to be tested. One of assumptions of ANCOVA was that that homogeneity of variances was required before the analysis could be performed. This assumption was tested by using Levene's test for homogeneity of variances. If the Levene's test was significant ($p < 0.05$), then the variances in the groups were different, the groups would not be homogeneous and the assumptions of the ANCOVA would not be satisfied. If Levene's test was not significant ($P > .05$), the opposite would be true and the assumptions of the ANCOVA analysis would be

satisfied (Field, 2013). As shown in Table 4.8, the Levene's test of writing tests and OES tests were not significant with $P = .335$ for the writing tests and $P = .510$ for the OES tests as both of these numbers were higher than $.05$ ($p > .05$). Therefore, it was concluded that the assumption of homogeneity of variances was met and the ANCOVA could be performed validly for both writing tests and OES tests.

Table 4.9 Descriptive Data for Writing Posttest Scores of Both Groups

Treatment Group	N	Original Posttest Mean	S.D.	Adjusted Posttest Mean	S.D.
Fully SRL	51	13.485	4.317	14.102	.471
Semi SRL	51	15.823	4.251	15.207	.471

Note: Covariates in the model = 8.953 (Pretest)

Table 4.10 ANCOVA Results on Writing Posttest between Fully and Semi SRL

Groups ¹					
Source	Sum of Squares	df	Mean Square	F	P (Sig.)
Pretest	743.335	1	743.335	67.367	.000
Group	29.587	1	29.587	2.681	.105
Error	1092.379	99	11.034		
Total	23879.813	102			
Corrected Total	1975.131	101			

Note: * $P \leq 0.05$; type III sum of squares; df = degree of freedom

¹Regarding the correctness of the statistical analyses in this study, all statistical analyses used in the current study have been checked for appropriateness and correctness by expert statisticians such as Asst. Prof. Dr. Burathin Khampirat.

The result of this measurement aimed to measure the impact of the SNE on both groups of students' writing skills. Results of the ANCOVA analysis revealed that there was no significant effect of the group on students' posttest. F-value was 2.681, P-value was .105 ($p > 0.05$).

Result of the ANCOVA as illustrated in the above (Table 4.10) revealed an F value of 2.681 and P -value was higher than .05 ($p=.105$; $p > .05$) which was not significant difference. That is to say that the group received small effect and did not make a significant difference between the fully and the semi SRL groups in terms of their writing skills. In other words, no significant difference was found in the posttest writing scores between the fully SRL and the semi SRL groups.

4.3.4 Test of Homogeneity of Regression Slopes of Writing Tests

Table 4.11 ANCOVA Tests on Between-Subjects Effects (Writing Tests)

Source	Sum of Squares	df	Mean Square	F	P (Sig.)
Group	.379	1	.379	.034	.854
Pretest	744.455	1	744.455	66.983	.000
Group*Pretest	3.197	1	3.197	.288	.593
Error	1089.181	98	11.114		
Total	23879.813	102			
Corrected Total	1975.131	101			

Note: * $P \leq 0.05$; type III sum of squares; df = degree of freedom

A key assumption of ANCOVA is the requirement for homogeneity of regression slopes. This assumes that the interaction between the covariate (pretest) and the dependent variable (posttest) does not differ significantly. If this effect (Group*Pretest) is significant, then the assumption of regression slopes has been broken. In other words, there must be no interaction detected between the covariate and the grouping variable. As shown in the above table (Table 4.11), the interaction

between “group” and “pretest” was not significant ($P=.593$; $p>.05$). Therefore, the assumption that the regression slopes are similar over the groups is justified. Thus, the results of the original ANCOVA analysis previously conducted were acceptable (Field, 2013; Rutherford, 2011).

4.4 Results and Analysis of the OES Tests

4.4.1 Comparison of before and after Experiment Scores of OES Test within Both Groups

In order to discover whether the SNE had any effect on the fully SRL and semi SRL groups in relation to the participants’ other English skills, the mean scores of before and after the experiment were compared utilizing paired samples t-tests. The results were illustrated in table 4.12 for descriptive data and table 4.13 was for paired samples t-test as follows:

Table 4.12 Descriptive Data of OES Pretest and OES Posttest of Fully and Semi SRL Groups

Group	OES Test	N	Min. (Full=30)	Max. (Full=30)	Mean	SD
Fully SRL	Pretest	51	7.00	27.50	16.254	4.327
	Posttest	51	5.00	32.50	21.156	5.834
Semi SRL	Pretest	51	8.50	27.00	18.039	4.132
	Posttest	51	7.00	32.50	22.313	4.586

Table 4.13 Paired t-Test Results Showing the Difference between OES Pretest and OES Posttest Scores of Fully and Semi SRL Groups

Group	Test	N	Mean	S.D.	MD	t	Df	P(Sig.)
Fully SRL	Pretest	51	16.254	4.327	4.902	7.235*	50	.000*
	Posttest	51	21.156	5.834				
Semi SRL	Pretest	51	18.039	4.132	4.274	6.598*	50	.000*
	Posttest	51	22.313	4.586				

Note: * $P \leq 0.05$; MD=Mean Differences

As shown in table 4.13, fully SRL group scores revealed higher posttest mean scores (mean=21.156) than in the pretest (mean=16.254). The maximum score for the test was 30 points, the mean difference was 4.902 and the t-value was 7.235* with a degree of freedom of 50 (N=51). The result revealed that there was a significant difference between the mean scores from the pretest and posttest at a significance level of P-value equaled to .000* ($P < .05$).

Similarly, it was reported in table 4.14 that semi SRL group of student received higher posttest mean scores (mean=22.313) than the pretest mean scores (mean=18.039). The total score was 30 points, the mean difference was 4.274 and the t-value was 6.598* with a degree of freedom of 50 (N=51). The result revealed that there was a significant difference between the mean scores from the pretest and posttest at a significant difference level of P-value equaled to .000* ($P < .05$).

According the data presented in Table 4.14, the fully SRL group exhibited a significant difference between OES pretest and OES posttest ($t = 7.235^*$, sig. = $0.00 < 0.05$). Similarly, the results of the semi SRL group also revealed a significant difference ($t = 6.598^*$, sig. = $0.00 < 0.05$). Given that this result mirrors the results of the comparison of writing skills of the fully SRL and the semi SRL groups, it could be interpreted that the SNE intervention was helpful in developing other English skills apart from the writing skills to both groups of participants.

4.4.2 Comparison of OES Pretest Scores between Groups

Table 4.14 Descriptive Data of OES Pretest of Fully and Semi SRL Groups

OES Test	Group	N	Min. (Full=30)	Max. (Full=30)	Mean	SD
Pretest	Fully SRL	51	7.00	27.50	16.254	4.327
	Semi SRL	51	8.50	27.00	18.039	4.132

Table 4.15 Independent Samples t-Test Results Showing the Difference between OES Pretest of Fully and Semi SRL Groups

Group	Test	N	Mean	S.D.	t	Df	P(Sig.)
Fully SRL	Pretest	51	16.254	4.327	-2.130*	50	.036*
Semi SRL	Pretest	51	18.039	4.132			

Note: * $P \leq 0.05$

As presented in Table 4.15, the pre-test mean scores of the Semi SRL group ($\bar{x}=18.039$) were higher than that of the Fully SRL group ($\bar{x}=16.254$). Therefore, the results of the independent samples t-test of both groups indicated a statistically significant difference ($p < 0.05$) between groups in the pretest scores of other English skills (OES).

4.4.3 Comparison of OES Posttest Scores between Groups

Table 4.16 Descriptive Data for OES Posttest of Both Groups

Treatment Group	N	Original Posttest Mean	S.D.	Adjusted Posttest Mean	S.D.
Fully SRL	51	21.156	5.83	21.731	.639
Semi SRL	51	22.313	4.58	21.740	.639

Note: Covariates in the model =17.147 (Pretest)

In order to detect the difference between fully SRL and semi SRL group for other English skill difference after the experiment, the mean scores of these two groups were compared using ANCOVA. The results were illustrated in Table 4.17.

Table 4.17 ANCOVA Results on OES Posttest between Fully and Semi SRL

Groups					
Source	Sum of Squares	df	Mean Square	F	P (Sig.)
Pretest	741.140	1	741.140	36.448	.000
Group	.002	1	.002	<u>.000</u>	.992
Error	2013.086	99	20.334		
Total	50975.500	102			
Corrected Total	2788.353	101			

Note: * $P \leq 0.05$; type III sum of squares; df = degree of freedom

As shown in Table 4.17, the ANCOVA result revealed an F -value of .00 and P -value higher than .05 ($p=.992$; $p > .05$) that was not statistically significant. That was to say that the posttest scores did not make a significant difference between the fully and the semi SRL groups in terms of other English skill improvement. In other words, there was no difference in OES posttest scores found between groups.

The results represented in Table 4.17 indicated that the fully SRL group performed significantly differently from the semi SRL group before the experiment. Initially, the fully SRL group had significantly lower scores at $P=0.00$; $p < 0.05$ comparing to the semi SRL group. However, there was no difference in the posttest scores between the fully SRL and semi SRL groups ($p = 0.992$, $p = 0.992 > 0.05$) in other English skill performance, including listening, conversation, reading, vocabulary, and grammar (with writing skill excluded).

Since F -value was 0.00 ($F = 0.00$), and P -value was .992 ($p = .992$ $p > 0.05$), these were not statistical significance of mean difference between the OES posttest of the fully and the semi SRL groups.

4.4.4 Test of Homogeneity of Regression Slopes of OES tests

Table 4.18 ANCOVA Tests on Between-Subjects Effects (OES tests)

Source	Sum of Squares	df	Mean Square	F	P (Sig.)
Group	36.631	1	36.631	1.818	.181
Pretest	724.094	1	724.094	35.942	.000
Group*Pretest	38.767	1	38.767	1.924	.169
Error	1974.319	98	20.146		
Total	50975.500	102			
Corrected Total	2788.353	101			

Note: * $P \leq 0.05$; type III sum of squares; df = degree of freedom

A key assumption of ANCOVA is the requirement for homogeneity of regression slopes. This assumes that the interaction between the covariate (pretest) and the dependent variable (posttest) does not differ significantly. If this effect (Group*Pretest) is significant, then the assumption of regression slopes has been broken. In other words, there is no interaction between the covariate and the grouping variable. As shown in the above table (Table 4.18), the interaction between “group” and “pretest” was not significant ($p = .169$, $p > 0.05$). Therefore, the assumption that the regression slopes were similar over groups is justified. Then, the results of the original ANCOVA analysis previously were acceptable (Field, 2013; Rutherford, 2011).

4.5 Discussion of the Tests Results

Online learning for higher education could be subjected to contextual influences. With the rapid growth of ICT-based technology, online learning has become an important aspect of educational institutions around the world. As argued previously in Chapter 1, online environments originated in, were developed, and employed in Western countries within Western cultural values. However, an increasing number of consumers of online learning were mainly found in Eastern countries, such as India, China, and Australia (Docebo, 2014).

Lack of sufficient attention to this issue could ultimately lead to failure in online environments or blended environments. It was challenging for researchers to provide online learning environments that resulted in successful outcomes for targeted countries and pedagogical values. This was not only a change from traditional classroom to an online learning setting but also a question of adapting to a system which originated in a different cultural environment.

The Thai educational system, like that of many other countries, has been oriented to the notion of instructivist-based approaches. It is known as a teacher-centered system where teachers are seen as the predominant source of content delivery. However, this role has been gradually transferred to depend more on learners by using various teaching approaches.

Since the SNE was influenced and embedded in the specific context of Thailand, it was impossible to decontextualize these initial experiment from its context and circumstance that it was employed in. In order to design an effective online learning in an appropriate way, the Thai pedagogical context should be explored. This study was designed to be related to dominant pedagogical values in

Thai online institutions. The exploration of embedded pedagogical values was set to investigate the most suitable degree of self-regulated learning that could be adopted in Thai online environments to facilitate learners' achievement. This study was seeking to answer whether a full form of self-regulated learning (autonomous learning without teacher mediation) or a semi form of self-regulated learning including teacher mediation would be most suitable for Thai circumstance.

The result of this study indicated that a fully SRL group of students, the autonomous learners, where full control depended entirely on the students and their peer community could be implemented as effectively or even more effectively than the semi SRL group of students that included teacher mediation. The comparison of the two different levels of teacher mediation had been added and had been mainly focused because Thailand had a long history of instructivist-based teaching in English teaching. The self-regulated learning environment, cognition, and motivation may appear to be critical aspects of learning. In the fully SRL group, the university students were expected to become self-organizers of their own learning, and this influenced their academic and language success.

Furthermore, the informal conversation with students during the semi-structured interview session revealed that certain students (3 students=5.88%) in the fully SRL group had a history of failing their course (English 1) more than once. Moreover, their total grade point averages (GPAs) were significantly low. However, these students from the fully SRL group with a history of failure became competitive with students in the semi SRL group by the end of the experiment, as indicated by their scores in the writing posttest, whereas the semi SRL group consisted of students with no history of failure. Assuming that the past seems to be the best predictor of the

future, and that they had failed repeatedly previously, there is a serious likelihood that without participating in this experiment, those students from the fully SRL group would have failed again. The self-organization of the fully and semi SRL groups was compared and discussed below:

The above statistics showed the following interesting, unexpected and exciting outcomes. The fully SRL group was significantly behind the semi SRL group in the pretest. In other words, the semi SRL group was performing significantly better than the fully SRL group at the beginning of the experiment. The statistics showed that at the end of the experiment, the fully SRL group had made up its initial performance deficit and was performing as well as the semi SRL group (no significant difference in mean scores of the two groups) despite the additional assistance and resources provided by the teacher to the semi SRL group. This means that, in effect, because of its initial deficit in relation to the semi SRL group, the fully SRL group actually outperformed the semi SRL group and was now performing as well.

This result was surprising, indeed exciting, because of counter-intuitive. How could a group working on its own, especially in the educational context of Thailand, effectively outperform a group provided with copious teacher support? In this context, even discounting the outperformance of the semi SRL group by the fully SRL group, a “no significant difference” outcome statistically is in fact highly significant pedagogically. It clearly means, at very least, that under the right conditions (such as the ones set up by the researcher), a teacher-less, self-managed, resource-light, autonomous group is just as effective in learning to write well as a teacher-led, resource-intensive, group. This outcome clearly signals that a fully autonomous SRL group is more effective and efficient pedagogically than a semi SRL group as it

results in major savings in terms of teachers' time and in terms of investment of resources resulting in major efficiency gains: no teacher is needed for the students engaged in this form of learning and the number of students who can be served by this kind of structure is essentially limitless.

As a result of this research study, it was likely to conclude that the notion of the self-regulated learning or learner autonomy could be found successful in any context even in Thailand where it had a strong instructivist tradition. This may be because of the following reasons.

1) Seven principles of good practice-on the basis of the “seven principles for good practice” in online teaching identified and reviewed in Chapter 2, it had been confidently expected by the researcher that the semi SRL (teacher-led) group would have been more successful. Not only that they had a teacher to guide them but they also had a significant higher dominance score at the beginning of the experiment. However, as we had seen, this was not the case. How could this counter-intuitive outcome be accounted for? Clearly the most likely contributing factor was the absence (fully SRL group) or presence (semi SRL group) of the teacher and her role. This, in turn, had an impact on the activities that students engaged in and the roles that they fulfilled. The review of teacher's role and possible impacts was presented in the next section and followed by an analysis of students' behavior.

The “Seven Principles” that were reviewed previously in Chapter 2 (Bangert, 2004; Chickering & Ehrmann, 1996; Gamson, 1991), consisted of 1. Encourages staff-student contact, 2. Develops cooperation among learners, 3. Encourages active learning, 4. Gives prompt feedback, 5. Increases time on task, 6. Communicates high expectation, and 7. Respects diversity of talents and methods of learning.

The semi SRL group applied all these seven principles that were claimed to promote online learning whereas the fully SRL (non-teacher supported) group applied only four principles; principle number 2, 3, 5, and 7 (Bangkert, 2004; Chickering & Ehrmann, 1996; Gamson, 1991). The four principles were applied in this group consisted of principle 2; develops cooperation among learners, principle 3; encourages active learning, principle 5; increases time on task, and principle 7; respects diversity of talents and methods of learning. This brought to a conclusion that the seven principles of good practice were not applicable in the context of this research study because less principles use yielded the same or even better results in students' progress like the results found for this fully SRL group.

2) *Teacher's Role*-Regarding the role of the teacher, the fully SRL group received less teacher communication (around 5 minutes of teacher-talk about the SNE during the normal face-to-face class, as a reminder/encouragement to use the online system), they received very few teacher posts and absolutely no teacher assistance through online and offline means. On the other hand, the semi SRL group received on-demand teacher assistance both online and offline (plus around 10 minutes of teacher-talk about the SNE during each face-to-face class) as well as receiving more teacher's comments on their posts. They were allowed to consult teacher at any time through many ways of communication such as instant messaging (see figure 4.1) that provided personal space chatting with teacher. They could E-mail, phone, and use other social networking sites to contact their teacher. Furthermore, they could make an appointment to see the teacher.

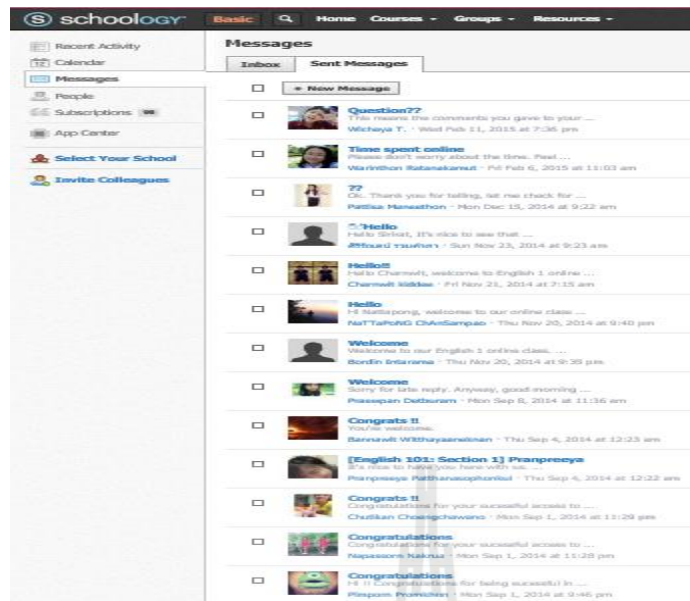


Figure 4.1 Instant Messages Sent to Teacher

A number of previous research projects indicated the necessity of teacher' roles in facilitating students in order to support such online environments to be more successful. In addition to the announcements, encouragement, and social support, guidelines, and examples of how to complete an assignment were important aspects to engage students into the online learning. A number of training VDOs were provided to both groups as additional resources to help students maximize their use of the SNE.

In the semi SRL group, students were informed about instructions and examples of how to complete online assignments, how to access to advisory services by teacher both online and offline using a variety of alternative channels, such as instant messaging, email, chat box, and so on. This supports were available as they needed them. That is to say that these supports offered “just-in-time (JIT)” and “just-in-case (JIC)” (Bose, 2015) mediation throughout the experiment.

On the other hand, students in the fully SRL group were informed about instructions, examples of assignment, and plagiarism prevention before the

experiment but there were no advisory services of any kind provided by the teacher after that. Although sometimes students in this group needed an assistance from the teacher, she would ask them to work by themselves on their own ways.

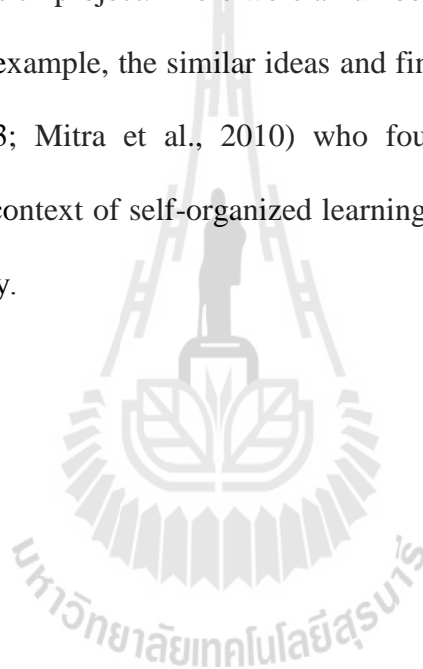
Table 4.19 SNE Activities

	Fully SRL Group			Semi SRL Group			
	Classroom	Online Activity	Students	Classroom	Online Activity	Students	Teacher
Tutorial	Teacher's explanation + students' practice			Teacher's explanation + students' practice			
Practice	Practice posting on SNE			Practice posting on SNE			
Pretest	Essay writing			Essay writing			
Pretest	OES test			OES test			
Week1	-5 minutes teacher-talk about SNE -Lesson 4	-Lesson 1 - Discussion topics	Students' discussion with classmates	-10 minutes teacher-talk about SNE -Lesson 4	-Lesson 1 -Discussion topics	-Students' discussion with classmates + consultation with teacher when needed	-Post lessons with examples of answers -Make some comments and feedback both online and off-line -Post to answer some students' posts to encourage students to post more
Week2	-5 minutes teacher-talk about SNE -Lesson 4	-Lesson 2 - Discussion topics	Students' discussion with classmates	-10 minutes teacher-talk about SNE -Lesson 4	-Lesson 2 -Discussion topics	-Students' discussion with classmates + consultation with teacher when needed	-Post lessons with examples of answers -Make some comments and feedback both online and off-line -Post to answer some students' posts to encourage students to post more
Week 3	-5 minutes teacher-talk about SNE -Lesson 5	-Lesson 4 - Discussion topics	Students' discussion with classmates	-10 minutes teacher-talk about SNE -Lesson 5	-Lesson 4 -Discussion topics	-Students' discussion with classmates+ consultation with teacher when needed	-Post lessons with examples of answers -Make some comments and feedback both online and off-line
Week 4	-5 minutes teacher-talk about SNE -Lesson 5	-Lesson 5 - Discussion topics	Students' discussion with classmates	-10 minutes teacher-talk about SNE -Lesson 5	-Lesson 5 -Discussion topics	-Students' discussion with classmates + consultation with teacher when needed	-Post lessons with examples of answers -Make some comments and feedback both online and off-line -Post to answer some students' posts to encourage students to post more
Posttest	Essay writing			Essay writing			
Posttest	OES test			OES test			
Questionnaire	51 Students			51 Students			
Individual Interview	51 Interviewees			51 Interviewees			

Accordingly, the fully SRL group without teacher paying attention on them might try to accomplish the skill necessary for their survival in completing SNE tasks. This may belong to a kind of self-organizing solution that really helped them to write, to post and to apply to use with other academic success that fitted each individual. For example, they may search for feedback from other sources (such as peers, Internet resources), monitor their speed and sources of learning, learn actively, plan their time

to reach their goals effectively, and decide and adjust their goals, methods, and behaviors flexibly to be successful in their writing, English learning, other subjects, and other similar problems facing as well.

The quoted paragraph below entitled, “*Shifting in Responsibility*” was taken from the article, “*Hands-Off Teaching Cultivates Metacognition*”, wrote by Maats & O'Brien (2015) that presented related concepts which reflected a similar idea found in the results of this research project. There were a number of studies and articles talking about this matter, for example, the similar ideas and findings from many experiments of Mitra (2012, 2013; Mitra et al., 2010) who found that students could learn effectively under the context of self-organized learning environments (SOLE) among their peers' community.



Shifting the Responsibility (by Maats & O'Brien, 2015)

"We've seen this tactic succeed on a personal level. Ten years ago, when we started tutoring full time, we did everything we could to help our students. It was our job to make sure that they understood and succeeded. Pretty soon, we realized that our desire to help was exactly what was hurting our students the most. They knew we'd do everything we could, so they stopped doing things for themselves. Eventually, we turned our tutoring sessions around. When a student asked how something was done, we'd play dumb and say, "I don't know. We should probably look it up." The student would look it up, ask another question, and we'd say, "Hmmm. That's interesting. How can we find that out?" Again, the student would go to the book. After enough of those sessions, our students stopped bothering to ask us for the answers -- they already knew all the behaviours that would lead to understanding.

Curious whether this shift in our students was just a fluke, we began working our way through the scientific literature, and the picture quickly became clear. Today's students have incredible resources -- and a troubling lack of resourcefulness. They have brand new textbooks that they never crack open. They have the collected knowledge of the world available at the click of a mouse, but they never use it to look up things they don't know. After years of classroom lectures, students everywhere -- regardless of cultural or socioeconomic background -- had internalized the idea that students are supposed to get answers from teachers. At its core, that translates to the idea that the person in charge of their learning is someone other than them. And that's a huge problem because, ultimately, no one else can be responsible for our learning.

No matter how entertaining you make your lectures, you can't make your students pay attention. Only they can do that, and yet we fall victim to the idea that if the student isn't learning or isn't paying attention, it's the teacher's fault. From a neuroscience perspective, that's just wrong. Yet by doing the majority of students' thinking and rushing to solve their problems, we reinforce that idea. In our experience, that has done America's students a tremendous disservice. A great education doesn't come from a teacher who thinks for you. It comes from a teacher who teaches (and pushes) you to think for yourself"

(Source: <http://www.edutopia.org/blog/hands-off-teaching-cultivates-metacognition-hunter-maats-katie-obrien>)

Similarly, the Sudbury Valley School experiences (Oppenheimer, 2014; Greenberg & Sadofsky, 1992) and also 21st Century education (Lian, 2004; Lian, 2012) suggested and confirmed the positive results on giving students fully control of their own learning processes and strategies without teacher's influences or guidance that seemed to give more positive effect on students' behaviors in the long term.

3) *Values of Error-* Regarding error correction and feedback, the fully SRL group received very little feedback from the teacher compared to the semi SRL group who received "grade" and "short comments" for the post (see Figure 4.2). This

experiment has shown that feedback might not affect students' academic progress. Since a number of research projects undertaken previously mentioned the value of feedback in influencing students' improvement in writing, this study decided to test this belief by designed an experiment where one group (the semi SRL) received feedback while the other groups received very little feedback in the form of "grade" and "short comments" from the teacher (see Figure 4.2). This suggested that feedback given from the teacher might give no impact to the development of students' writing skills. As according to the performance in the post-test scores of both groups, the results showed no significant difference between the groups. However, there was no grammatical correction of students' work given to either groups but students in both groups still had better improvement of scores (that included grammar items in the OES test) comparing to their pertest scores within each group. This brought to the conclusion that error correction may not be necessary in this context of study.

This might be one of the answer to reconfirm the belief that we "learn until we make no errors" could not be applied because "Making no mistakes" may mean that the students learn nothing. If students were afraid of making mistakes, they would be reluctant to write or to produce the posts or written texts because they might be afraid of making mistakes. Therefore, grammatical correction at this fundamental writing state would be a good idea to help students generate sentences and develop their writing performances.

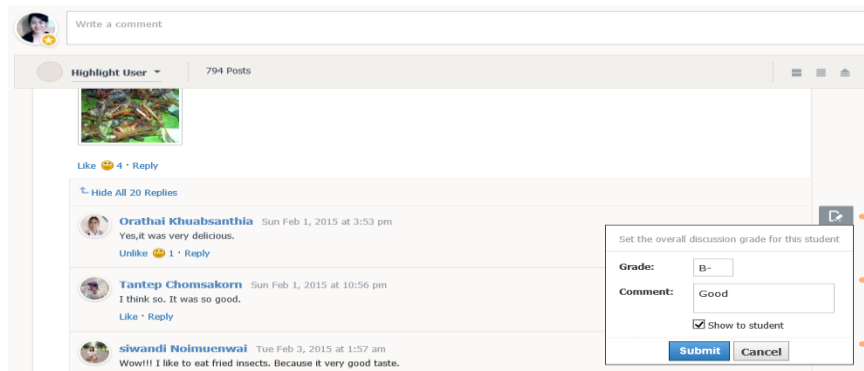


Figure 4.2 Feedback Given to the Semi SRL Group

4) *Type of motivation* -As a result of the differences in treatment, the students displayed the following different characteristics and behavior patterns. These were described and discussed. Evidences for this, together with necessary explanations, were presented below when reviewing students' activities.

The fully SRL group posted around 50 % less than the semi SRL group. The fully SRL group posted half amount of the semi SRL group' posts. While this number may appear low, in fact it could reflect greater commitment and interest on the part of learners when no one forced them to write but they still completed the task. For instance, it was arguable that they posted because of their inner motivation that was stimulated by their peers' online behaviors, such as the feedback from peers. More students from the fully SRL group mentioned about amusement in posting compared to the fully SRL group.

In the fully SRL group, 18 students (35.29%) talked about amusement or happiness in posting. For example:

"I think that Schoology made me feel more entertained in learning (Q1N28/4)",
"Learning on Schoology was fun. It was not boring at all(Q1N28/7)",
"Schoology made me have more fun in learning because we could share our ideas, post photos, and interact with many people at the same time(Q1N28/39)",
"We could post for fun and we chatted with friends and at the same time we practiced

English (Q1N28/41)",
 "It was fun to ask and answer just like Facebook(Q2N28/7)",
 "Learning using Schoology was very fun, it was not boring, and we could search for knowledge in many ways. (Q2N28/9)",
 "I thought that it was very amused(Q5N28/7)",
 "I felt that I would like to reflect to those comments because I felt good and amused(Q5N28/12)",
 "I felt fun chatting with my friends even though my grammar uses were not correct according to the grammar rules but the most important thing was how to communicate to understand each other(Q5N28/16)".

At the same time, 10 students (19.60%) from the semi SRL group mentioned about amusement to post. For example:

"I had fun interacting with friends using English to communicate (Q1N24/42)",
 "I had fun chatting with my friends. It was a combination of audio, video, and animation (Q2N24/18)",
 "I had fun sharing opinions with friends (Q2N24/21)",
 "I posted because of the scores and I thought it was fun for me (Q4N24/13)",
 "Firstly I would like to have scores but after a while I felt it was very fun to do. (Q4N24/32)",
 "It also depended on my desire to post whether I would like to post or not and at what time (Q4N24/45)",
 "It was fun and I felt good to comment on the posts (Q5N24/14)",
 "I was excited and amused with interaction (Q5N24/21)",
 "I felt that it was amused to use English to post and there were people (Q6N24/6)",
 "I turned to think that using English made me feel amused (Q6N24/8)".

Regarding the above evidence from these two groups, there was a high tendency to be caused by the teacher's facilitation. The fully SRL group, without the teacher help, who was more self-reliant, posted whenever they felt like posting. They might have more enjoyment about the SNE because they might have never noticed that their teacher was staying online looking at their posts when they received very small numbers of feedback form the teacher. Moreover, the teacher never encouraged them to post. On the other hand, the semi SRL group, with teacher mediation whenever they needed, might post to follow the teacher's suggestions. Therefore, this might be the extrinsic motivation to post that influenced by the teacher's encouragement and assistance level. Then, the personal enjoyment of posting might be lower compared to the fully SRL group who posted because of their inner needs.

5) *Style of posting*- it might be concluded that the fully SRL group was more creative and self-dependent than the semi SRL group. Evidences from the SNE pages showed that some students from the fully SRL group posted in other pages that were not related to their assignments, such as the posts on the “Updated Post” (news feeds/current status) for communicating with friends who were staying online at that time. On the other hand, no one from the semi SRL group posted their current status on the “Updated Post” page except the teacher of the course who started the conversation every time and very few students commented on the teacher’s posts in this page because this was not the assignment pages that the teacher encouraged the semi SRL group to complete.

Evidence from fully SRL group



Evidence from semi SRL group

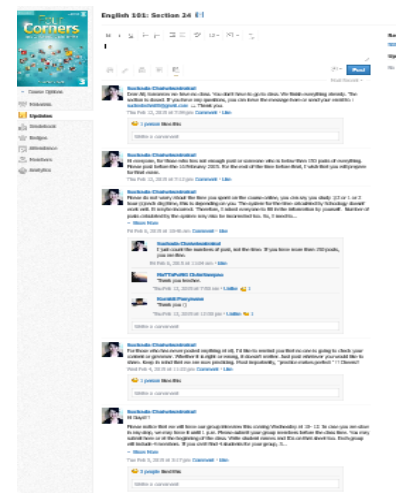


Figure 4.3 Updated Post Pages

6) *Well-designed environment of the SNE*-Both groups had higher mean scores after the experiment. This was likely to result from the well-established virtual environment of the SNE, particularly the fully SRL group who worked on their own

with their online community without teacher mediation. Students from the fully SRL group could participate collaboratively within the SNE community and gained English skills.

Even though without the teacher initiation, the learning community of both groups, especially the fully SRL group, was established under the sense of “personalized environment”, personal space and place to learn, as well as the comfortable feeling (evidences from interviews), and under the sense of social interaction and social identities among peers. The notion of full personalization that addressed the learning environment that could be adapted following the learners’ needs. Thus, personalized environment enabled students to take control over their own personal learning environments in accordance with their knowledge, interests, needs, motivation, and goals (Mayeku, et al., 2015).

The SNE was a platform that was user-friendly when the new user could log in to use the system easily by using the code given by the course instructors. In addition, the design of SNE’s setting was created to support and to meet different needs and preferences of learners. It consisted of numerous didactic scenarios to facilitate individual differences in terms of learning style and language proficiency. The fully SRL group had higher control to manage their own environments in terms of ideas, learning style and content information comparing to the semi SRL group. In semi SRL group, teacher graded students’ posts in some topics and gave constructive feedback in certain topics. Sometimes, the teacher also posted after each student post. However, these behaviors had not been found in fully SRL group.

The SNE provided “appropriate learning scenarios and resources” that learning scenarios could shape and affect all aspects of learning as a way of

facilitating understanding of English lessons and as a guided design of learning activities. Learning scenarios and styles were designed to use purposefully on the basis of course objectives, type of content, and individual difference among learners. The learning resources and discussion topics were linked to the course content and students' informal everyday use of language.

The issues of effective design of learning resources were placed on the appropriate selection and sequencing of resource presentation. Therefore, organization and structure of learning resources could determine ultimate efficiency of learning environments. Learning resources could be developed for each specified course. Sequencing and hierarchical structures of learning resources should be best supported learners' needs and course elements. Moreover, learning resources should be accurate and reliable. They should have been reviewed and updated regularly. Lastly, ownership and copyright should be defined.

Moreover, the SNE also provided “adequacy of learning resources and services” which was an essential element for academic support. The full ranges of related resources were provided for both groups of students. Students were provided with clear information on the process to access the online course services before the experiment. The online resources as information services were easily accessible. Facilities and process of downloading and printing materials were clearly explained to students.

7) *Quantity of posts*-Number of posts, amount of peer feedback, and quantity of written work might not be representative of language progress. The semi SRL group always produced longer sentences and paragraphs than the fully SRL group. Moreover, there were more comments received from each post. As could be seen

from the SNE page in the topic of “my friend”. The fully SRL group seemed to post shorter paragraphs and had fewer responses from friends comparing to the semi SRL group who received more feedback from friends.

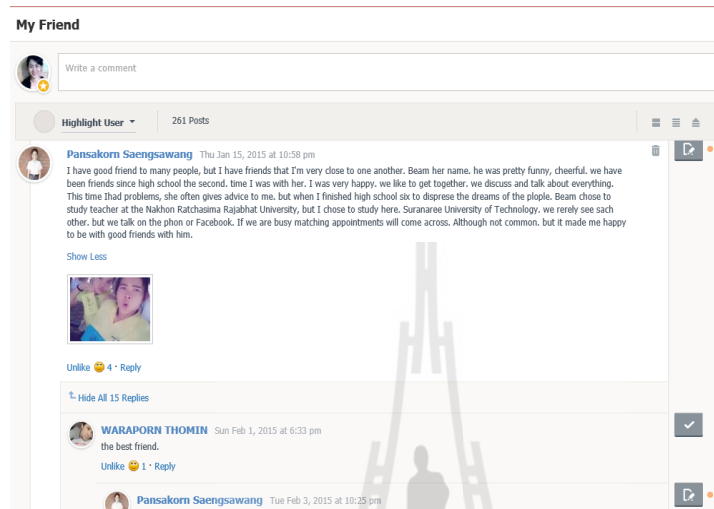


Figure 4.4 Sample Page from the Semi SRL Group (Quantity of Posts)



Figure 4.5 Sample Page from the Fully SRL Group (Quantity of Posts)

8) *Constructive Plagiarism*-Plagiarism might be viewed in a good sense; it could be a method for language learners at a beginning state who learned to write and construct sentences. There were some recurring phrases that appeared all the time. Some phrases or sentences were used very often to share ideas found in both groups. For example, “I agree”, “I think so”, “Me too”, “Really?”, “I agree with you”, “I think so too”, “ I like it too”, “I don’t like it”, “So do I”, “I don’t know”, “Wow”, “So funny”, “Very funny”, “I’m excited”, “Very excited”, “Oh”, “Um”, and “It is very scary.” It could be noticed easily that when someone posted something, other students tried to use the same or similar phrases or sentences in other occasions. Students may not copy their friends’ words, or sentences but they may learn new phrases and took the risk to try to use them. They learned new sentences from friends every day. Information from the interview session revealed that they had no opportunity to write to express their opinions previously and they were not sure to write anything in English. This platform offered them a good chance to test their language use. They felt good when someone posted back. This told them that what they posted were understood by friends.

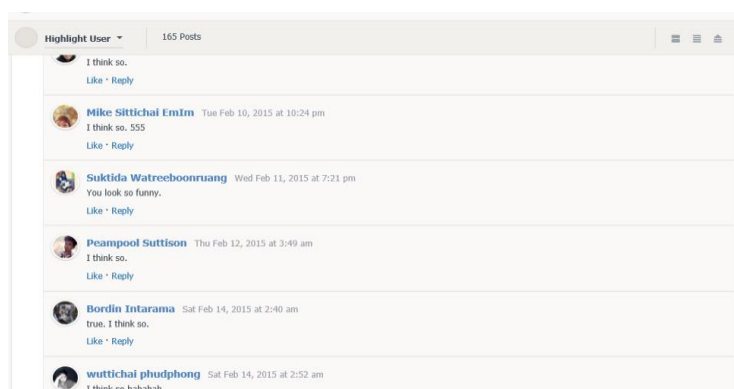


Figure 4.6 Sample Page from the Fully SRL Group (Repeated Phases)

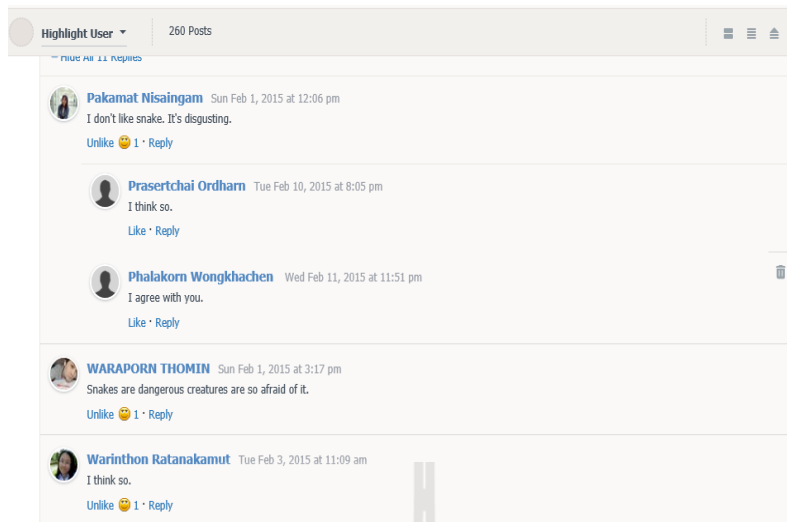


Figure 4.7 Sample Page from the Semi SRL Group (Repeated Phases)

In conclusion, The fully SRL group was a group of students without significant teacher assistance but who created their own help and environment, solved their own problems by themselves, developed personal problem-solving skills that deal with their difficulties. On the other hand, the other group of students (semi SRL) had their problems solved or solutions suggested by the teacher. In so doing, the pressure was reduced from them by giving them the solutions but, seemingly, reduced their abilities to develop their critical thinking skill such as problem-solving skill, and language learning skills.

9) *Self-organization-* The students in both groups demonstrated a self-awareness or a concern for the accuracy of the language that they posted. Even though no one or no teacher checked their writing mistakes, students in the fully SRL group (12 students out of 51 or 23.53%) had a higher awareness on making mistakes than the students in the semi SRL group (9 students out of 51 or 17.64%). The awareness was about the grammatical errors, language errors, and writing content they might

have done wrong and they were waiting for someone to post right after their posts to ensure other people could understand their posts. For example, they said:

Evidences from the fully SRL group:

“When someone commented on my post, if it was a good point or a suggestion, I would fix my writing and make it better. (Q5N28/17)”,

“When they criticized, we would know what went wrong and how to rewrite. It supported development of our languages to be better. (Q5N28/29)”,

“We could fix if we used wrong words (Q5N28/30)”,

“I felt good and brought back those criticism to improve myself to become better in English. (Q5N28/34)”,

“I felt good when someone told me about weakness in my English usage. (Q5N28/45)”,

“I felt good when someone suggested about writing because I might write something wrong. (Q5N28/48)”.

Evidences from the semi SRL group:

“I felt good when someone posted following my posts and I felt very good when they criticized so I brought those comments to improve myself (Q5N24/33)”.

“I felt good and I knew my mistakes” (Q5N24/37)”.

“I felt good because at least it made me know how to improve my English and how to correct it (Q5N24/4)”.

“Considered and improved them to better (Q5N24/54)”.

“It’s good because I knew what is right and what is wrong (Q5N24/3)”.

10) *Creative thinking skills*-The SNE established an environment that promoted creative thinking when students designed their own media and content that were combined with the real-world assignments. They were encouraged to use multiple ways of presentation to attract their friends. Students in the fully SRL group was more creative whereas students in the semi SRL group could be less creative when they consulted their instructor who was available online to coach them in their concepts, and production of their content if they needed. Students in the fully SRL

group created posts that reflected their unique patterns of interests and individual differences in the “updated post” page. Their enthusiasm for the posting remained increasingly high comparing to the other group who had very few comments on this page. The students created the content, enjoyed the process and realized that they had created the valuable posts to their friends in the community. They had positive ideas when their peers posted to answer their posts. The degree of engagement was not depending on how low or high ability in English writing the students had. Students with different abilities (high and low) became committed and task-oriented. Therefore, both groups gained more self-organization and self-confidence to post. However, the interview results showed that students in the fully SRL group might have more confidence to post when there were some conversation found in the interview scripts that could be referred to higher confidence in English writing.

11) *Critical thinking skills*-Students reported on-task behavior was increased over time and their ideas shifted in a better way. Semi-structured interview revealed that students accessed wide ranges of online resources in order to find the content they desired. At the same time, they developed generalized note-taking skills, information seeking skills, writing for interpretation, and designing posts. Learners used media to generate their own content then they became more integrated. Moreover, the results from both groups were positive, most of the students revealed that their idea had shifted in the better ways in the last two weeks (week 3 to 4). However, the fully SRL group who had no teacher’s influence in guidance how to do the activities but their posttest results were not different from the other group.

12) *Problem-solving skills*-This could be resulted from their experience of knowledge construction process under their community. They were exposed to a

number of online resources and peer writing in multiple perspectives on the same and similar topics. Apart from using the online resources routinely and appropriately, they were undergoing extensive research and evaluation, they had to decide which information could be used. Students realized their level of expertise and shared their expertise with the community unconsciously. That is to say they created their own rhizomatic thinking (Lian, 2004; Lian & Pineda, 2014) on problem-solving skills to gain the knowledge from the related resources located online.

13) *Metacognitive learning skills*-Their classroom learning made sense to them because it was realistic in real communication with friends in the community. The content was provided in the relevant contexts of students' daily experiences on the SNE. They had more social interaction experience through online discussion with peers. They became socially aware and they became more confident to communicate using English writing. They became strategic organizers of their own behavior by deciding what to post and how to organize the posts. They learned to reflect to their friends' posts intellectually as could be noticed on the written posts of the SNE.

In conclusion, The SNE may provide students with some of the characteristics of 21st Century Skills, including "critical thinking and problem-solving skills, creativity, self-organizing skills, technology skills, and life-long learning skills" (Lian, 2012). The results from this research project seems to demonstrate an effective and efficient system of the SNE. There are considerable evidences showing that students from the non-teacher supported group, or the fully SRL group, developed higher critical thinking skills, metacognitive strategies, constructors of creative content, active participants of community, fluent writers that were as effective as or even better than teacher supported group, or the semi SRL group. Therefore, this

suggested that the teacher may not necessarily support students for certain activities if the system was well-designed. Furthermore, the seven principles of good practice for online learning had been proved inapplicable in the context of this research study.

4.6 Results from Perception Questionnaires

4.6.1 Backgrounds of the Fully and Semi SRL Groups

As reported in Chapter 3, there were 102 students from two intact classes studying English 101 (203101) course at Suranaree University, Nakhon Ratchasima, Thailand, who participated in this research. The following participants' descriptions were collected from the first part or the background information of student's questionnaire.

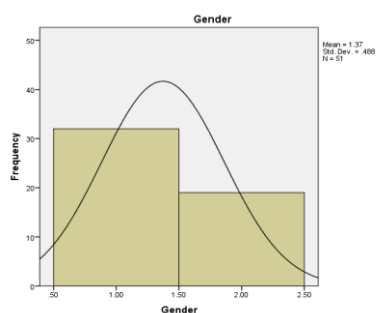
1. Gender Number

The frequencies and descriptive statistics for both groups of participants were presented in Table 4.20. The fully SRL group consisted of male (32= 62.7 %) more than female (19=37.3%) participants whereas the semi SRL group consisted of female (30=58.8%) more than male (21=41.2%) participants.

Table 4.20 Gender Number

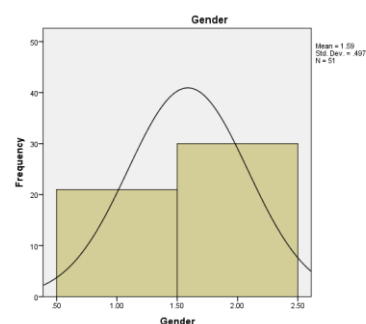
Group	Gender				Total	
	Male		Female		N	%
	N	%	N	%		
Fully SRL	32	62.7	19	37.3	51	100
Semi SRL	21	41.2	30	58.8	51	100
Total Both groups	53	103.9	49	96.1	102	200

Fully SRL Gender



1= Male 2= Female

Semi SRL Gender



1= Male 2= Female

Figure 4.8 Histogram Presenting Participants' Genders

The difference in terms of gender component between these two groups revealed different results from many previous studies (Caspi et al., 2008; Bostocka & Lizhib, 2005; Im & Lee, 2003-2004; Anthony, 2012) as reviewed in Chapter 2 that females were good at language skills more than males and that female learners tended to post on discussion board more than their male counterparts. As can be noticed in Table 4.20, the fully SRL group contained more male participants (males=62.7 %; females=37.3%) than females but still they could perform as good as the semi SRL group who had more female participants than males (females=58.8%; males=41.2%). This might be concluded that the SNE had developed writing skills and other language skills of the male participants positively.

2. Level of Education

Considering the current year of study, all participants (100%) for semi SRL group were first year students whereas the participants of the fully SRL group were vary consisting of the first year (96.1%) and few participants were studying in the second year (2%) and the third year (2%).

Table 4.21 Participants' Level of Education

Group	Current Year of Study						Total		
	1 st Year		2 nd Year		3 rd Year				
	N	%	N	%	N	%	N	%	
Fully SRL	49	96	1	2	1	2	51	100	
Semi SRL	51	100	-	-	-	-	51	100	
Total	Both groups	100	196	1	2	1	2	102	200

This English 1 course was for the first year of students to enroll, however, there were some students failed the course in the first year and another student failed more than twice as reported by the participants in the informal interview section. Therefore, there were second year and third year students were found in the in fully SRL group. These numbers showed the unequal background in terms of student's level of education. This brought to the conclusion that the SNE supported poor students, who had the history of failure, positively when they could finally past the course after studying through the SNE.

3. Faculty

As presented in Table 4.22, all participants for semi SRL group were studying in the faculty of engineering (100%) meanwhile most of the participants in the fully SRL group were studying engineering (96 %) with a few studying in the major of information technology (2 %) and crop production technology (2%).

Table 4.22 Participants' Faculty

Group of Participants	Faculty						Total		
	Engineer		Information technology		Crop production technology				
	N	%	N	%	N	%	N	%	
Fully SRL	49	96	1	2	1	2	51	100	
Semi SRL	51	100	-	-	-	-	51	100	
Total	Both groups	100	196	1	2	1	2	102	200

4. Grade Point Average (GPA)

As noted in Table 4.23, the participants in the fully SRL group seemed to have lower grade point average comparing to the semi SRL group.

Table 4.23 Participants' Grade Point Average (GPA)

Group	GPA								Missing answer		Total	
	0-0.99		1-1.99		2-2.99		3-3.99		N	%	N	%
	N	%	N	%	N	%	N	%				
Fully SRL	1	2	6	11.8	24	47.1	16	31.3	4	7.8	51	100
Semi SRL	-	-	4	7.8	28	55	17	33.3	2	3.9	51	100
Total Both groups	1	2	10	19.6	52	102.1	33	64.6	6	11.7	102	200

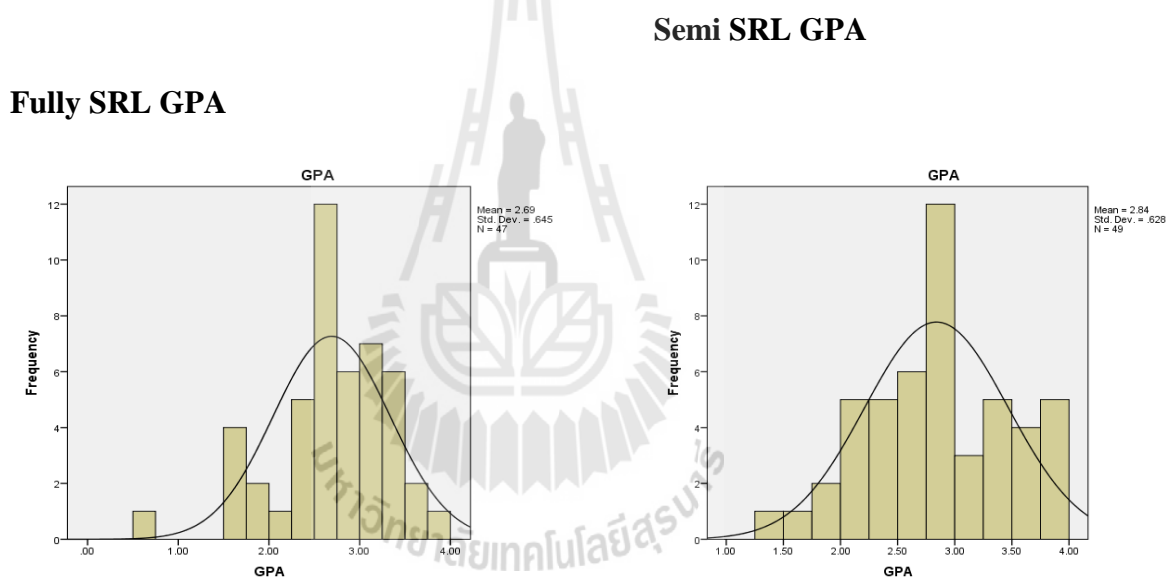


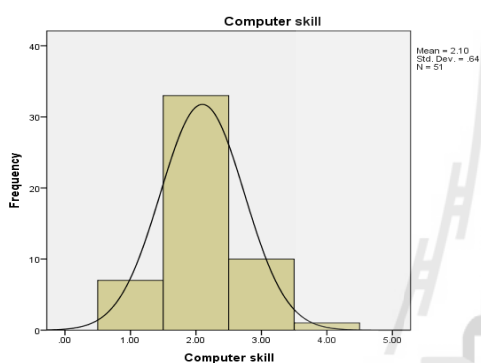
Figure 4.9 Histogram Presenting Participants' GPA

5. Computer Skills

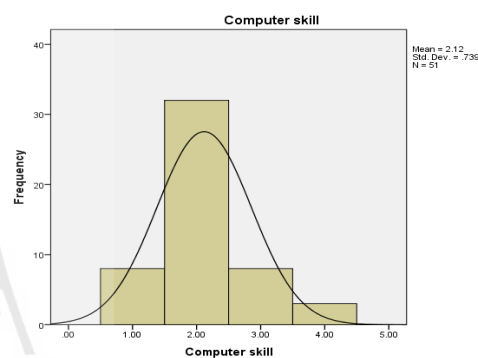
Most participants reported having good computer skills (64.7%), some of them reported having very good computer skills (19.6%), and a few reported having poor (13.7%) or excellent skills (2%) for the fully SRL group.

Table 4.24 Participants' Computer Skills

Group	Computer skills								Total	
	Poor 1		Good 2		Very Good 3		Excellent 4			
	N	%	N	%	N	%	N	%	N	%
Fully SRL	7	13.7	33	64.7	10	19.6	1	2.0	51	100
Semi SRL	8	15.7	32	62.7	8	15.7	3	5.9	51	100
Total Both groups	15	29.4	65	127.4	18	35.3	4	7.9	102	200

Fully SRL Computer Skills

1=Poor 2=Good 3=Very Good 4=Excellent

Semi SRL Computer Skills

1=Poor 2=Good 3=Very Good 4=Excellent

Figure 4.10 Histogram Presenting Participants' Computer Skills

Table 4.24 revealed overall computer skills that showed small percentage of students' "Poor" capacity in terms of computer skills. There were 7 students or 13.7% selected "Poor" in the fully SRL group. Likewise, there were 8 students or 15.7% selected "Poor" in the semi SRL group. These results ensured that the majority of students in both groups could do the online tasks of the SNE.

6. Ownership of Computers or Other Devices

Table 4.25 Participants' Ownership of Computers or Other Devices

Group	Computer/Other Devices Owner				Total	
	Yes		No		N	%
	N	%	N	%		
Fully SRL	49	96.1	2	3.9	51	100
Semi SRL	49	96.1	2	3.9	51	100
Total Both groups	98	192.2	4	7.8	102	200

Most participants in both groups reported being owners of a computer or other devices (96.1%) and a few reported having none of these devices (3.9%). All together 98 participants had a machine to study online course whereas only 4 of them did not have any devices. These students used university facilities.

The majority of both groups had their own computers or other devices. Therefore, there might not be any problems dealing with lack of facilities to work for the SNE that required this kind of support when students were assigned to work at least one hour per day to study and to post in the online community.

7. Internet Access

Table 4.26 Participants' Internet Access

Group	Internet Access				Total	
	Yes		No		N	%
	N	%	N	%		
Fully SRL	50	98	1	2	51	100
Semi SRL	51	100	0	0	51	100
Total Both groups	101	198	1	2	102	200

All of the participants in the semi SRL group reported having Internet access (100%) whereas nearly all participants in the fully SRL group reported having access to the Internet (98%) while a few had no Internet access (2%). The semi SRL group seems to have higher number of students who had the Internet access. However, the

result turned out that both groups had no different scores whereas the fully SRL group had a slightly lower Internet access.

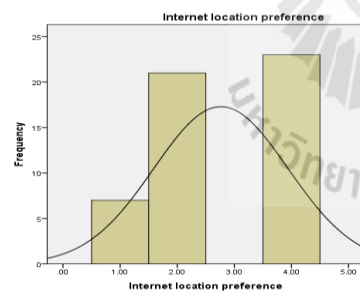
Overall, the majority of both groups had Internet access. Therefore, there might not be any problems dealing with lack of Internet connectivity to work for the SNE course that required this kind of support when students were assigned to work at least one hour per day to study and to post in online community.

8. Internet Location Preference

Table 4.27 Participants' Internet Location Preference

Group	Internet Location Preference						Total		
	Home		University		Everywhere				
	N	%	N	%	N	%	N	%	
Fully SRL	7	13.7	21	41.2	23	45.1	51	100	
Semi SRL	7	13.7	27	53	17	33.3	51	100	
Total	Both groups	14	27.4	48	94.2	40	78.4	102	200

Fully SRL



Semi SRL

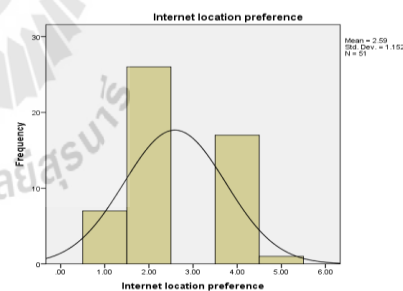


Figure 4.11 Histogram Presenting Participants' Internet Location Preference

When they were asked about their preferred location for Internet usage, nearly half of the participants in the fully SRL group reported that they preferred to use it at the university (41.2%) and everywhere (meaning wherever they stayed) (45.1%) and a few of them (13.7%) reported that they liked to use Internet at home.

At the same time, half of the participants in the semi SRL group reported that they preferred to use Internet at the university (53.0%), some of them were prepared to use it everywhere (33.3%), and a few of them (13.7%) reported they liked to use Internet at home. It had been reported that most of the participants stayed at a university dormitory inside the university area. Only few (13.7 %) of them from each group stayed at home.

To sum up, the information in Table 4.27 made us know that both groups had similar working style in terms of area to work on or their convenient places. There was not much difference between groups about their working locations.

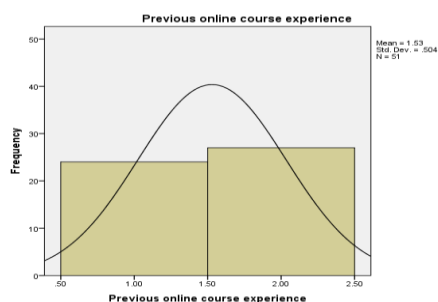
9. Online Course Experience

For online course experiences, more than half of the participants in fully SRL group reported (52.9%) that they had never studied in an online course before whereas lower than half of them used to study online course (47.1%).

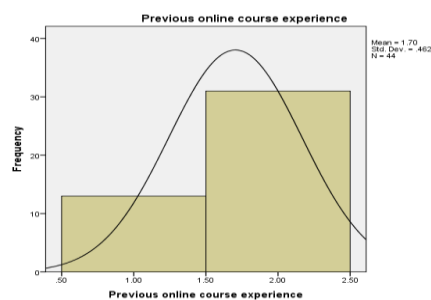
More than half of the participants in semi SRL group also reported never study online course (60.8%), some of them reported that they used to study online course (25.5%) and some of them (13.7%) did not give any ideas on this.

Table 4.28 Participants' Online Course Experience

Group	Online course experience						Total		
	Yes		No		Missing Answer		N	%	
	N	%	N	%	N	%			
Fully SRL	24	47.1	27	52.9	-	-	51	100	
Semi SRL	13	25.5	31	60.8	7	13.7	51	100	
Total	Both groups	37	72.6	58	113.7	7	13.7	102	200

Fully SRL

1=Yes 2=No

Semi SRL

1=Yes 2=No

Figure 4.12 Histogram Presenting Participants' Online Course Experience

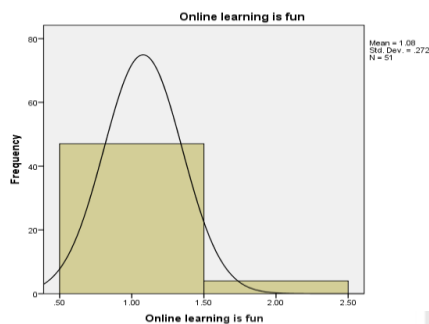
Table 4.28 suggested that students without experience (58 students for both groups) in taking online course had higher numbers than students with such experience (37 students for both groups). This made us know that more than half of them had more or less difficulties working on the SNE. However, these students who had no experience of online course learning might have never face any difficulties using the system of SNE because the system was easy to be used when its features were similar to the popular social networking platform of “Facebook”.

10 Agreement on “Online Course Was Fun”**Table 4.29 Participants' Agreement on “Online Course Was Fun”**

Group	Online course is fun				Total		
	Yes		No		N	%	
	N	%	N	%			
Fully SRL	47	92.2	4	7.8	51	100	
Semi SRL	40	78.4	11	21.6	51	100	
Total	Both groups	87	170.6	15	29.4	102	200

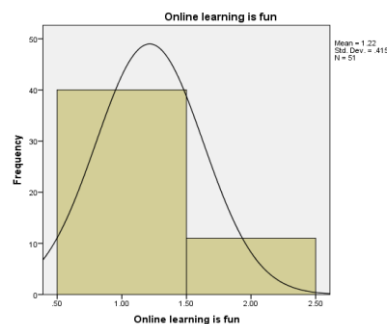
“Online Course Was Fun”

Fully SRL



1=Yes 2=No

Semi SRL



1=Yes 2=No

Figure 4.13 Histogram Presenting Participant’s Online Course Opinion about

Most participants (92.2%) in the fully SRL group thought that online learning was fun whereas a few of them (7.8%) thought in the opposite way. Meanwhile, more than half of the participants (78.4%) in the semi SRL group thought that online learning was fun whereas some participants (21.6%) thought the opposite way.

Overall, the fully SRL group had higher agreement that “the online course was fun” than the semi SRL group. This implied that the fully SRL group was happier to study using the SNE than the semi SRL group.

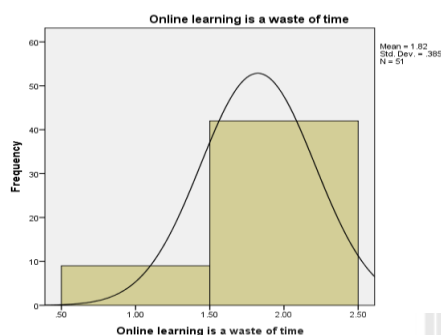
11. Agreement on “Online Course Was a Waste of Time”

Table 4.30 Participants’ Agreement on “Online Course Was a Waste of Time”

	Group	Online course is a waste of time				Total	
		Yes		No		N	%
		N	%	N	%		
Fully SRL	9	17.6	42	82.4	51	100	
Semi SRL	9	17.6	42	82.4	51	100	
Total	Both groups	18	35.2	84	164.8	102	200

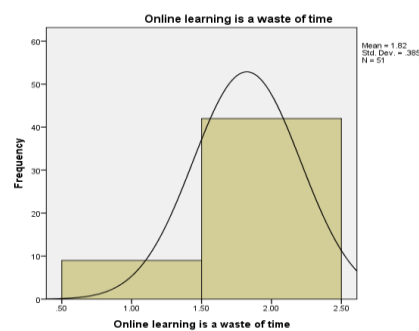
“Online Course was a Waste of Time”

Fully SRL



1=Yes 2=No

Semi SRL



1=Yes 2=No

Figure 4.14 Histogram Presenting Participant’s Online Course Opinion about

Only 9 or 17.6 % of the participants in both groups thought that online learning was a waste of time, whereas the majority of the participants (42 or 82.4%) in both groups thought in the opposite way. This might be concluded that they found online courses useful for them.

4.6.2 Results of Reliability of Perception Questionnaires

Table 4.31 Results of Cronbach’s Alpha Coefficients (α) for Perception

Questionnaires

Name of Questionnaire	Number of Cases	Number of Survey Items	Cronbach’s Alpha	Interpretation
Perception Questionnaire for Fully SRL Group	51	32	0.718	Reliable
Perception Questionnaire for Semi SRL Group	51	32	0.835	Reliable
Perception Questionnaire for Fully and Semi SRL Groups	102	32	0.793	Reliable

Reliability of the questionnaires was assessed with regard to internal consistency. The computed Cronbach's alpha coefficients' index of 32 items from the perceived value of 51 cases was 0.718 for fully SRL group and it was 0.835 for the semi SRL group. The overall reliability coefficients of the questionnaire from 102 cases returned $r = 0.793$. This was in line with the minimum standard of 0.70 suggested for basic research. Alpha coefficients were all above 0.7 (Field, 2013), which meant that these questionnaire items had high reliability and internal consistency.

Table 4.32 Results of Cronbach's Alpha Coefficients (α) for Each Item of Perception Questionnaires

Questionnaire Item	Fully SRL (N=51)	Semi SRL (N=51)	Fully SRL Semi SRL (N=102)	Interpretation of α
1. The SNE helped me to improve my listening skills.	.715	.826	.786	Reliable
2. The SNE helped me to improve my speaking skills.	.696	.827	.782	Reliable
3. The SNE helped me to improve my reading skills.	.713	.824	.783	Reliable
4. The SNE helped me to improve my writing skills.	.717	.831	.790	Reliable
5. The SNE helped me to improve my pronunciation.	.713	.826	.785	Reliable
6. The SNE helped me to improve my spelling.	.717	.829	.789	Reliable
7. The SNE helped me to improve my grammar.	.721	.829	.789	Reliable
8. The SNE helped me to improve my vocabulary.	.703	.832	.787	Reliable
9. The SNE was more convenient for me than face-to-face learning.	.701	.826	.782	Reliable
10. The SNE improved communication between students and teachers.	.710	.827	.784	Reliable
11. The SNE made teaching and learning more effective because it integrated all forms of media, print, audio, video, and animation.	.690	.827	.780	Reliable
12. I found the SNE interesting and useful.	.696	.827	.781	Reliable
13. I liked the SNE because I could work at my own pace.	.695	.830	.784	Reliable
14. The SNE helped me to develop knowledge of computers and the Internet.	.711	.821	.780	Reliable
15. I felt more confident when I used English online than when I used it in my classroom.	.712	.832	.789	Reliable
16. The SNE helped me to use time effectively.	.695	.824	.779	Reliable
17. I benefited from the feedback given by my peers through the SNE.	.703	.825	.781	Reliable
18. I benefited from the feedback given by my teacher through the SNE.	.710	.831	.788	Reliable
19. The SNE gave me access to authentic materials in the second language.	.709	.828	.785	Reliable
20. The SNE was difficult to handle and frustrating to use.	.737	.829	.794	Reliable
21. Slow Internet connectivity was a major problem I faced in using the SNE.	.722	.830	.790	Reliable
22. I faced technical problems when I used the SNE.	.723	.833	.793	Reliable

Table 4.32 Results of Cronbach's Alpha Coefficients (α) for Each Item of Perception Questionnaires (Cont.)

Questionnaire Item	Fully SRL (N=51)	Semi SRL (N=51)	Fully SRL Semi SRL (N=102)	Interpretation of α
23. I preferred to learn from course book rather than from the course website.	.746	.846	.809	Reliable
24. The SNE facilitated cheating and plagiarism.	.719	.851	.806	Reliable
25. Asynchronous interactions through the SNE were less effective than face-to-face interactions in the classroom.	.709	.843	.797	Reliable
26. I did not have a computer, therefore, I found it difficult to use the SNE.	.716	.846	.802	Reliable
27. The instructions provided on the SNE were difficult to follow.	.710	.831	.788	Reliable
28. We should increase the number of online courses.	.705	.831	.787	Reliable
29. We should increase the number of Internet labs.	.708	.825	.782	Reliable
30. We should solve all technical problems.	.715	.825	.785	Reliable
31. The SNE training should be provided to all students.	.708	.829	.786	Reliable
32. We should reduce the number of online courses.	.725	.831	.792	Reliable
Total	.718	.835	.793	Reliable

All items of perception questionnaires were tested by using Cronbach's alpha computed by a computer program. According to Table 4.32, all of the Cronbach's alpha scores were above 0.6 for each group and above 0.7 for both group which were acceptable for reliability of perception. The Cronbach's alpha values ranged from 0.779 to 0.809 for the perceptions of both groups of participants. These alpha scores indicated sufficient reliability for this study (Field, 2013).

4.6.3 Results of the Students' Perceptions

This section reported on the perceptions of students from the two groups: the fully SRL group and the semi SRL group. To survey students' perceptions, all students from both groups were asked to respond to the questionnaires after the experiment.

To answer the third research question of the present study: "What are EFL students' perceptions of their writing performance, as developed through the use of the social networking environment?", the students' responses to the questionnaires

were analyzed for the mean scores using a computer program. The mean scores of the responses on the two different SRL groups were presented and discussed in two sections. The perceptions of the fully SRL group toward the social networking environment were presented first, followed by the perceptions of the semi self-regulated writing group toward the social networking environment.

There were two major parts of the perception questionnaire. The first part of the questionnaire consisted of items 1-10 with questions asking students to give their personal details and past experiences about their computer use and online learning experiences. The second part of the questionnaire consisted of items with five-point rating scale questions asking the students to rate their opinions of the SNE. However, not all the students responded to the questionnaire, three students missed the class on the day of the questionnaire survey. 51 questionnaires were distributed altogether for each group of the participants. Only the responses given were grouped and tallied for frequency and then calculated for percentages using a computer program. The data received from the questionnaire were discussed in detail in two parts. The discussion consisted of 2 parts; the personal details (background information) of the participants which is reported in the previous section and the perceptions of participants as follows.

To examine student's perceptions toward the SNE, the participants in each group were asked to rank how high their agreement was for in each item as described in the questionnaire after they had studied using the SNE. The data were analyzed to find the mean scores of each item in four categories on the use of the SNE. The four main categories consisted of "*language areas, advantages, limitations, and*

suggestions". The mean scores were interpreted using the criteria for rating scale interpretation as follows.

4.50-5.00	means	Students reported having a "very high" level of perception on the statement given.
3.50-4.49	means	Students reported having a "high" level of perception on the statement given.
2.50-3.49	means	Students reported having a "moderate" level of perception on the statement given.
1.50-2.49	means	Students reported having a "low" level of perception on the statement given.
1.00-1.49	means	Students reported having a "very low" level of perception on the statement given.

4.6.4 Perceptions toward the SNE of Fully and Semi SRL Groups

1) Perceptions of the Fully SRL Group towards the SNE

Table 4.33 Questionnaire Results on Language Areas of the Fully SRL Group

No.	Rank	Statement	Mean — (\bar{X})	S.D.	Level of Perception
8	1	The SNE helped me to improve my vocabulary.	4.33	.62	High
3	2	The SNE helped me to improve my reading skills.	4.25	.48	High
4	3	The SNE helped me to improve my writing skills.	4.15	.70	High
6	4	The SNE helped me to improve my spelling.	3.92	.68	High
1	5	The SNE helped me to improve my listening skills.	3.84	.78	High
7	6	The SNE helped me to improve my grammar.	3.65	.78	High
2	7	The SNE helped me to improve my speaking skills.	3.64	.77	High
5	8	The SNE helped me to improve my pronunciation.	3.23	.73	Moderate
Total			3.87	.69	High

According to the results presented in Table 4.33, the mean scores of the students' responses ranged from 3.23 to 4.33 which fell into the “moderate” and “high” levels of perceptions. Overall, the grand mean was 3.87 and the SD was .69 that was they had “high” level of perceptions on the language areas.

The fully SRL group studied through the SNE agreed that it helped improve their vocabularies (item 8, $\bar{x} = 4.33$), their reading skills (item 3, $\bar{x} = 4.25$), their writing skills (item 4, $\bar{x} = 4.15$), their spelling (item 6, $\bar{x} = 3.92$), their listening skills (item 1, $\bar{x} = 3.84$), their grammar (item 7, $\bar{x} = 3.65$), and their speaking skills (item 2, $\bar{x} = 3.64$) respectively. However, their perceptions on the improvement of pronunciation fell into the moderate level (item 5, $\bar{x} = 3.23$).

It could be interpreted that the group of full SRL students felt that after using SNE, they had improved their English skills of vocabulary, reading, writing, spelling, listening, grammar, and speaking skills respectively at the “high” level but they felt that it supported their pronunciation merely at the “moderate” level.

Table 4.34 Questionnaire Results on Advantages of the Fully SRL Group

No.	Rank	Statement	Mean (\bar{X})	S.D.	Level of Perception
4	1	I found the SNE interesting and useful.	4.25	.62	High
5	2	I liked the SNE because I could work at my own pace.	4.13	.74	High
10	3	I benefited from the feedback given by my teacher through the SNE.	4.09	.50	High
3	4	The SNE made learning more effective because it integrated all forms of media, print, audio, video, and animation.	4.05	.78	High
6	5	The SNE helped me to develop knowledge of computers and the Internet.	4.03	.74	High
9	6	I benefited from the feedback given by my peers through the SNE.	4.01	.61	High
7	7	I felt more confident when I used English online than when I used it in the classroom.	4.00	.69	High
2	8	The SNE improved communication between students and teachers.	3.96	.56	High
11	9	The SNE gave me access to authentic materials in the second language.	3.80	.66	High
8	10	The SNE helped me to use time effectively.	3.80	.74	High
1	11	The SNE was more convenient for me than face-to-face learning.	3.70	.94	High
Total			3.98	.68	High

According to the results presented in Table 4.34, the mean scores of the fully SRL group responses ranged from 3.70 to 4.25 which fell into the “high” levels of perceptions on the advantages of the SNE. Overall, the grand mean was $\bar{x} = 3.98$, and the standard deviation was .68 which referred to the “high” level of perceptions.

Regarding the fully SRL group, their perception level was considered high with all the items about the advantages of the SNE, ranging from 1) The online SNE was interesting and useful (item 4, $\bar{x} = 4.25$). ; 2) They liked it because it helped them to work at their own pace (item 5, $\bar{x} = 4.13$). ; 3) They benefited from the feedback from the instructor (item 10, $\bar{x} = 4.09$). ; 4) The SNE made learning more efficient when it included many different forms of media (item 3, $\bar{x} = 4.05$). ; 5) It helped them developing knowledge of computers and the Internet (item 6, $\bar{x} = 4.03$). ; 6) They benefited from the feedback given by friends (item 9, $\bar{x} = 4.01$). ; 7) They felt more confident using English online than using in the classroom (item 7, $\bar{x} = 4.00$). ; 8) It improved communication between students and teachers (item 2, $\bar{x} = 3.96$). ; 9) It gave them access to authentic materials in the second language (item 11, $\bar{x} = 3.80$). ; 10) It helped them using time effectively (item 8, $\bar{x} = 3.80$); and 11) and, it was more convenient than the face-to-face session (item 1, $\bar{x} = 3.70$) respectively.

Table 4.35 Questionnaire Results on Limitations of the Fully SRL Group

No.	Rank	Statement	Mean — (\bar{X})	S.D.	Level of Perception
2	1	Slow Internet connectivity was a main problem I faced in using the SNE.	4.13	.91	High
4	2	I preferred to learn from course book rather than from the course website.	3.23	.86	Moderate
6	3	Asynchronous interactions through the SNE were less effective than face-to-face interactions in the classroom.	3.07	.82	Moderate
3	4	I faced technical problems when I used the SNE.	3.05	.78	Moderate
5	5	The SNE facilitated cheating and plagiarism.	2.94	1.06	Moderate
1	6	The SNE was difficult to handle and frustrating to use.	2.39	.80	Low
7	7	I did not have a computer, therefore, I found it difficult to use the SNE.	2.33	1.10	Low
8	8	The instructions provided on the SNE were difficult to follow.	2.05	.81	Low
Total			2.89	.89	Moderate

According to the results presented in Table 4.35, the mean scores of the fully SRL students' responses ranged from 2.05 to 4.13 which fell into the "low", "moderate" and "high" levels of perceptions on the limitations of the SNE. The fully SRL group studying through the SNE agreed that "slow Internet connectivity was a main problem they faced in using online learning" was the very serious limitations found (item 2, $\bar{X}=4.13$). Overall, the grand mean was $\bar{X}=2.89$, and the standard deviation was .89 which referred to the "moderate" level of perceptions. The moderate levels of perceptions of the limitations revealed that they preferred to learn from the course book more than from the SNE (item 4, $\bar{X}=3.23$), asynchronous interactions through the SNE were less effective than the face-to-face classroom interactions (item 6, $\bar{X}=3.07$), they faced technical problems when they used the SNE (item 3, $\bar{X}=3.05$), and the SNE facilitated cheating and plagiarism (item 5, $\bar{X}=2.94$). However, the three "low" levels of perceptions on the limitations of the SNE were found in the items stating that SNE was difficult and frustrating to use (item 1,

$\bar{x} = 2.39$), then they did not have computers and so they found it difficult to use (item 7, $\bar{x} = 2.33$), and the instructions provided there were difficult to follow (item 8, $\bar{x} = 2.05$) respectively.

Table 4.36 Questionnaire Results on Suggestions of the Fully SRL Group

No.	Rank	Statement	Mean (\bar{X})	S.D.	Level of Perception
2	1	We should increase the number of Internet labs.	4.27	.53	High
4	2	The SNE training should be provided to all students.	4.27	.77	High
3	3	We should solve all technical problems.	4.25	.62	High
1	4	We should increase the number of online courses.	3.90	.75	High
5	5	We should reduce the number of online courses.	2.80	1.05	Moderate
Total			3.89	.74	High

According to the results presented in Table 4.36, the mean scores of the fully SRL students' responses ranged from 2.80 to 4.27 which fell into the "moderate" and "high" levels of perceptions on the suggestions of the SNE. Overall, the grand mean was $\bar{x} = 3.89$, and the standard deviation was .74 which referred to the "high" level of agreement.

The fully SRL group studied through the SNE agreed that the number of Internet labs should be increased (item 2, $\bar{x} = 4.27$), the SNE training should be provided to everyone (item 4, $\bar{x} = 4.27$), all technical problems should be fixed (item 3, $\bar{x} = 4.25$), number of online courses should be increased (item 1, $\bar{x} = 3.90$) respectively. However, their perceptions about reducing number of online courses were at the moderate level (item 5, $\bar{x} = 2.80$) and it was in the last priority of suggestions.

2) Perceptions of the Semi SRL Group toward the SNE

Table 4.37 Questionnaire Results on Language Areas of the Semi SRL Group

No.	Rank	Statement	Mean — (\bar{X})	S.D.	Level of Perception
8	1	The SNE helped me to improve my vocabulary.	4.43	.60	High
3	2	The SNE helped me to improve my reading skills.	4.13	.80	High
4	3	The SNE helped me to improve my writing skills.	4.11	.88	High
6	4	The SNE helped me to improve my spelling.	4.03	.79	High
7	5	The SNE helped me to improve my grammar.	3.84	.78	High
1	6	The SNE helped me to improve my listening skills.	3.70	.80	High
2	7	The SNE helped me to improve my speaking skills.	3.58	.75	High
5	8	The SNE helped me to improve my pronunciation.	3.49	.83	High
Total			3.91	.77	High

According to the results presented in Table 4.37, the mean scores of the students' responses ranged from 3.49 to 4.43 that all items fell into the "high" level of perceptions. The semi SRL group studying through the SNE agreed that it helped improve their vocabularies (item 8, $\bar{X} = 4.43$), their reading skills (item 3, $\bar{X} = 4.13$), their writing skills (item 4, $\bar{X} = 4.11$), their spelling (item 6, $\bar{X} = 4.03$), their grammar (item 7, $\bar{X} = 3.84$), their listening skills (item 1, $\bar{X} = 3.70$), their speaking skills (item 2, $\bar{X} = 3.58$), and their pronunciation (item 5, $\bar{X} = 3.49$) respectively. It could be interpreted that the semi SRL group felt that they had improved their English skills, including vocabulary, reading, writing, spelling, listening, grammar, speaking and pronunciation at the "high" level respectively.

Table 4.38 Questionnaire Results on Advantages of the Semi SRL Group

No.	Rank	Statement	Mean — (\bar{X})	S.D.	Level of Perception
10	1	I benefited from the feedback given by my instructor through the SNE.	4.31	.67	High
5	2	I liked the SNE because I could work at my own pace.	4.27	.56	High
4	3	I found the SNE interesting and useful.	4.21	.61	High
7	4	I felt more confident when I used English online than when I used it in the classroom.	4.09	.70	High
3	5	The SNE made learning more effective because it integrated all forms of media, print, audio, video, and animation.	4.07	.65	High
9	6	I benefited from the feedback given by my peers through the SNE.	4.00	.77	High
11	7	The SNE gave me access to authentic materials in the second language.	3.98	.86	High
6	7	The SNE helped me to develop knowledge of computers and the Internet.	3.98	.86	High
2	8	The SNE improved communication between students and teachers.	3.96	.72	High
8	9	The SNE helped me to use time effectively.	3.82	.84	High
1	10	The SNE was more convenient for me than face-to-face learning.	3.82	.97	High
Total			4.04	.74	High

According to the results presented in table 4.38, the mean scores of the semi SRL students' responses ranged from 3.82 to 4.31 which fell into the "high" levels of perceptions on the advantages of the SNE. Overall, the grand mean was 4.04 and the SD was .74 that was at the "high" level of perceptions for advantages of the SNE.

Regarding the semi SRL students' responses, their perception levels were considered high with all of the items about the advantages of the SNE, ranging from

- 1) They benefited from the feedback given by their teacher (item 10, $\bar{X} = 4.31$). ; 2). They liked the SNE because they could work at their own pace (item 5, $\bar{X} = 4.27$). ;
- 3) The SNE was interesting and useful (item 4, $\bar{X} = 4.21$); 4). They felt more confident using English through the SNE than using it in the classroom (item 7, $\bar{X} = 4.09$). ; 5) The SNE made learning more efficient because it included many patterns of

media (item 3, $\bar{x} = 4.07$). ; 6). They benefited from the feedback given by their peers (item 9, $\bar{x} = 4.00$). ; 7). The SNE gave them access to authentic materials in the second language (item 11, $\bar{x} = 3.98$) and the SNE helped them to develop knowledge of computers and the Internet (item 6, $\bar{x} = 3.98$). ; 8) The SNE improved communication between learners and instructor (item 2, $\bar{x} = 3.96$). ; 9) The SNE helped them to use time effectively (item 8, $\bar{x} = 3.82$); and 10) The SNE was more convenient than the face-to-face session (item 1, $\bar{x} = 3.82$) respectively.

Table 4.39 Questionnaire Results on Limitations of the Semi SRL Group

No.	Rank	Statement	Mean \bar{x} (\bar{x})	S.D.	Level of Perception
2	1	Slow Internet connectivity was a main problem I faced in the SNE.	3.98	1.04	High
6	2	Asynchronous interactions through the SNE were less effective than face-to-face interactions in the classroom.	3.11	.97	Moderate
5	3	The SNE facilitated cheating and plagiarism.	3.01	1.22	Moderate
3	4	I faced technical problems when I used the SNE.	2.98	.96	Moderate
4	5	I preferred to learn from course book rather than from the course website.	2.98	1.02	Moderate
1	6	The SNE was difficult to handle and frustrating to use.	2.50	.85	Moderate
7	7	I did not have a computer, therefore, I found it difficult to use the SNE.	2.41	1.20	Low
8	8	The instructions provided on the SNE were difficult to follow.	2.09	.85	Low
Total			2.88	1.0	Moderate

According to the results presented in Table 4.39, the mean scores of the semi SRL students' responses ranged from 2.09 to 3.98 which fell into the "low", "moderate" and "high" levels of perceptions on the limitations of the SNE. The semi SRL students studying through the SNE agreed that slow Internet system was one of the main problems they faced in using the NSE that was the very serious limitations

found (item 2, $\bar{x} = 3.98$). Overall, the total mean was 2.88 and the SD was 1.0 that was the “moderate” level of perceptions.

The moderate levels of limitations revealed that asynchronous interactions through the SNE were less effective than classroom face-to-face interactions (item 6, $\bar{x} = 3.11$), the SNE facilitated cheating and plagiarism (item 5, $\bar{x} = 3.01$), they faced technical problems when they used the SNE (item 3, $\bar{x} = 2.98$) and they preferred learning from the course book more than from the SNE (item 4, $\bar{x} = 2.98$). Finally, the SNE was difficult and frustrating to use (item 1, $\bar{x} = 2.50$).

However, the two “low” levels of agreement on the limitations of the SNE were found in the items stating that they did not have computers, so it was difficult to use the system (item 7, $\bar{x} = 2.41$), and the item indicating that the instructions on the SNE were difficult to follow (item 8, $\bar{x} = 2.09$) respectively.

Table 4.40 Questionnaire Results on Suggestions of the Semi SRL Group

No.	Rank	Statement	Mean \bar{x} (\bar{X})	S.D.	Level of Perception
4	1	The SNE training should be provided to all students.	4.11	.68	High
2	2	The number of Internet labs should be increased.	4.05	.81	High
3	3	We should solve all technical problems.	3.82	.86	High
1	4	We should increase the number of online courses.	3.78	.80	High
5	5	We should reduce the number of online courses.	2.86	.91	Moderate
Total			3.72	.81	High

According to the results presented in Table 4.40, the mean scores of the semi SRL students’ responses ranged from 2.86 to 4.11 which fell into the “moderate” and “high” levels of perceptions on the suggestions of the SNE. Overall, the total mean was 3.72 and the SD was .81 that was the “high” degree of perceptions.

The semi SRL students studying through the SNE agreed that the SNE training should be provided to all learners (item 4, $\bar{X} = 4.11$), the Internet labs should be increased (item 2, $\bar{X} = 4.05$), technical problems should be solved (item 3, $\bar{X} = 3.82$), number of the online courses should be increased (item 1, $\bar{X} = 3.78$) respectively. However, the perception on reduction of the number of online courses was at the moderate level (item 5, $\bar{X} = 2.86$) and it was in the last priority of suggestions as rated by this group of participants.

4.6.5 Comparison of Perceptions toward the SNE of Both Groups

Table 4.41 Questionnaire Results on Language Areas of Both Groups

No	Statement	Fully SRL(N=51)			Semi SRL(N=51)			Comparison	
		Mean (\bar{X})	S.D.	Level of Perception	Mean (\bar{X})	S.D.	Level of Perception	t	P (Sig.)
1	The SNE helped me to improve my listening skills.	3.84	.78	High	3.70	.80	High	.871	.386
2	The SNE helped me to improve my speaking skills.	3.64	.77	High	3.58	.75	High	.390	.697
3	The SNE helped me to improve my reading skills.	4.25	.48	High	4.13	.80	High	.898	.371
4	The SNE helped me to improve my writing skills.	4.15	.70	High	4.11	.88	High	.247	.805
5	The SNE helped me to improve my pronunciation.	3.23	.73	Moderate	3.49	.83	High	-1.636	.105
6	The SNE helped me to improve my spelling.	3.92	.68	High	4.03	.79	High	-.797	.428
7	The SNE helped me to improve my grammar.	3.64	.77	High	3.84	.78	High	-1.274	.206
8	The SNE helped me to improve my vocabulary.	4.33	.62	High	4.43	.60	High	-.805	.423

Note: * $P < .05$

According to the results presented in Table 4.41, the mean scores of the fully SRL students' responses ranges from 3.23 to 4.33 which fell into the "moderate" and

“high” levels of agreement whereas the mean scores of the semi SRL students’ responses ranged from 3.49 to 4.43 that all items fell into the “high” level of agreement. However, a comparison between the two groups indicated that there were no statistically significant differences between the scores of these two groups.

Overall, the perceptions of both groups fall into the “High” level, both groups agreed that using the SNE was helpful to develop all of their English skills.

Table 4.42 Questionnaire Results on Advantages of Both Groups

No.	Statement	Fully SRL(N=51)			Semi SRL(N=51)			Comparison	
		Mean \bar{x}	S.D.	Level of Perception	Mean \bar{x}	S.D.	Level of Perception	t	P (Sig.)
1	The SNE was more convenient for me than face-to-face learning.	3.70	.94	High	3.82	.97	High	-.619	.537
2	The SNE improved communication between students and teachers.	3.96	.56	High	3.96	.72	High	.000	1.000
3	The SNE made learning more effective because it integrated many forms of media, print, audio, video, and animation.	4.05	.78	High	4.07	.65	High	-.137	.892
4	I found the SNE interesting and useful.	4.25	.62	High	4.21	.61	High	.320	.750
5	I liked the SNE because I could work at my own pace.	4.13	.74	High	4.27	.56	High	-1.043	.300
6	The SNE helped me to develop knowledge of computers and the Internet.	4.03	.74	High	3.98	.86	High	.369	.713
7	I felt more confident when I used English online than when I used it in the classroom.	4.00	.69	High	4.09	.70	High	-.711	.479
8	The SNE helped me to use time effectively.	3.80	.74	High	3.82	.84	High	-.124	.901
9	I benefited from the feedback given by my peers through the SNE.	4.01	.61	High	4.00	.77	High	.141	.888
10	I benefited from the feedback given by my teacher through the SNE.	4.09	.50	High	4.31	.67	High	-1.828	.070
11	The SNE gave me access to authentic materials in the second language.	3.80	.66	High	3.98	.86	High	-1.160	.249

Note: * $P < .05$

According to the results presented in Table 4.42, the mean scores of the fully SRL students' responses ranged from 3.70 to 4.25. Similarly, the mean scores of the semi SRL students' responses ranged from 3.82 to 4.31. Both groups' levels of perceptions fell into the "high" level on the advantages of the SNE. Furthermore, a comparison between the two groups found that there were no statistically significant differences between the scores of these two groups.

Overall, the perceptions of both groups fell into the "High" level, both group agreed that using the SNE contained many advantages

Table 4.43 Questionnaire Results on Limitations of Both Groups

No.	Statement	Fully SRL(N=51)			Semi SRL(N=51)			Comparison	
		Mean (\bar{x})	S.D.	Level of Perception	Mean (\bar{x})	S.D.	Level of Perception	t	P (Sig.)
1	The SNE was difficult to handle and frustrating to use.	2.39	.80	Low	2.50	.85	Low	-.716	.476
2	Slow Internet connectivity was a main problem I faced in the SNE.	4.13	.91	High	3.98	1.04	High	.804	.423
3	I faced technical problems when I used the SNE.	3.05	.78	Moderate	2.98	.96	Moderate	.449	.654
4	I preferred to learn from the course book rather than from the course website.	3.23	.86	Moderate	2.98	1.02	Moderate	1.356	.178
5	The SNE facilitated cheating and plagiarism.	2.94	1.06	Moderate	3.01	1.22	Moderate	-.345	.731
6	Asynchronous interactions through the SNE were less effective than face-to-face interactions in the classroom.	3.07	.82	Moderate	3.11	.97	Moderate	-.220	.826
7	I did not have a computer, therefore, I found it difficult to use the SNE.	2.33	1.10	Low	2.41	1.20	Low	-.343	.733
8	The instructions provided on the SNE were difficult to follow.	2.05	.81	Low	2.09	.85	Low	-.238	.813

Note: * $P < .05$

According to the results presented in Table 4.43, the mean scores of the fully SRL students' responses ranged from 2.05 to 4.13 which fell into the "low", "moderate" and "high" levels of perceptions. Similarly, the mean scores of the semi

SRL students' responses ranged from 2.09 to 3.98 which also fell into the “low”, “moderate” , and “high” levels of perceptions on the limitations of the SNE. Furthermore, a comparison between the two groups revealed that there were no statistically significant differences between the scores of these two groups.

As shown in the above table, the perceptions toward the SNE on the development of language areas of the fully SRL group and the semi SRL group were found not significant different by having $P=.604$ ($P>.05$). The results showed that the fully SRL group reported having slightly higher perceptions toward the limitations of the SNE ($\bar{X}=2.89$, $SD=.89$) than the semi SRL group ($\bar{X}=2.88$, $SD=1.01$). Overall, the perceptions of both groups fell into the “Moderate” levels of agreement on the limitations of the SNE.

All of these “Low”, “Moderate” and “High” levels of agreement found in all categories may mean nothing without significant difference when they were compared between the groups. In general, they were approximately the same for both groups. Their perceptions toward the SNE in all items of this category remained the same. In conclusion, both groups felt the same way about everything concerning the use of SNE.

Table 4.44 Questionnaire Results on Suggestions of Both Groups

No.	Statement	Fully SRL(N=51)			Semi SRL(N=51)			Comparison	
		Mean \bar{x}	S.D.	Level of Perception	Mean \bar{x}	S.D.	Level of Perception	t	P (Sig.)
1	We should increase the number of online courses.	3.90	.75	High	3.78	.80	High	.760	.449
2	We should increase the number of Internet labs.	4.27	.53	High	4.05	.81	High	1.589	.115
3	We should solve all technical problems.	4.25	.62	High	3.82	.86	High	2.883	.005**
4	The SNE training should be provided to all students.	4.27	.77	High	4.11	.68	High	1.083	.281
5	We should reduce the number of the SNE courses.	2.80	1.05	Moderate	2.86	.91	Moderate	-.300	.765

Note: * $P < .05$; ** $P < .01$

According to the results presented in Table 4.44, the mean scores of the fully SRL students' responses ranged from 2.80 to 4.27 which fell into the "moderate" and "high" levels of perceptions on the suggestions of the SNE. Similarly, the mean scores of the semi SRL students' responses ranged from 2.86 to 4.11 which also fell into the "moderate" and "high" levels of perceptions on the suggestions of the SNE.

When comparing the fully and semi SRL groups' perceptions in each item, there were no significant difference found in each of the four items of perceptions (item 1, 2, 4 and 5). However, there was a significant difference ($P=.005^{**}$; $P < 0.05$) on perceptions found in one item that was item 3. This item stated that "we should solve all technical problems". The fully SRL group was found to have a higher level of agreement on this item than the semi SRL group. This significant number referred to more engagement to use the SNE until this fully SRL group could encounter technical problems of the platform used. In more detail, the fully SRL group was found to have higher positive agreement toward the other four suggestions (item 1, 2, 4 and 5) stating that the number of online courses and Internet labs should be increased and all training should be provided to students, than the semi SRL group. On the other hand, the semi SRL group was found to have higher agreement on one item stating that "the number of online courses should be reduced" than the fully SRL group.

4.7 Summary of the Chapter

The quantitative data analysis of this study was to investigate the impact of the SNE on students' writing skills and some categories of students' perceptions toward this environment, consisting of language skills, advantages, limitations and suggestions. Furthermore, the impact related to students' other English skills apart from writing was also part of an interest of this research findings. This chapter reported statistical results and discussions.

First, the experimental group 1 namely the fully SRL group and the experimental group 2, namely the semi SRL group experienced a significant development in their post-writing skill results, when comparing with the pre-writing skill results. This demonstrated the evidence that the SNE did significantly increase EFL students' writing skills.

Second, there was a significant difference between the writing pretest of both groups. In other words, the semi SRL group was found having higher mean scores than the fully SRL group at the beginning of the study.

Third, there was no significant difference between these two groups in their writing posttests. That is, participants in the fully SRL group showed greater development in terms of writing skills when they had lower scores than the semi SRL group on writing at the initial stage. Hence, the SNE gave more positive results to the fully autonomous learners (fully SRL group).

This result was consistent with many previous studies and further proved that the SNE could help support learners' autonomy, writing skills and also other English skills. Considering the perceptions toward the SNE, the results revealed no significant difference in the first three categories; language skills, advantages, and limitations.

However, there was a significant difference found in terms of “suggestions” categories. That is, the fully SRL group realized more technical problems of the platform used to support SNE intervention. This brought to the conclusion that the fully SRL group was more engaged to the platform; therefore, they could capture the problematic features of the platform used.



CHAPTER 5

QUALITATIVE RESULT AND DISCUSSIONS

5.1 Introduction

Regarding Thai researchers' experiences in teaching English in EFL classes, like many of these Thai researchers, the researcher of this research project, who has been teaching EFL classes for many years, also found that the students who have studied English for more than 10 years still faced difficulties in writing. They tried very hard and put a lot of effort in English writing (Promnont & Rattanavich, 2015) and yet they were afraid to write when they were assigned to do the writing tasks. What was the problem? These could be evident to the failure in teaching writing to these EFL students that had been done earlier in the Thai context. In this study, it was the researcher's intension to understand the situation better. The quantitative analysis might not be able to answer all dimensions of the phenomenon. Although the statistical results in Chapter 4 revealed effectiveness of the SNE, it would be more reliable if the statistic results had been triangulated to cross check the findings found previously before accepting this fact. Data analysis for this chapter presented the findings about participants' views after using the SNE that gave more insightful confirmation of the results from the previous chapter. This chapter presented qualitative findings received from the semi-structured interview with the whole set of the participants. The information was presented separately by groups.

The semi-structured interview analysis as qualitative data part in this chapter is presented in the following sections. First, Section 5.2 presents qualitative data analysis that covers the whole chapter. Section 5.2.1 reports the results from fully SRL group with the discussion of results. Section 5.2.2 presents discussion of results of the fully SRL group section. Second, 5.2.3 describes the results from semi SRL group with the discussion of results. Section 5.2.4 presents discussion of results of the semi SRL group section. Finally, Section 5.3 demonstrates summary of the chapter.

The information to be analyzed came from the eight interview questions consisting of: 1) Did you think that the SNE has made a difference to your learning or English writing? Could you please tell me about the difference (if any)? 2) How did you think that the lectures in this course were supported by the SNE? Did the SNE support the lectures at all? 3) Did you think that your experience in using the SNE changed the way you learn or the way you write in any way? 4) Could you please explain why in some weeks you contributed more to the comments or the posts and in other weeks you just responded only once or twice? What did you think encouraged you to contribute more? 5) How did you feel when someone commented on your ideas or corrected your English writing? 6) In what way did you think your ideas changed during weeks 1-4 or other weeks and why? Or was there any shifting of ideas at all? 7) In what ways did you think that your performance in English writing changed during weeks 1-4 or other weeks and why? Or has there been any change in your English writing performance? 8) Did you have any other views relating to English writing using the SNE? The qualitative data results received from these 8 questions were presented as follows.

5.2 Qualitative Data Analysis

5.2.1 Interview Results of the Fully SRL Group

The data obtained from the semi-structured interview of all participants from the fully SRL group with 51 students could be grouped into three major categories: 1) positive, 2) neutral, and 3) negative comments for interview questions 1, 2, 3, 5, 6, and 7. Then, other three major categories: 1) personal factors, 2) course factors, and 3) social factors for interview question 4. Lastly, the interview results were grouped by four major categories: 1) compliment, 2) no comment, 3) suggestion, and 4) complaint for interview question 8.

For question 1, “Did you think that the SNE has made a difference to your learning or English writing? Could you please tell me about the difference (if any)?”, the answers from each category were grouped. The interview scripts were divided into three categories for this question, the first category consisted of the “positive comments” covering 42 responses or 82.35% of the students’ responses which was the majority of the responses. The students mentioned that they could review the lessons through the SNE, they could study at their convenience and at whatever time they preferred. They had more confidence to use English to communicate without paying attention to the language mistakes. It was easy to complete the tasks and the activities were entertaining for them. They felt that their reading, writing, vocabulary, and grammar skills were developed through the SNE.

For the “neutral comments” covering 5 responses or 9.80% three of them stated that the SNE made no difference to them and one of them had no comment. At the same time, one of them stated that this platform was similar to other social networking platforms so there was no difference found.

The last category for question 1 was the “negative comment” covering 4 responses or 7.84%. The students stated that they did not know whether what they posted were correct forms of language use and there was nobody staying online to fix their language mistakes as they had in the real classroom and they also complained that the SNE system using Schoology platform was not stable enough.

Table 5.1 Interview Results from the Fully SRL Group: Question 1

Did you think that the SNE has made a difference to your learning or English writing?

Could you please tell me about the difference (if any)?

Positive	Neutral	Negative
1. We could return to study again if we couldn't follow the lessons through online learning whereas we sometimes couldn't follow or understand the lessons such as listening parts and vocabularies in the classroom. (Q1N28/1)	1. No difference (Q1N28/6)	1. SNE was more limited in terms of communication when we compared to other social networking sites. (Q1N28/9)
2. It was wider than learning in class. Sometimes we couldn't find vocabulary and couldn't compose sentences but learning through social networking helped us a lot to do the tasks. (Q1N28/2)	2. No difference (Q1N28/44)	2. We could write there but we didn't know if it was right or wrong. Learning through SNE, we couldn't pronounce correctly because no one there to listen to us and fix our pronunciation mistakes immediately. (Q1N28/12)
3. It was easy to study such as we could study every time. It was convenient. (Q1N28/3)	3. No difference (Q1N28/52)	3. It was different. Studying in classroom, we could ask the teacher. But study through SNE, we were unable to ask anybody. (Q1N28/23)
4. Yes, learning on SNE was excellent. We were more confident to share ideas using English whether they were right or wrong. Sentences or vocabularies used in the SNE were daily use language. Therefore, I thought that SNE made me feel more entertained in learning. (Q1N28/4)	4. No comment (Q1N28/55)	4. It was not much different and the system was not stable enough. (Q1N28/37)
5. SNE was a social network that made us communicate in our groups but we might not dare to communicate in learning or writing in the real classroom. (Q1N28/5)	5. It caused a little bit difference. At present, many social network sites had the same features like this one such as sharing of ideas, and photos in the very similar ways. (Q1N28/16)	

Table 5.1 Interview Results from the Fully SRL Group: Question 1 (Cont.)

Positive	Neutral	Negative
6. It was different because learning on the SNE was fun. It wasn't boring at all. (Q1N28/7)		
7. It caused differences such as videos and self-study functions. (Q1N28/8)		
8. It supported better English writing. (Q1N28/10)		
9. It caused us to be confident in doing or speaking that we couldn't do in the real classroom. (Q1N28/11)		
10. It formed the ability of sentence composition and grammatical skill for writing to us. (Q1N28/13)		
11. Yes, because after class and outside class, we still used English. (Q1N28/14)		
12. We could go to learning resources without consulting books. We could give examples easier than in the classroom. We didn't have enough time in the classroom. (Q1N28/15)		
13. It was different. Daily language was used more, we didn't use much of this in our classroom. (Q1N28/17)		
14. It caused us to have more reading and writing skills because when someone posted, we would read. After reading, we would answer back to the posts. It was a real conversation more than classroom conversation. (Q1N28/18)		
15. It was convenient for everybody, it was easy to access.(Q1N28/19)		
16. It caused us to have better writing skills and to have correct use of principles and grammar. (Q1N28/21)		
17. It was convenient to use to study at home.(Q1N28/22)		
18. It caused us to have more courage in using English. We had used English more. (Q1N28/24)		
19. It was different. A major task found in the SNE was the sharing of opinions.(Q1N28/26)		

Table 5.1 Interview Results from the Fully SRL Group: Question 1 (Cont.)

Positive	Neutral	Negative
20. We could use to communicate with friends in English. We learned English. We were able to increase our speaking, reading, and writing English by ourselves. (Q1N28/27)		
21. We learned more vocabularies, and composed more sentences.(Q1N28/28)		
22. SNE was a smaller social network compared with Facebook so it was easy to communicate with people in its group.(Q1N28/29)		
23. It made a difference to me. In the past, I never typed in English but SNE made me type in English and practice using many words. (Q1N28/30)		
24. It was convenient. We had more time to chat with classmates. We could express our opinions more. (Q1N28/31)		
25. We never felt shy to comment because we didn't see other people faces. (Q1N28/32)		
26. We could interact using English to others and made them understand without paying attention to the grammar principles. (Q1N28/33)		
27. It was not much different. It was a bit different. There were new and strange words appeared all the time since it was an open network for everybody to share their ideas. There were examples of writing, vocabulary and grammar there that I had never seen before. (Q1N28/34)		
28. It increased our confidence when we had to communicate to others within the group.(Q1N28/35)		
29. SNE made us practice language, and chatted with friends. We dared to share ideas, and posted which were different from our classroom learning that we didn't dare to say anything because we were afraid that it would be wrong and we felt shy to say so we couldn't practice English in the classroom. (Q1N28/36)		
30. It was different. We could write even though we didn't know it was right or wrong. (Q1N28/38)		

Table 5.1 Interview Results from the Fully SRL Group: Question 1 (Cont.)

Positive	Neutral	Negative
31. SNE made me have more fun in learning because we could share our ideas, post photos, and interact with many people at the same time. (Q1N28/39)		
32. Learning through social network made us want to answer friends' posts and then we were practicing English at the same time. (Q1N28/40)		
33. The difference was that we could write to interact with the teacher and friends using English. It was very useful, we wanted to chat because it was not too formal. We could post for fun and we chatted with friends and at the same time we practiced English. (Q1N28/41)		
34. I had practiced daily life sentences. (Q1N28/42)		
35. It was different. We could communicate easily and in the friendly manner. It was similar to Facebook. (Q1N28/43)		
36. It was different. We dared to use English to express our opinions or posted more. We dared to interact with our classmates. (Q1N28/45)		
37. It was different because SNE helped students to use their free time usefully and increased confidence in communication using English. It supported the development of English skills very well. (Q1N28/46)		
38. It was different. We mainly used English to communicate. Those who were not good at English would try to use English to communicate. They became more diligent workers in learning English. (Q1N28/48)		
39. I thought that the good point of SNE was that we never felt shy when posting, not the same as talking in our classroom. (Q1N28/49)		
40. The difference was that SNE provided both reading and writing skill contents for us to study whenever we needed and it was convenient for learning. (Q1N28/50)		

Table 5.1 Interview Results from the Fully SRL Group: Question 1 (Cont.)

Positive	Neutral	Negative
41. We could use English words and phrases that were related to daily use languages more than the lessons from the book. (Q1N28/51)		
42. It was different. We had confidence to give opinions when using the SNE more than in our classroom. (Q1N28/54)		
42=82.35 %	5=9.80%	4=7.84%

For question 2, “How did you think that the lectures in this course were supported by the SNE? Did the SNE support the lectures at all?”, the answers from each category were grouped. The interview scripts were divided into three categories for this question, the first category is the “positive comments” covering 50 responses or 98.03 % of the fully SRL students’ responses which is the majority of the responses. The students mentioned that the SNE was an easy to use form like other familiar social networking sites. It caused them to have more opportunities in using English skills, such as listening, speaking, reading, writing, grammar and vocabulary to communicate with their classmates. Some students had more confidence in using English. Some of them preferred to share opinions through writing more than speaking in the classroom. They were more familiar with their classmates. The lessons and activities provided on the SNE supported the course contents. The SNE provided them more time to learn at their own convenience.

For the “neutral comments” covering 1 responses or 1.96% of the students’ responses which stated that they felt “so so”.

The last category is the “negative comment” covering 0 responses or 0%. There was no negative comment found from students’ interview for this question.

Table 5.2 Interview Results from the Fully SRL Group: Question 2

How did you think that the lectures in this course were supported by the SNE? Did the SNE support the lectures at all?

Positive	Neutral	Negative
1. Yes, and there should be more exercises and also the teacher's teaching clips there. (Q2N28/1)	1. So so (Q2N28/38)	
2. Although I didn't gain a lot of knowledge but I gained some amount of knowledge because today's teenagers used social network more than book reading. (Q2N28/2)		
3. It supported learning because we benefited from our free time and we had practiced language use. (Q2N28/3)		
4. It helped very much because the teacher lessons and students' posts supported the lessons learned and made me understood more about the contents. (Q2N28/4)		
5. SNE gave me a chance to chat and communicate with my classmates. So we had more speaking, reading and writing in English. (Q2N28/5)		
6. It helped me used words and composed sentences better and I knew more vocabularies. (Q2N28/6)		
7. It supported because it was fun to ask and answer just like Facebook. (Q2N28/7)		
8. Yes, it supported because the contents in SNE were related to the contents that we were studying. (Q2N28/8)		
9. It supported learning and teaching very much because today's students were very much addicted to social networks. So, learning using SNE was very fun, it was not boring, and we could search for knowledge in many ways. (Q2N28/9)		
10. It supported a little bit because it looked the same as the classroom lessons but learning through SNE was more convenient. (Q2N28/10)		
11. It supported students' confidence. (Q2N28/11)		
12. Yes, because we could bring what we had studied both grammar and vocabulary to apply and use in the SNE. (Q2N28/12)		
13. It helped in some parts for reviewing lessons and supporting learning. (Q2N28/13)		
14. It made us search for vocabulary to write and post so we knew more vocabulary. (Q2N28/14)		
15. Yes, because we could study online before going to class, if the teacher assigned homework, we could do it very quickly better than our classroom learning. (Q2N28/15)		
16. Yes, it supported because it made students practice the use of English skills. (Q2N28/16)		
17. Yes, it supported such as if we couldn't follow the classroom lessons, we could use the SNE as a tutorial part instead. (Q2N28/17)		

Table 5.2 Interview Results from the Fully SRL Group: Question 2 (Cont.)

Positive	Neutral	Negative
18. Yes, because learning in classroom contained time limitation but learning through social network could happen all the time that we wanted. Because of this, we understood the lessons, sentence samples more than studying from the books, we learned from friends' posts, vocabularies and so on. (Q2N28/18)		
19. It supported the learning to be more convenient, everyone could connect to each other easier and new form of knowledge was offered to all who used the system. (Q2N28/19)		
20. Learning through SNE helped us do homework and work quickly and it helped increase writing skills to students.(Q2N28/21)		
21. Yes, it helped because we could study at home. (Q2N28/22)		
22. It supported as another way to increase learning proficiency, it provided us with additional materials, so we used our free time more usefully. (Q2N28/23)		
23. It was an English practicing place for us to use in the classroom. We practiced grammar there to use in our classroom learning. (Q2N28/24)		
24. Yes, because everybody had enough confidence to answer or post comments but in the real classroom, we didn't dare to answer anything. (Q2N28/26)		
25. It helped me understand better about the lessons learned. When I worked in the SNE, I also understood what I studied in my class. I knew more new words and unknown vocabularies. It helped me have confidence in English speaking. (Q2N28/27)		
26. Yes, because someone preferred typing more than speaking. They felt shy and had troubles talking in English. (Q2N28/28)		
27. Yes, it helped very much because we nearly never communicate using English with others. So, posting or commenting online to express our ideas helped very much in creating more confidence in English communication with others. (Q2N28/29)		
28. Yes, very much because we knew more vocabularies. If we could remember those vocabularies then we would develop our speaking skills. (Q2N28/30)		
29. It supported, it helped us manage our free time usefully and search for knowledge in everywhere which might not always come from the classroom. (Q2N28/31)		
30. It supported because we used outside class time to study by ourselves. (Q2N28/32)		
31. It supported all skills that were able to be use in the classroom such as listening, speaking, pronunciation and writing. (Q2N28/33)		
32. It supported in terms of vocabulary, grammar, and sentence structures. We saw new vocabularies and we could apply them to use later. (Q2N28/34)		

Table 5.2 Interview Results from the Fully SRL Group: Question 2 (Cont.)

Positive	Neutral	Negative
33. It supported because it helped increase our additional knowledge, not only from the book. (Q2N28/35)		
34. It helped students to use their free time usefully, practice vocabulary, and practice composing sentences. All of these could be helpful in the classroom learning. (Q2N28/36)		
35. It helped for some extent but not helped very much. The SNE helped us come closer to language use. (Q2N28/37)		
36. Yes, because it helped us connect to each other and shared ideas. (Q2N28/39)		
37. Yes, because social network made me become friends with my classmates. When I studied in class, it made us become closer. (Q2N28/40)		
38. Yes, it helped develop reading, writing, communicating with teacher and classmates. We were more familiar with each other when studying in class. (Q2N28/41)		
39. Yes, because sometimes when we didn't dare to speak in the classroom, we could post on SNE instead. (Q2N28/42)		
40. Yes, it supported the writing practice because it opened the Internet dimension of learning. (Q2N28/43)		
41. It supported because we communicated using English, so we had more English skills. (Q2N28/44)		
42. It supported by making us become closer to teacher and classmates because we interacted through social network. (Q2N28/45)		
43. Yes, learning through SNE was like practicing English use in everyday life. (Q2N28/46)		
44. Yes, we could express our opinions and knew other persons' opinions. We had practiced more on reading and writing skills. (Q2N28/48)		
45. My classmates and I could send messages to others by posting update news that were useful and it was convenient for us to receive the information. (Q2N28/49)		
46. Yes, it helped learners to communicate and practice sharing opinions to each other. It was convenient for learning, we were able to access at all time. (Q2N28/50)		
47. It supported because the topics of interaction were coming from the classroom lessons, so they supported learning of the classroom to certain amount. (Q2N28/51)		
48. Yes, because we learned new vocabularies or sentences that were different from what we studied in the book. (Q2N28/52)		
49. Yes, it supported because in SNE, students could practice English, such as writing sentences, answering questions, and exchanging ideas. (Q2N28/54)		
50. Yes, because we interacted and exchanged opinions through SNE which looked similar to Facebook. (Q2N28/55)		
50=98.03 %	1=1.96%	0=0%

For question 3, “Did you think that your experience in using the SNE changed the way you learn or the way you write in any way?”, the answers from each category were grouped. The interview scripts were divided into three categories for this question, the first category is the “positive comments” covering 32 responses or 62.74 % of the students’ responses which is the majority of the responses. The students mentioned that the SNE helped them develop their reading and writing skills, their spelling, vocabulary memorization, sentence construction, understanding of the lesson learned, ability to write English correctly, use of grammar, confidence to use English, and their attitude toward using English.

For the “neutral comments” covering 7 responses or 13.72 % of the students’ responses which stated that their language skills were improved in a better way but the system should be improved in many ways, such as its speed, and stability of the system. It should be more interesting than this, game and chat room should be added.

The last category is the “negative comment” covering 12 responses or 23.52%. Some of them stated that the SNE was quite difficult to use because it was slow and the server was often down. It should be improved to be easier to use with more functions to communicate and more users to logging into the system. The system should be more accurate and stable.

Table 5.3 Interview Results from the Fully SRL Group: Question 3

Did you think that your experience in using the SNE changed the way you learn or the way you write in any way?

Positive	Neutral	Negative
<p>1. Internet using or online learning depended on the users, sometimes students might not want to go to class because they could study online by themselves. Some students studied online because they wanted to have better understanding of the lessons learned. (Q3N28/1)</p>	<p>1. The change was that after classroom learning, I reviewed lessons using SNE. I was changed in a better way, I used my free time more useful, it was better than playing other online media. I dared to speak English, I had practiced making sentences. I understood more about English. I suggested that more functions should be added there such as games and chat room. (Q3N28/27) (Suggestion)</p>	<p>1. It changed because SNE system was quite difficult to use, the system was so slow, and the server was often down. (Q3N28/6)</p>
<p>2. It helped support more conversation with friends and others. We were better in constructing sentences. (Q3N28/2)</p>	<p>2. It was changed in a better way and my writing was developed because I saw words all the time. I could remember them and understand grammar. The system should be improved to be more stable because it was slow and stopped sometimes. (Q3N28/34) (Suggestion)</p>	<p>2. The improvement that should have been done included 1) SNE should be more precise 2) SNE system should be improved to have higher ability for using in communication. (Q3N28/9)</p>
<p>3. My experience of using SNE system, it somewhat helped increase reading and writing skills. (Q3N28/3)</p>	<p>3. No change (Q3N28/37)</p>	<p>3. Classroom learning was already good because writing English was depending on students themselves how much they practiced writing. (Q3N28/10)</p>
<p>4. Learning through SNE had changed my attitude about English a lot. It helped me with my study, my reading, and my word spelling. I would like other subjects to add SNE as a part of the learning. (Q3N28/4)</p>	<p>4. I had somewhat changed in the better way. I developed my writing a lot. It should be improved to be easier to use, to post, and there should be more interesting things there. (Q3N28/43)</p>	<p>4. The system should be improved not to be down so often. (Q3N28/11)</p>
<p>5. It changed for some parts. I could see new words and I could write English in the correct way. (Q3N28/5)</p>	<p>5. It was changed in a better way but SNE should be improved to be more interesting. (Q3N28/46)</p>	<p>5. It changed because it took time to log in to the system. The system should be improved to have more users and to be easier to use. (Q3N28/13)</p>

Table 5.3 Interview Results from the Fully SRL Group: Question 3 (Cont.)

Positive	Neutral	Negative
6. It changed in the better way. I dared to express my opinions more. My English writing was developed because I typed on the SNE pages and I remembered more vocabularies. (Q3N28/7)	6. It changed the way I studied such as I had a section to share my ideas. My writing was developed because I answered questions, and shared my ideas with friends. The system should be improved to have higher speed. (Q3N28/54)	6. SNE should fix its problems about the calculation of numbers of posts which was not accurate and the calculation of the time spent online for logging in to use the system to provide more accurate information than these. (Q3N28/16)
7. It changed me and my English was developed because I used English in many occasions. (Q3N28/8)	7. It changed to be somewhat better. We could develop our language part and conversational skill. The system of SNE should be improved because it was so slow. If it was changed to be Facebook, there might be more people come to interact. (Q3N28/55)	7. It should be developed to allow everybody to log in to use. (Q3N28/19)
8. It changed because we needed to activate ourselves in using SNE. My English was improved because I had to write online for everyone to see, so I had to find most correct words but my grammar was not much correct as it should be. (Q3N28/12)		8. SNE should be improved to have more functions. (Q3N28/24)
9. My learning was improved because of this. (Q3N28/14)		9. The system was slow and was difficult to use, it made me feel moody. (Q3N28/36)
10. My learning was improved in the better direction but I wasn't sure my writing was improved or not because what I used or knew was what I typed and sometimes I used my friends' posts as guidelines. (Q3N28/15)		10. It should be improved to present in a more interesting way and it should encourage more participation from the students.(Q3N28/38)
11. It changed. It made us learn about English skills much better. My English writing was developed because I had a chance to use English more in communicating with friends in the group including answering the questions and commenting on others' posts. (Q3N28/17)		11. SNE should be improved. It had a slow system and the users were too small. (Q3N28/48)
12. It changed. Learning through SNE was able to increase reading and writing skills to the learners. (Q3N28/18)		12. The Internet should be improved to have more speed. The speed was the big weakness of the Internet. (Q3N28/49)
13. It changed because I had increased my writing skills and speaking skills. (Q3N28/21)		

Table 5.3 Interview Results from the Fully SRL Group: Question 3 (Cont.)

Positive	Neutral	Negative
14. It changed in the better way. I was able to answer many questions and I had more confidence to use English. (Q3N28/22)		
15. It changed my learning. In the past I used my free time to play football but now I used SNE when I had time. I managed my time to be more useful. I developed my writing. I knew how to use grammar. (Q3N28/23)		
16. It was different from learning in the classroom because we manage our own time when to use the system of SNE. Everybody dared to comment and give suggestions. I thought I developed myself a lot. (Q3N28/26)		
17. I improved a lot because typing supported my confidence to communicate better than speaking. (Q3N28/29)		
18. It changed because I never used SNE in the past. I thought it was difficult but when I used it, I thought it was good already to have SNE for me to be better in English for another level. (Q3N28/30)		
19. It changed. I used my free time more useful. I practiced writing in English. I gained more vocabularies. (Q3N28/31)		
20. I had to find more vocabularies to comment on others' posts so I gained more vocabularies. (Q3N28/32)		
21. My speaking skill, pronunciation skill, writing skill and so on were developed from listening and watching videos and from studying many topics on SNE. I thought that this social network was easy, was convenient, and was appropriate to all ages of learners. (Q3N28/33)		
22. It changed because writing in English, we had to study the word meaning, searched for information to write and we gained more words. (Q3N28/35)		

Table 5.3 Interview Results from the Fully SRL Group: Question 3 (Cont.)

Positive	Neutral	Negative
23. SNE made me feel more interested in learning because I had interacted with many friends. It helped me to have better English writing skill and I knew more strange vocabularies. (Q3N28/39)		
24. My listening, speaking, writing skills were developed because of the videos posted and messages from friends' posts. (Q3N28/40)		
25. It changed my learning to become better. My writing was developed not so much but it was better developed comparing to the past. When interacting with friends, I had seen some vocabularies that couldn't be found in the classroom. Sometimes someone's answered to the posts might not be related the topics but I thought it was cool. My English writing was better at some levels. (Q3N28/41)		
26. It changed me to be better in writing English. I had used the words and practiced reading. (Q3N28/42)		
27. There was no change but my writing skill was better developed. (Q3N28/44)		
28. It changed in a better way. We could study on SNE at any time we wanted. My writing skill was improved very much. (Q3N28/45)		
29. It helped develop my English writing to be better. It helped us to practice and have more confidence to express our opinions using English. (Q3N28/50)		
30. It changed me. I liked to listen and watched more English media. My English writing was not much improved. (Q3N28/51)		
31. My English writing was developed.(Q3N28/52)		
32. My English was improved because I had practiced making sentences, and wrote more vocabularies. (Q3N28/28)		
32=62.74 %	7=13.72%	12=23.52%

For question 4, “Could you please explain why in some weeks you contributed more to the comments or the posts and in other weeks you just responded only once or twice? What did you think encouraged you to contribute more?”, the answers from each category were grouped. The interview scripts were divided into three categories for this question, the first category is the “personal factors” covering 27 responses or 52.94% of the students’ responses which is the majority of the responses. The majority of the students mentioned that personal factors such as their free time and the workload for other subjects influenced the numbers of posts. If they had more free time, they posted more. If they did not have much time, they posted less. Some students posted when they wanted to post.

For the “course factors” covering 19 responses or 37.25 % of the students’ responses which stated that they posted because of the interest of the posts or the topics. Some of them posted because of the dateline and the scores given. One of them liked to practice English use.

The last category is the “social factors” covering 5 responses or 9.80%. Four of them stated that they posted because of their friends. They posted to chat with friends and to increase their number of friends and also would like to know if their friends would be interested in what they posted. However, one of them stated that the teacher emphasis made him/her post.

Table 5.4 Interview Results from the Fully SRL Group: Question 4

Could you please explain why in some weeks you contributed more to the comments or the posts and in other weeks you just responded only once or twice? What did you think encouraged you to contribute more?

Personal Factor (Time/Mood)	Course Factor (Topics/Activities/System)	Social Factor (Friends/teacher)
1. I often posted in the evening or when I had a computer lab but I seldom posted in the morning. (Q4N28/2)	1. It depended on the topic to post. (Q4N28/1)	1. It was about friends. (Q4N28/6)
2. It depended on the free time. (Q4N28/3)	2. About the time that needed to hand in. Near the dateline, I had a lot of posts. (Q4N28/7)	2. I would like to test my English use if it was correct or not. The reason that I posted was that I would like to know if my friends would be interested in what I had posted or not. (Q4N28/29)
3. It depended on the free time to post. (Q4N28/4)	3. It depended on the scores, activities, and values. (Q4N28/9)	3. I would like to increase a number of friends. I had few friends and I felt lonely. (Q4N28/33)
4. If I had more free time, I posted more. If I had less free time, I posted less. (Q4N28/5)	4. It depended on the post itself. If any posts were funnier, we answered a lot. (Q4N28/10)	4. I would like to chat with friends. (Q4N28/37)
5. The free time of each day(Q4No28/8)	5 Scores(Q4No28/11)	5 It was teacher emphasis that made me posted. (Q4N28/44)
6. Free time (Q4N28/14)	6. It depended on my daily news, lessons, dateline, and scores. (Q4N28/12)	
7. Free time, mood, situation (Q4N28/15)	7. Scores and free time (Q4N28/13)	
8. Sometimes I didn't have time, I might need to do homework for other subjects or I had to prepare for examination and other activities about students' club, and camps also took my time. So, I didn't have much free time. (Q4N28/16)	8. Scores and teacher(Q4N28/19)	
9. I posted when I had free time or after class or tutorial. I often posted a lot during weekends and I posted sometimes during daily break. (Q4N28/17)	9. It was the scores that encouraged me to post on SNE. (Q4N28/23)	
10. It depended on the time. Sometimes I had other subjects' homework that were required to submit so soon. So, I didn't have much time to post during that period. (Q4N28/18)	10. The thing that influenced my post was the interesting of the topic. (Q4N28/26)	

Table 5.4 Interview Results from the Fully SRL Group: Question 4 (Cont.)

Personal Factor (Time/Mood)	Course Factor (Topics/Activities/System)	Social Factor (Friends/teacher)
11. About free time, I often posted to answer my friends' posts and chatted with friends if I had time. If I posted less, it meant I didn't have time. (Q4N28/21)	11. It was about the scores and free time. If I had free time, I would post a lot. In some days I was afraid that I didn't get the scores, so I posted a lot. (Q4N28/28)	
12. If I had a free time, I would post a lot. (Q4N28/22)	12. If I wanted to post, I looked at the topic to see if it was interesting or not and also I read the interactions from friends about the posts. (Q4N28/34)	
13. Free time availability for each day (Q4N28/24)	13. The messages of the post, if they were easy and were understandable, I would like to answer those posts. (Q4N28/36)	
14. Free time was very important. If I had a lot of class, I didn't have time to post. (Q4N28/27)	14. Scores only (Q4N28/38)	
15. It depended on my free time. (Q4N28/30)	15. The interesting of the post, if the post was interesting or if I felt that I liked the messages posted, I would like to answer the post. (Q4N28/39)	
16. It depended on my free time. Sometimes I was busy. I posted after I wake up in the morning. (Q4N28/31)	16. The time that I logged in to use social networking sites. (Q4N28/40)	
17. It depended on my daily free time. Sometimes I had a lot of time, sometimes I had little time. (Q4N28/32)	17. It was a practice of real life conversation that it was very useful, I gained difficult vocabularies and the experience of using them. (Q4N28/49)	
18. Free time and Internet speed (Q4N28/35)	18. The scores (Q4N28/51)	
19. It depended on the free time, so sometimes posted more, sometimes posted less. (Q4N28/41)	19. The dateline (Q4N28/52)	
20. It depended on free time, it depended on how much time I had. If I had a lot of time, I could posted and expressed my opinions. (Q4N28/42)		
21. My feeling and daily situation (Q4N28/43)		
22. Sometimes I posted less because I didn't have free time or it was during examination time. (Q4N28/45)		

Table 5.4 Interview Results from the Fully SRL Group: Question 4 (Cont.)

Personal Factor (Time/Mood)	Course Factor (Topics/Activities/System)	Social Factor (Friends/teacher)
23. It was a bout the feeling. Sometimes I would like to post, sometimes I didn't want to post. (Q4N28/46)		
24. The fee time but we didn't have much time. It depended on the time. (Q4N28/48)		
25. I might not have free time. Sometimes it depended on my ability and feeling, I interacted when I wanted to do. (Q4N28/50)		
26. It was about free time of each day. If I didn't have time, I didn't post. If I had free time, I would post. (Q4N28/54)		
27. It was about the time I had, sometimes I was very busy, so I didn't log in. (Q4N28/55)		
27=52.94%	19=37.25%	5=9.80%

For question 5, “How did you feel when someone commented on your ideas or corrected your English writing?”, the answers from each category were grouped. The interview scripts were divided into three categories for this question, the first category is the “positive comments” covering 46 responses or 90.19% of the fully SRL students’ responses which is the majority of the responses. The majority of the students mentioned that they were glad and happy. They also felt good, amused and excited when someone commented on their posts because they felt that their friends were interested in their posts. This also showed that they could communicate using English and made others understand their messages even though some of them were not sure about their grammar use.

For the “neutral comments” covering 4 responses or 7.84% of the students’ responses which two of students stated that they felt no difference or felt nothing, another one stated that he/she felt surprised and the last one had no comment about this.

The last category is the “negative comment” covering 1 response or 1.96%. This student stated that he/she was annoyed when someone commented after his/her posts.

Table 5.5 Interviews Results from the Fully SRL Group: Question 5

How did you feel when someone commented on your ideas or corrected your English writing?

Positive	Neutral	Negative
1. I felt good and would like to thank everyone. (Q5No28/1)	1. I felt nothing at all. (Q5No28/9)	1. I felt annoyed. (Q5No28/33)
2. I felt good at least we had someone to talk to and practiced answering. (Q5No28/2)	2. No comment (Q5No28/38)	
3. I felt good because it made us know that people were interested in my messages. (Q5N28/3)	3. I didn't feel different, it depended on the person who commented. If we were not really good, we had better improve ourselves to be better. This helped us develop ourselves. (Q5N28/50)	
4. I was very glad and felt very good that someone understood and felt interested in my posts. (Q5N28/4)	4. I felt surprised and I didn't know whether I used the words correctly or not. (Q5N28/19)	
5. I was glad that someone felt interested in my posts so this became communication. (Q5N28/5)		
6. I felt good that there were still some people felt interested in my posts. (Q5N28/6)		
7. I was glad and thought that it was very amused. (Q5N28/7)		
8. I felt good that someone paid attention to and read my posts. (Q5N28/8)		
9. That was good. So we knew that we used writing principles correctly or not and this would be an experience. (Q5N28/10)		
10. I felt good because we seldom talked in our real classroom. (Q5N28/11)		
11. I felt that I would like to reflect to those comments because I felt good and amused. (Q5N28/12)		
12. It was good because there was someone interested in our posts. (Q5N28/13)		
13. I felt good. It was like we were asking them and they answered back well. (Q5N28/14)		
14. I felt good. (Q5N28/15)		

Table 5.5 Interviews Results from the Fully SRL Group: Question 5 (Cont.)

Positive	Neutral	Negative
15. I felt fun chatting with my friends even though my grammar uses were not correct according to the grammar rules but the most important thing was how to communicate to understand each other. (Q5N28/16)		
16. If it was a good point or a suggestion, I would fix my writing and make it better. (Q5N28/17)		
17. I felt good with those who came to criticize or answer because it made us know that what we posts were more or less interesting. (Q5N28/18)		
18. It made us know how much answering skill we had and how good we were able to answer our friends' posts. (Q5N28/21)		
19. I felt good when someone answered my posts back because it made me know that my posts were understandable. (Q5N28/22)		
20. I was proud of myself. I felt like there was someone felt interested in me. I felt like a person of value. (Q5N28/23)		
21. I was glad that people commented on my ideas. (Q5N28/24)		
22. I was glad that people gave some comments. (Q5N28/26)		
23. I was glad and I had learned English sentences. (Q5N28/27)		
24. I was glad that people criticized my ideas so that I knew if my posts were good or bad. (Q5N28/28)		
25. I felt very good because we knew who were interested in our posts. When they criticized, we would know what went wrong and how to rewrite. It supported development of our languages to be better. (Q5N28/29)		
26. I felt good and we could fix if we used wrong words. (Q5N28/30)		
27. I was glad that someone answered my posts so I knew what my weakness was and I had more friends. (Q5N28/31)		
28. I felt good to communicate with friends. (Q5N28/32)		
29. I felt good and brought back those criticism to improve myself to become better in English. (Q5N28/34)		
30. I was happy to chat with friends. (Q5N28/35)		

Table 5.5 Interviews Results from the Fully SRL Group: Question 5 (Cont.)

Positive	Neutral	Negative
31. I felt good that my friends were interested in my posts. (Q5N28/36)		
32. I felt glad that others felt interested in what we posted. (Q5N28/37)		
33. I felt glad that people answered to my posts because it indicated that they were interested in my posts. (Q5N28/39)		
34. I was glad that someone answered my posts back. (Q5N28/40)		
35. I felt glad that people commented on my posts although they were some criticism in positive or negative sides. (Q5N28/41)		
36. I was fun because someone felt interested in what I posted. (Q5N28/42)		
37. I felt good because they read my posted. (Q5N28/43)		
38. I felt good. (Q5N28/44)		
39. I felt good when someone told me about weakness in my English usage. (Q5N28/45)		
40. I felt good because it made me know that people understood what I was trying to communicate. (Q5N28/46)		
41. I felt good when someone suggested about writing because I might write something wrong. (Q5N28/48)		
42. I was glad because we helped each other to post and this made us become closer. (Q5N28/49)		
43. I was excited and was glad. I accepted all ideas. (Q5N28/51)		
44. I was glad when someone answered back to my posts so we interacted together. (Q5N28/52)		
45. I felt good that my friends commented on my posts. (Q5N28/54)		
46. I was glad when my friends answered my posts because it showed that they had read my posts. (Q5N28/55)		
46=90.19%	4=7.84%	1=1.96%

For question 6, “In what way did you think your ideas have changed during weeks 1-4 or other weeks and why? Or was there any change in ideas at all?”, the answers from each category were grouped. The interview scripts were divided into three categories for this question, the first category is the “positive comments”

covering 31 responses or 60.78% of the fully SRL students' responses which is the majority of the responses. The students mentioned that learning from the SNE was more interesting than learning in the classroom. They felt more excited, amused, and interested in English use. The students learned more vocabulary and developed their language skills. They had a chance to communicate with their classmates and had more familiar relationship. Many students had more confidence and felt happier to post and then they posted more often.

For the “neutral comments” covering 20 responses or 39.21% of the students' responses. Many of the students in this category felt that there was no change of their ideas. Some of them were not sure whether there might be any changes in their ideas or not. Some of them had no comment. However, one of them said that the change was in week 4 or the last week which was the last week that he/she had to submit the work to receive 10 scores from the course.

The last category is the “negative comment” covering 0 responses or 0%. None of the students had negative comment about shifting of idea during their work on the SNE.

Table 5.6 Interview Results from the Fully SRL Group: Question 6

In what way did you think your ideas have shifted during weeks 1-4 or other weeks and why? Or was there any shifting of ideas at all?

Positive	Neutral	Negative
1. The change started from the first week, I thought that online learning was a new form of learning and it was more interesting than studying in the classroom. (Q6N28/2)	1. No comment (Q6N28/1)	
2. Change because I nearly didn't dare to post in the first week but in the very last week, I started to get more friends and I dared to post. (Q6N28/8)	2. I was not sure. (Q6N28/3)	
3. It changed in third week, I had faster memory. (Q6N28/9)	3. I didn't know. I felt like normal. (Q6N28/4)	
4. My thought changed in a better way, I could link English to my daily routine. (Q6N28/12)	4. No change (Q6N28/5)	

Table 5.6 Interview Results from the Fully SRL Group: Question 6 (Cont.)

Positive	Neutral	Negative
5. In the third week because I felt excited and was more interested in English usage. (Q6N28/13)	5. No change (Q6N28/6)	
6. I had better attitude in using English. I started to feel amused with English in week 2. (Q6N28/15)	6. No change at all. (Q6N28/7)	
7. Change in a better way in the development of English vocabulary, used vocabulary more often from the first time until the last time. So, I felt that I learned more vocabularies. (Q6N28/17)	7. In week 4 that I really had to post. (Q6N28/10)	
8. Change in the better way, in the very first week, I didn't know what to post. Then when I posted more often, I was amused to post and was amused with the feedback returning to my posts. (Q6N28/18)	8. No change (Q6N28/11)	
9. Change, I used time valuably in week 4. (Q6N28/19)	9. In the fourth week when I had to submit my work. (Q6N28/14)	
10. Change since week 4, we learned more about English and we had a chance to communicate with friends using English. (Q6N28/21)	10. No change (Q6N28/16)	
11. It had been changed a lot because I could answer to my friends' posts without using Google translation. (Q6N28/22)	11. Change in week 4 because of the scores that caused us to change a lot. (Q6N28/23)	
12. Around week 3, I felt that I knew more English and I used more English. (Q6N28/24)	12. Still not much change (Q6N28/28)	
13. I changed quite a lot. Before this I was always on Facebook but now I sometimes studied online lessons. (Q6N28/26)	13. No change (Q6N28/30)	
14. In week 2-3 it was changed in the better direction, I liked to post English sentences. (Q6N28/27)	14. No change because when I posted, I found they were right and wrong posts. It was a normal situation. (Q6N28/34)	
15. In the second week I started to know some vocabularies and knew more on construction of correct sentences from posting and from friends' comments. (Q6N28/29)	15. No change (Q6N28/35)	
16. Started to change in week 2, I started to know more friends and dared to post more. (Q6N28/31)	16. No change at all (Q6N28/37)	
17. Since the second week, I felt happier to post. (Q6N28/32)	17. No comment (Q6N28/38)	
18. I started to think that it was a convenient program and it was suitable to all ages of learners. (Q6N28/33)	18. No change at all (Q6N28/44)	
19. It was changed in week 2, I dared to comment on friends' posts. I started to have more confidence in English. (Q6N28/36)	19. No change at all (Q6N28/51)	

Table 5.6 Interview Results from the Fully SRL Group: Question 6 (Cont.)

Positive	Neutral	Negative
20. Changed in the better way since the first week because I felt interested in SNE. (Q6N28/39)	20. No change (Q6N28/52)	
21. In week 3-4, started to change, I felt amused with English. (Q6N28/40)		
22. Changed in the better way in week 3-4 because I had higher confidence to interact with friends. (Q6N28/41)		
23. In a positive way in week 3 because I thought that activities on SNE were useful to practice many skills in learning English language. (Q6N28/42)		
24. In week 4 because I got used to using it. (Q6N28/43)		
25. Change in a better way, I felt that I liked English more because I used it to chat with my classmates so I was more familiar with my classmates. (Q6N28/45)		
26. Change in week 3 I felt amused with using SNE. (Q6N28/46)		
27. In week 3 the change was that I dared to talk to friends and commented on friends' posts who I had never known them before. (Q6N28/48)		
28. There were some changes because my thought had been developed. I was not like me the past. My past events about English was very bad. I didn't dare to talk, I felt shy when I used English. After I had practiced using English, I had higher confidence. (Q6N28/49)		
29. The change occurred. Instead of playing with Facebook, I turned to study English more in week 3. (Q6N28/50)		
30. I started to post more in week 3. (Q6N28/54)		
31. I changed from playing often on Facebook to come to play with SNE instead because I wanted to change the atmosphere to use other things apart from Facebook. (Q6N28/55)		
31=60.78%	20=39.21%	0=0%

For question 7, “In what ways did you think that your performance in English writing has shifted during weeks 1-4 or other weeks and why? Or has there been any change in your English writing performance? ”, the answers from each category were grouped. The interview scripts were divided into three categories for this question, the

first category is the “positive comments” covering 45 responses or 88.23% of the fully SRL students’ responses which is the majority of the responses. The students mentioned that their conversational skills were improved. Their overall English skills had been improved. They knew more unknown vocabulary and remembered more vocabulary. They had more chance to interact with friends. They had a chance to practice writing through the SNE. They had a chance to express their feeling and the fact about themselves. Some of them said that they started to know how to write, they were able to write in English with correct grammar use. Some students said that they studied from their friends’ posts so they could write better. They had more confidence to communicate.

For the “neutral comments” covering 6 responses or 11.76% of the students’ responses. Four students stated there were no change in their English writing performance whereas one of them said that they had not much change and another one had no comment.

The last category is the “negative comment” covering 0 responses or 0%. None of the students had negative comment about shifting of their writing performance during their work on the SNE.

Table 5.7 Interview Results from the Fully SRL Group: Question 7

In what ways did you think that your performance in English writing has shifted during weeks 1-4 or other weeks and why? Or has there been any change in your English writing performance?

Positive	Neutral	Negative
1. My writing started to get better. I understood the principle in writing and how to create correct written work. (Q7N28/1)	1. No change (Q7N28/3)	
2. It changed in the better way in week 2 to 4. I had increased my conversational skills with others. (Q7N28/2)	2. No change (Q7N28/6)	
3. I felt that I failed in the first week of posting but after that I was increasingly developed when time passed by in week 2 to week 3. (Q7N28/4)	3. Not much change (Q7N28/15)	
4. I wrote and knew unknown vocabulary. (Q7N28/5)	4. No change because I was not good at English. (Q7N28/19)	
5. I was changed because when I posted often, I remembered more and more vocabulary. (Q7N28/7)	5. No comment (Q7N28/38)	
6. In the good way because I had a chance to express my true feeling and the fact about myself. (Q7N28/8)	6. No change at all (Q7N28/54)	
7. Change in the third week, I started to know how to write and I was able to write. (Q7N28/9)		
8. I was a person who didn't like English at all. I couldn't write but when I wrote around week 3, I was able to write a little. (Q7N28/10)		
9. Change occurred by having better ability in writing in the second week. (Q7N28/11)		
10. Change in a better way, knew more vocabulary, had more courage to interact using English. (Q7N28/12)		
11. In the fourth week because I had good fundamental knowledge about writing before this week. (Q7N28/13)		
12. In the third week because I used it more often. (Q7N28/14)		
13. Yes, it changed. In week 6-7, I had better ability in language usage. (Q7N28/16)		
14. Change more because I had to use English to compose sentences or some words about interjections. So I could think of more words to write. (Q7N28/17)		
15. Change in a better way in the very last week because when I often posted, I remembered vocabulary and conversational forms very well. (Q7N28/18)		
16. Change since week 4, it made us know more on writing principle. (Q7N28/21)		

Table 5.7 Interview Results from the Fully SRL Group: Question 7 (Cont.)

Positive	Neutral	Negative
17. In the first two weeks. (Q7N28/22)		
18. Change because it made me use grammar correctly. (Q7N28/23)		
19. In week 4 I could write more English, knew more vocabulary, I could write follow the grammar rules. (Q7N28/24)		
20. My writing developed for some extent from commenting on friends' posts, I had a lot of experience in communication. (Q7N28/26)		
21. In week 3, I started to understand how to compose a sentence, how to organize sentence, used the known vocabulary and knew the meaning of unknown vocabulary. (Q7N28/27)		
22. Started to change, knew more vocabulary, and started to be able to write English. (Q7N28/28)		
23. In the third week I started to post with more confidence that my sentences were grammatically correct. (Q7N28/29)		
24. My writing was developed in the pretty good level, I thought I had more courage to use vocabularies and to reflect to other people ideas. (Q7N28/30)		
25. I started to know more about grammar at around week 2. (Q7N28/31)		
26. I was able to write easier with my own understanding but without paying attention in grammar. (Q7N28/32)		
27. My writing was developed since the third week. (Q7N28/33)		
28. It was better in the third week because some friends in my groups posted the questions and answers so I upgraded my vocabulary in a better level. (Q7N28/34)		
29. My writing was better developed. (Q7N28/35)		
30. Change in week 2 because I saw my friends' posts so I could compare my grammar and friends' grammar, all of us used easy grammars, so I had more confidence to use English. (Q7N28/36)		
31. Change to be better starting from the beginning. (Q7N28/37)		
32. Change in the better way from week 2-3 because I studied from my friends' posts so I could write better. (Q7N28/39)		
33. It started to change in week 3-4, I could understand different sentences posted. (Q7N28/40)		
34. Around week 3 to 4 because I started to have confidence in using English to interact with friends. I felt that it was fun to chat with many friends. (Q7N28/41)		

Table 5.7 Interview Results from the Fully SRL Group: Question 7 (Cont.)

Positive	Neutral	Negative
35. I was better in week 2-3 because I learned new things and I could work on it. (Q7N28/42)		
36. I was better in week 5 because I practiced by reading my friends posts previously. (Q7N28/43)		
37. Change in a better way in week 3 because I practiced writing often. (Q7N28/44)		
38. In week 4 because learning English in classroom also supported it so I developed more on English skills. (Q7N28/45)		
39. My English writing was better since the first week because I tried to use vocabulary to make my friends understand my ideas. (Q7N28/46)		
40. In week 4 the change was that I was diligent to use English more. I tried to know what my friends were talking about so I could participate in answering their posts. (Q7N28/48)		
41. I was very much better. We had better practice writing more often until we got used to it and had more courage to write or type more. (Q7N28/49)		
42. I was better because SNE supported us to have more confidence to type and to post and then we learned to write in the way that intended to make others understand our posts in week 3. (Q7N28/50)		
43. Change a little bit from being not fluent in English and had low confidence in vocabulary use because I had to translate them all the time but now I felt that I started to be quite fluent in English. (Q7N28/51)		
44. It changed in the better direction in week 4. (Q7N28/52)		
45. I had developed more because I knew more vocabularies, I translated and I remembered them. (Q7N28/55)		
45=88.23%	6=11.76%	0=0%

For question 8, “Did you have any other views relating to English writing using the SNE? ”, the answers from each category were grouped. The interview scripts were divided into four categories for this question, the first category was the “compliments” covering 10 responses or 19.60% of the fully SRL students’ responses. The majority of the students mentioned that the SNE was good already. Some of them added that it helped increase interactional skill and increase

opportunities in practice grammar and writing everywhere and every time they needed.

The second category “no idea” covering 20 responses or 39.21% which is the majority of this question responses. All of the students had not share any ideas about any other opinion concerning English writing using the SNE.

The third category “suggestion” covering 13 responses or 25.49% of the students’ responses which stated that the system’s problem should be solved to be more stable. It should have higher speed. It should be easier to use with more interesting functions. Chat functions and emotion icons should be provided there. Calculation of user hours and posts should be improved to be more accurate. More lessons and contents related to real life situation should be increased.

The last category is the “complaint” covering 8 responses or 15.68%. The students stated that the system was strange and slow. It was difficult to use and it was boring. It did not have chat functions. The system was not stable and sometimes it stopped working when there were too many people using system at the same time.

Table 5.8: Interview Results from the Fully SRL Group: Question 8

Did you have any other views relating to English writing using the SNE?

Compliment	No idea	Suggestion	Complaint
1. I agreed to have this kind of learning. (Q8N28/15)	1. No(Q8N28/3)	1. The system problems should be solved. (Q8N28/4)	1. There should be exercises for students and improve the system because it was unable to use too often (system failed). (Q8N28/1)
2. No, everything was already good. (Q8N28/16)	2. No(Q8N28/5)	2. SNE should be more interesting and provide more interesting details than the present one. (Q8N28/7)	2. SNE was a new form of learning and it was strange. (Q8N28/2)

Table 5.8: Interview Results from the Fully SRL Group: Question 8 (Cont.)

Compliment	No idea	Suggestion	Complaint
3. No because it was good already. (Q8N28/19)	3. No(Q8N28/6)	3. SNE should have more stable system. (Q8N28/8)	3. It was a waste of time. It was difficult and was boring because I had to work in front of the computer screen. (Q8N28/13)
4. There were some advantages about SNE because it increased practice of English writing skill and increased interactional skills with friends. (Q8N28/21)	4. No(Q8N28/9)	4. SNE should be like Facebook and it should be easier to use. (Q8N28/17)	4. It was still slow. (Q8N28/14)
5. SNE supported English use of students and the practice of English grammar. We could use everywhere and every time. (Q8N28/24)	5. No(Q8N28/10)	5. SNE should be improved to have higher speed because if there were too many students online at the same time, the system stopped working. (Q8N28/22)	5. I thought that the internet was so slow. It didn't have the chat function. (Q8N28/23)
6. I didn't have. It was a good social networking site, it was the same as Facebook. (Q8N28/29)	6. No(Q8N28/11)	6. I would like to have personal chat with friends. (Q8N28/31)	6. The system might not be good enough, it was not 100 %. (Q8N28/32)
7. No because it was already a good learning form of social networking system. (Q8N28/40)	7. No(Q8N28/12)	7. It should improve the updated system to be better than this. (Q8N28/35)	7. It should be more stable because sometimes I used SNE, the program stopped working. (Q8N28/39)
8. It was good, we should add SNE to our learning. (Q8N28/42)	8. No(Q8N28/18)	8. It should provide chat functions and emotion icons. It should be quicker and easier to use. (Q8N28/36)	8. At first I didn't pay attention because there were many things which were difficult to be reached and understood. (Q8N28/49)
9. It made me know my classmates and I could practice my writing also. (Q8N28/44)	9. No(Q8N28/26)	9. SNE should adjust the calculation of hours spent online and also the calculation of the numbers of posts. They were incorrect. (Q8N28/41)	
10. No because it was good already. (Q8N28/45)	10. No(Q8N28/27)	10. I would like to have other friends from other places to apply to use to get more friends than this. (Q8N28/43)	

Table 5.8: Interview Results from the Fully SRL Group: Question 8 (Cont.)

Compliment	No idea	Suggestion	Complaint
	11. No(Q8N28/28)	11. It should add more lessons and contents that were related to the real situations and it could be used in daily life. (Q8N28/50)	
	12. No(Q8N28/30)	12. The speed of the system should be improved. (Q8N28/54)	
	13. No(Q8N28/33)	13. Everything should be improved, such as the speed, the mistakes, and many other things. (Q8N28/55)	
	14. No(Q8N28/34)		
	15. No(Q8N28/37)		
	16. No(Q8N28/38)		
	17. No(Q8N28/46)		
	18. No because I had told everything already. (Q8N28/48)		
	19. I have no idea. Thank you. (Q8N28/51)		
	20. No (Q8N28/52)		
10=19.60%	20=39.21%	13=25.49%	8=15.68%

5.2.2 Discussion of Interview Results of the Fully SRL Group

Regarding the fully SRL group, the majority of students in this group had positive perceptions of the SNE. By social interaction with peers in their community, this group of students felt that they could develop many skills of English, especially writing and reading. They could write easier. They could construct English sentences. They could understand English messages. They remembered more vocabulary, understood grammar use correctly, and so on. The SNE had enhanced their language skills through practicing English writing online. They had more confidence to write in English. Their enjoyment to chat was increased.

In contrast, there were some disadvantages found when interacting in the SNE. The system was slow, unstable and sometimes stopped working. The SNE should have higher speed and stable system. They should add more features to facilitate learning. More listening functions should be increased. More people should be invited to participate in the activities like other social networking platforms.

In conclusion, students' opinions reflected the effectiveness of the SNE. The SNE was effective for developing their skills in English. The results from interview had confirmed the quantitative result reported in Chapter 4. However, there were many features on the SNE that were incomplete and were required to be improved.

5.2.3. Interview Results of the Semi SRL Group

The data obtained from the semi-structured interview of all participants from the semi SRL group with 51 students could be grouped into three main categories: 1) positive, 2) neutral, and 3) negative comments for interview questions number 1, 2, 3, 5, 6, and 7. Then, another three main categories: 1) personal factors, 2) course factors, and 3) social factors for interview question number 4. Lastly, the four main categories: 1) compliment, 2) no comment, 3) suggestion, and 4) complaint for interview question number 8.

For question 1, "Did you think that the SNE has made a difference to your learning or English writing? Could you please tell me about the difference (if any)?", the answers from each category were grouped. The interview scripts were divided into three categories for this question, the first category were the "positive comments" covering 39 responses or 76.47% of the students' responses which is the majority of the responses. The students mentioned that the SNE helped them with English writing and their ideas, it made them improve their writing skills and learn more vocabulary.

It was a place for them to post, interact, share and exchange opinions. It provided them with a chance to practice interaction with their classmates that they had never talked to in class. They communicated like what they performed in daily and real conversation. The SNE provided them with videos and media, and entertainment that were different from classroom learning. They did not have to worry about incorrect grammar and vocabulary use so they could produce more written work. They had confidence to interact with friends.

For the “neutral comments” covering 10 responses or 19.60% of the students’ responses. Some students stated that the SNE made no difference in their English writing or learning. One of them was not sure whether it caused any difference because he/she rarely used the system. One of them said that the difference was that they could talk to others in the classroom, but they had to post to talk through the SNE. Another one stated that there was no teacher correction of their online work.

The last category for question 1 was the “negative comment” category covering 2 responses or 3.92 %. The SNE provided them with nothing or no communication practices. Writing on the paper made them remember vocabulary better than typing to communicate online. That was the typing on the computer or smartphone was not a good thing to do.

Table 5.9 Interview Results from the Semi SRL Group: Question 1

Did you think that the SNE has made a difference to your learning or English writing?

Could you please tell me about the difference (if any)?

Positive	Neutral	Negative
1. It helped us practice writing and thinking. (Q1N24/3)	1. Made a difference because you typed sometimes correctly, and sometimes incorrectly. (Q1N24/1)	1. In classroom we could speak and interact with others. But on SNE, we just posted to answer each other, so there was no communication practice, we didn't dare to express anything. (Q1N24/17)
2. Social network of SNE allowed me to see examples of sentences from friends' sentences. (Q1N24/4)	2. No difference (Q1N24/9)	2. It created a difference. Somebody could remember vocabularies well through writing better than typing. Writing caused us to remember words better than typing. (Q1N24/40)
3. There was no difference because the content looked similar but the difference was that we could study anywhere if we had the Internet access. (Q1N24/5)	3. I was not sure because I seldom logged in to use the system. (Q1N24/23)	
4. Yes, SNE acted as a medium for exchanging knowledge and a place to practice writing also. (Q1N24/6)	4. They were not much different. We brought the sentences that we would like to talk to post on the computer screen instead. (Q1N24/26)	
5. Yes, it was different because we used it to practice real life communication. (Q1N24/7)	5. I didn't know. (Q1N24/41)	
6. Yes, at least we had a chance to use English in real situations. I thought that using English and learning for taking examination were different things. (Q1N24/8)	6. Yes, in classroom learning, we could speak with others whereas we posted in order to interact in the SNE. (Q1N24/45)	
7. It was somewhat different. For example, we didn't dare speaking English in class, so we were not good at English. But when we had SNE, we dared to think, we dared to speak, and we practiced skills from the SNE. We chatted with teacher and friends there without any worry at all. (Q1N24/10)	7. SNE was a sharing of opinions through the online delivery. (Q1N24/50)	
8. It made a difference because it was an online lessons without teacher teaching. We had to try learning by ourselves, sometimes it was right, and sometimes it was wrong. (Q1N24/11)	8. SNE offered both advantages and disadvantages. Advantages were developing writing and spelling skills but the	

Table 5.9 Interview Results from the Semi SRL Group: Question 1 (Cont.)

Positive	Neutral	Negative
	disadvantage was that we could copy other's work. (Q1N24/51)	
9. It helped us learn more things apart from classroom learning. We searched for knowledge, and vocabularies through the Internet. We had a chance to interact with classmates who we had never talked to before. (Q1N24/12)	9. No, no difference. Because through social network or through classroom, we performed the same for practicing speaking, listening, thinking and writing. (Q1N24/52)	
10. SNE helped my English writing, it made us improve our writing skills. Moreover, it was a place for us to post, interact, share and exchange opinions. (Q1N24/13)	10. There was no teacher to correct us there. (Q1N24/48)	
11. SNE gave us more time to answer questions, we could explain better than in the classroom. We dared to comment on the SNE more than in the classroom. (Q1N24/14)		
12. Learning in class, we mainly talked to the teacher. But working in the SNE, we had more conversation with friends. (Q1N24/15)		
13. It was different. If we logged in to post and share opinions with friends, we could develop better reading and writing in English. If we didn't post or share ideas, we would have no improvement. (Q1N24/16)		
14. It was different. Many people dared to express their opinions through this social networking site. (Q1N24/18)		
15. It was different. It gave us the feeling that it was something wider than the classroom learning. (Q1N24/19)		
16. It was different. Learning through social network, we could post what we think, and we dared to chat with many friends. (Q1N24/20)		
17. The different was that SNE required sharing opinions in English only, so it made us learn. (Q1N24/21)		
18. It was different. Writing in general required correct use of grammar which was difficult to write. Anyway, writing on the SNE, we didn't have to think about grammar, we just wrote them. (Q1N24/22)		
19. I had more confidence to express our opinions through SNE and we knew our classmates' ideas. (Q1N24/24)		
20. There were a variety of opinions there. (Q1No24/25)		

Table 5.9 Interview Results from the Semi SRL Group: Question 1 (Cont.)

Positive	Neutral	Negative
21. It caused a different. An efficient English learning required video and media that should be provided to make it more entertaining. Therefore, SNE created a big difference between normal learning and learning through social networking. (Q1N24/27)		
22. Using the SNE, my writing was improved. Because every time that I typed anything, I had to be sure that the spelling was correct. I gained more daily use vocabularies. (Q1N24/29)		
23. It was different because in the SNE, we could share ideas all the time and learn all the time whenever we were convenient. We could practice reading, spelling and writing correctly. (Q1N24/30)		
24. I gained knowledge of English. I knew about my English skills. (Q1N24/31)		
25. I knew new vocabularies to be used in conversation. I had ideas and confidence in using English. (Q1N24/32)		
26. The SNE provided a platform for personal opinions through its social network. It was convenient to use which was different from English classroom that allowed us to share ideas very few and it was also not convenient like computer use. (Q1N24/33)		
27. Yes, I have a chance to write more in English and there were some videos there that made me understand better. (Q1N24/34)		
28. We could express our opinions without caring about grammar. We used our own feeling. So, we had confidence in using English. (Q1N24/36)		
29. It was different. We posted by ourselves in SNE, so vocabulary and grammar might not be correct according to the grammar principles. All of the tenses might not be in use. (Q1N24/35)		
30. It was different in terms of writing. Writing on the SNE was not too strict about grammar. (Q1N24/37)		
31. It was different such as we used new words and we used comfortable words in communicating through SNE. (Q1N24/38)		

Table 5.9 Interview Results from the Semi SRL Group: Question 1 (Cont.)

Positive	Neutral	Negative
32. It provided time for us to study and understand by ourselves. We had a chance to practice, think, and answer questions using English as a medium. (Q1N24/39)		
33. It created a difference to me. When I play other social networking sites, I nearly never communicate using English but the SNE made me communicate using English more. I had fun interacting with friends using English to communicate. (Q1N24/42)		
34. It was different, we shared ideas in SNE. (Q1N24/43)		
35. It was different because there was no need for SNE to be in the classroom. We could study everywhere that had the Internet access, it was more convenient and was quicker. (Q1N24/44)		
36. Learning through social networking site allowed us to share ideas in many forms and we could take more time to express the ideas. (Q1N24/46)		
37. I used English without the fear of making grammatical mistakes. It's more interesting than studying in the classroom. (Q1N24/47)		
38. They were different such as working on the SNE, we developed more vocabulary use and felt more comfortable, and we had our own choice of time and places to be online. (Q1N24/49)		
39. It was different we learned in variety ways and increased English vocabularies. (Q1N24/54)		
39=76.47%	10=19.60%	2=3.92%

For question 2, “How did you think that the lectures in this course was supported by the SNE? Did the SNE support the lectures at all?”, the answers from each category were grouped. The interview scripts were divided into three categories for this question, the first category is the “positive comments” covering 48 responses or 94.11% of the semi SRL students’ responses which is the majority of the responses. The students mentioned that the SNE provided them with another kind of learning

that was not only in the classroom. They learned from friends' opinions and adapted to use. The system helped them practice using English skills. It provided a space for them to interact, and to share opinions with friends. They had more confidence in using English. It gave them additional knowledge and they could understand the lesson learned in class better. They knew more vocabulary. It was a place for practicing and developing their listening, speaking, reading, writing, knowledge, vocabulary, and grammar. They could ask or communicate with friends and teacher online out of class time. They worked at their own convenience time and place.

For the “neutral comments” covering 1 response or 1.96% of the students' responses which stated that the SNE made little difference because the student could decide to work or not to work there.

The last category was the “negative comment” covering 2 responses or 3.92%. The students stated that the SNE did not support the classroom lectures. One of them said that if they posted just to finish the task, they might not benefit from what they did.

Table 5.10 Interview Results from the Semi SRL Group: Question 2

How did you think that the lectures in this course was supported by the SNE? Did the SNE support the lectures at all?

Positive	Neutral	Negative
1. Yes it supported lecture. It was a creation of personal responsibility of your own work. (Q2N24/4)	1. There was not much effect because students could decide to use or not to use the SNE. (Q2N24/3)	1. It didn't support. (Q2N24/1)
2. Yes, it caused us to compose better sentences. (Q2N24/5)		2. No, it was not supported. It was a trouble activity for somebody. The activity should be assigned to the interested group of students, so it would not become a problem for other subjects. Someone who posted a lot might be an indicator that they gained knowledge and had responsibility. On the

Table 5.10 Interview Results from the Semi SRL Group: Question 2 (Cont.)

Positive	Neutral	Negative
		other hand, those who just completed the tasks for the sake of handing in homework only, might not benefit anything except that they had real interest of what they were doing. (Q2N24/48)
3. Yes, it helped with my learning, it created another different way of learning which was not just the lessons or the lecture. (Q2N24/6)		
4. Yes, because we could review the lessons in there. We might not be able to write following the lecture but we could read there. (Q2N24/7)		
5. Yes, it supported. We learn different things, we learned from friends' opinions and adapted to use. (Q2N24/8)		
6. It supported because I communicated using English. (Q2N24/9)		
7. It supported because it made us practice our own skill by ourselves and we also had consultants through SNE use. (Q2N24/10)		
8. It supported because SNE was a social network that supported outside classroom learning and knowledge seeking apart from what the teacher had taught. Moreover, it provided a place for us to interact and share ideas with classmates in the same class. So I thought that it was very useful. (Q2N24/11)		
9. It supported in some ways because we interacted with friends about the tasks and assignments on SNE. (Q2N24/12)		
10. It supported because if we studied in classroom only, we would know only what we had studied but SNE provided us with additional knowledge that was more than what we had learned in the classroom. (Q2N24/13)		
11. SNE supported classroom learning, when we worked on the SNE, we were reviewing what we had learned in class and understood the lessons better. (Q2N24/14)		

Table 5.10 Interview Results from the Semi SRL Group: Question 2 (Cont.)

Positive	Neutral	Negative
12. Yes, it was another way of English practices. (Q2N24/15)		
13. It supported because it helped students think, exchange knowledge, and practice using vocabulary. (Q2N24/16)		
14. Learning through SNE supported vocabulary parts and extended lessons studied in the classroom. We could review the lessons there. (Q2N24/17)		
15. I had fun chatting with my friends. It was a combination of audio, video, and animation. (Q2N24/18)		
16. It supported. We could apply what we studied in classroom to use with SNE. On the other hand, we could bring knowledge from SNE to be used in classroom as well. (Q2N24/19)		
17. It supported. I brought knowledge that I learned from the classroom to use on the SNE. (Q2N24/20)		
18. It supported because I had fun sharing opinions with friends. (Q2N24/21)		
19. It supported because using SNE made us know more vocabularies, so we could use in our real life. (Q2N24/22)		
20. It helped me to have more confidence in using English. (Q2N24/23)		
21. It supported because it made me work punctually. (Q2N24/24)		
22. Learning through SNE supported classroom learning. If we didn't understand what we had learned in class, we could ask our teacher online through the SNE. (Q2N24/25)		
23. It supported for some parts. It made me get used to speaking English. (Q2N24/26)		
24. It supported because additional learning through SNE made me gain more knowledge and it was another form of entertaining activity. (Q2N24/27)		

Table 5.10 Interview Results from the Semi SRL Group: Question 2 (Cont.)

Positive	Neutral	Negative
25. Sometimes when teacher explained and we didn't understand, we could find it from the SNE. It was a practice of English writing that could be brought to use in the classroom. (Q2N24/29)		
26. It supported learning. We could turn back to review what we had studied and if we had questions, we could ask our friends or teacher there. (Q2N24/30)		
27. It supported because the SNE was a place for practicing English use and received many suggestions from the teacher. (Q2N24/31)		
28. It supported because words or sentences used in the SNE could be used in the oral interview examination or sentence creation. (Q2N24/32)		
29. It supported. Learning through SNE made students practice learning by themselves by searching for information from the Internet and using it right away and also practicing personal opinion sharing. (Q2N24/33)		
30. Yes, because I expressed my opinions there and practiced English more and my study was better. (Q2N24/34)		
31. Yes, because I studied and searched for vocabulary on my own. With this, I learned vocabularies. (Q2N24/35)		
32. Yes, because we chatted with classmates more often and we chatted without paying much attention to the correct use of language. So, we could understand more. (Q2N24/36)		
33. Yes, we used vocabularies studied in class to compose sentences and answer questions. All of these contents were related to one another. (Q2N24/37)		
34. It supported. This was the place for students to develop writing, reading, speaking and listening. (Q2N24/38)		
35. It supported classroom a little bit in the parts of vocabulary and reading. (Q2N24/39)		

Table 5.10 Interview Results from the Semi SRL Group: Question 2 (Cont.)

Positive	Neutral	Negative
36. It supported because we could read based on our own conveniences. (Q2N24/40)		
37. It supported both information and contents. (Q2N24/41)		
38. It supported because we knew more vocabularies, we used more grammar through the writing performance. (Q2N24/42)		
39. It made me know more vocabularies. (Q2N24/43)		
40. It supported because we studied English there. (Q2N24/44)		
41. It supported because contents studied in the classroom and the topic of the post online were related. We had the real practice outside the book. (Q2N24/45)		
42. It helped with English writing and reading. (Q2N24/46)		
43. Yes, because students seldom expressed their ideas in class but they dared to express their ideas on the SNE. (Q2N24/47)		
44. Learning through the SNE increased memorization of vocabularies, reading ability, speaking ability, listening ability and better grammar knowledge. So, posting supported learning. (Q2N24/49)		
45. Yes, because we had more time to learn. (Q2N24/50)		
46. Increase learning skills, if we couldn't understand what we studied in class, we were able to turn back to find the answer from the SNE. (Q2N24/51)		
47. Yes, it supported because on social network we used our own thought for answering others' posts, we shared our ideas and composed sentences. (Q2N24/52)		
48. It supported because we learned how to study English. (Q2N24/54)		
48 =94.11%	1=1.96%	2=3.92%

For question 3, “Did you think that your experience in using the SNE changed the way you learn or the way you write in any way?”, the answers from each category

were grouped. The interview scripts were divided into three categories for this question, the first category is the “positive comments” covering 45 responses or 88.23% of the students’ responses which is the majority of the responses. The students mentioned that the SNE helped them to practice English every day. They had developed their English skills, such as listening, speaking, reading, writing, vocabulary, word spelling, and grammar. They had better understandings about what they read. They had more confidence to use English. Some students used online dictionary whereas some of them learned from friends’ posts to develop their English skills. The students were able to ask and answer others’ posts. They could produce more English sentences. They could tell a story using English.

For the “neutral comments” covering 2 responses or 3.92% of the students’ responses. The students stated that there was no change found in the way they write or the way they learn by using the SNE.

The last category is the “negative comment” covering 4 responses or 7.84%. Some of them stated that the system of the SNE was slow. They could not find a place to practice listening on the system. The system did not have a spelling corrector. No one corrected their work, so they did not know whether what they wrote was correct or not.

Table 5.11 Interview Results from the Semi SRL Group: Question 3

Did you think that your experience in using the SNE changed the way you learn or the way you write in any way?

Positive	Neutral	Negative
1. I read and wrote better. (Q3N24/1)	1. There was no change. (Q3N24/40)	The system was slow and should be improved. (Q3N24/12)
2. My reading and writing were developed. (Q3N24/3)	2. There was no change. (Q3N24/41)	2. There was no change at all. SNE should improve the system to be able to fix the misspelling of words in order to be easier to type words with correct spelling automatically. (Q3N24/17)

Table 5.11 Interview Results from the Semi SRL Group: Question 3 (Cont.)

Positive	Neutral	Negative
3. It changed in a better way. My English writing was developed. (Q3N24/4)		3. There was no change about reading. I would like SNE to focus on listening, and provide the clear listening part. I had never had experience in listening through SNE except the short part that teacher opened in class. It might not be interesting enough. (Q3N24/29)
4. There was a change, I wrote better English. (Q3N24/5)		4. I had to post. What I needed to do was studying for other subjects that contained more about the lesson contents not something nonsense. My writing had never improved because no one corrected my work, I didn't know my writing was right or wrong. I had less interest with the popular posts that my friends had written with a lot of comments because what they wrote were always, "me too, and I think so". (Q3N24/48)
5. It changed. My writing was more developed because before we posted anything, we needed to write and rearranged the sentence to see if it was correct according to the grammar rules. This helped us practice at the same time. (Q3N24/6)		
6. It changed. We had a chance to use and develop our language use. The thing that needed to be changed was the content that should be related to the lessons as additional learning parts. (Q3N24/7)		
7. We had increasingly developed. We had a chance to use real English. We had more confidence and didn't feel shy to use English. (Q3N24/8)		
8. I wrote better because I practiced interacting and practiced writing there. (Q3N24/9)		
9. It changed me. When I came back to my room after class I had to log in to see what homework I might have online. I had to think and create sentences. It made me practice writing and speaking every day. (Q3N24/10)		
10. It changed. I had better development in writing, I wrote with the correct grammar. (Q3N24/11)		

Table 5.11 Interview Results from the Semi SRL Group: Question 3 (Cont.)

Positive	Neutral	Negative
11. It changed. My English writing was better than before but I had to use an e-dictionary website to help me translate for some words. (Q3N24/13)		
12. It changed. It made us know more vocabularies. I practiced answering with correct use of grammar rules. We could also learned from our friends' posts and comments. (Q3N24/14)		
13. It changed about the time that we could specify by ourselves. My listening skill had been developed. (Q3N24/15)		
14. I was changed in my thinking, speaking, reading, and writing. I developed myself to know and better understand English. (Q3N24/16)		
15. We could log in to use the system whenever we felt convenient. It helped improve reading skill and vocabulary a lot. (Q3N24/18)		
16. It changed in a better way. I gained more knowledge of word spelling, reading, and other things. (Q3N24/19)		
17. It changed in a better way because I could practice my English writing and reading. (Q3N24/20)		
18. It somewhat changed in the better way. My English writing was improved because of learning through SNE. (Q3N24/21)		
19. It changed. My English skill was better. I felt that English was very close to me. If we often used the SNE, learning English would be easier and it could really be used in the real life. (Q3N24/22)		
20. I was better. (Q3N24/23)		
21. It changed in the better way. Our English writing was better. (Q3N24/24)		
22. It changed in a better way. Because we practiced writing English, so our learning was more efficient. (Q3N24/25)		
23. My language was developed. I could speak without being afraid that it would be wrong. I could make more sentences. (Q3N24/26)		
24. I changed in a better way. My writing was developed, including speaking and listening of English through the use of many media on the SNE. (Q3N24/27)		
25. It changed in a better way. I could read better, and write better. My English learning was developed a lot. (Q3N24/30)		

Table 5.11 Interview Results from the Semi SRL Group: Question 3 (Cont.)

Positive	Neutral	Negative
26. It changed in the better way. It made me read and remember more vocabularies. (Q3N24/31)		
27. It changed and helped me increase my vocabularies, and word use in the sentences. My writing was developed. I could create correct sentences and I could answer the questions. (Q3N24/32)		
28. I developed at a fair level. Learning through SNE helped us think about conversational language quicker. However, SNE should be improved to have same features as teenagers' social network that is Facebook. (Q3N24/33)		
29. There was no change but my writing was developed because I wrote more. I understood sentence formats and understood more about meaning. (Q3N24/34)		
30. Yes, I knew more about vocabulary and writing. It should be improved to have a similar program to "Tell me more program" so students would be able to practice listening, speaking, reading and writing. (Q3N24/35)		
31. It changed. I had more confidence in writing English. My writing was developed. (Q3N24/36)		
32. My writing was improved. For each time of English writing, sometimes it was not necessary to take a look at the dictionary. (Q3N24/37)		
33. Change was in a better way. I developed my writing skill because I had practiced writing and I had practiced answering questions. The system should improve its messages, files, and pictures to be used with smartphone so we could practice language anywhere. (Q3N24/38)		
34. My learning was not much changed but I developed my writing and sentence making. (Q3N24/39)		
35. It changed because I wrote English more as could be seen from many posts. It should be improved to be more interesting by decorating the web page to be more colorful. (Q3N24/42)		
36. I was developed more. I learned new vocabularies. I learned the correct way of writing, reading, and listening. (Q3N24/43)		

Table 5.11 Interview Results from the Semi SRL Group: Question 3 (Cont.)

Positive	Neutral	Negative
37. My learning was changed, when more and more people became interested in my posts, my writing was more developed. (Q3N24/44)		
38. It was changed in a better way. Learning in the classroom would focus on the main content but in the SNE we had practiced writing, answering questions, and telling stories in English that supported developing of skills at this point. (Q3N24/45)		
39. It changed in a better way. I developed more on my writing and reading. (Q3N24/46)		
40. Yes, because I could write whatever I would like to on the SNE. The teacher's comments and suggestions for improvement built higher confidence for me about English use. (Q3N24/47)		
41. Learning through SNE had changed the way I learned. I had more courage to communicate using English. I gained new vocabularies and I learned grammar principles. I was changed in the very good direction. (Q3N24/49)		
42. It changed in a better way. (Q3N24/50)		
43. It changed in a better way. It helped us with the translation of vocabulary, spelling, and better writing. My writing was better as a result of often communicating in English through the system of SNE. (Q3N24/51)		
44. It changed, it was gradually changed in the better way. (Q3N24/52)		
45. There was a change in my English competency and I dared to use English more than before. (Q3N24/54)		
45=88.23%	2=3.92%	4=7.84%

For question 4, “Could you please explain why in some weeks you contributed more to the comments or the posts and in other weeks you just responded only once or twice? What did you think encouraged you to contribute more?”, the answers from each category were grouped. The interview scripts were divided into three categories for this question, the first category is the “personal factor” covering 39 responses or

76.47% of the students' responses which is the majority of the responses. The majority of the students mentioned that their personal factors, such as their free time and the workload for other subjects influenced the number of posts. If they had more free time, they would have posted more. If they did not have much time, they posted less. If they had more time for reading or thinking, they would have posted more. Their mood and feeling also influenced the number of posts. If they felt interested about the post, they would post more. The number of posts sometimes depended on the speed of the Internet and their computer availability.

For the "course factor" covering 7 responses or 13.72% of the students' responses. The majority of this group stated that they posted because of the course requirement and the scores. Some of them stated that they posted because of the topic and they had fun to post.

The last category is the "social factor" covering 5 responses or 9.80%. All of them stated that they posted because of teacher's talk and assignments. One of them stated that the posts of friends made him/her posted.

Table 5.12 Interview Results from the Semi SRL Group: Question 4

Could you please explain why in some weeks you contributed more to the comments or the posts and in other weeks you just responded only once or twice? What did you think encouraged you to contribute more?

Personal Factor (Time/Mood/Internet/Language Ability)	Course Factor (Topic/Activities/System)	Social Factor (Friends/Teacher)
1. Sometimes I was busy so I posted less. (Q4N24/1)	1. I posted more when it's time to submit the teacher. (Q4N24/5)	1. Teacher asked us to post. (Q4N24/9)
2. Sometimes I posted less because I didn't have enough free time. (Q4N24/3)	2. Because of the scores and I thought it was fun for me. (Q4N24/13)	2. Time availability, teacher talks, and the posts of friends that encouraged me to work there. (Q4N24/14)

Table 5.12 Interview Results from the Semi SRL Group: Question 4 (Cont.)

Personal Factor (Time/Mood/Internet/Language Ability)	Course Factor (Topic/Activities/System)	Social Factor (Friends/Teacher)
3. Because sometimes I had lots of free time and sometimes I had little time and sometimes I just took a look at others there. (Q4N24/4)	3. The skills or experiences, in the very final periods, I could do it easier in SNE. (Q4N24/15)	3. It was about teacher assignments. If the teacher didn't assign us to post, we didn't dare to post because we didn't know each other. (Q4N24/40)
4. It depended on the time we had. Sometimes we had more time, sometimes we had less time. (Q4N24/6)	4. It depended on the topics of the post. (Q4N24/23)	4. It depended on teacher's assignments. (Q4N24/43)
5. It was because of Internet connection or Internet signal. (Q4N24/7)	5. It was about the scores. SNE didn't make me want to learn more. Since I had logged in, I posted a lot for each time of using the SNE. So, I didn't have to log in very often. (Q4N24/29)	5. It depended on the checking of the teacher and numbers of subject to be studied each day. (Q4N24/51)
6. It depended on the free time. Sometimes I posted a lot because I felt that I would like to use English and it was fun. The score was also an important point. I didn't have much time because I had to do other subjects' homework and tutorial also. (Q4N24/8)	6. Firstly I would like to have scores but after a while I felt it was very fun to do. (Q4N24/32)	
7. It depended on free time. If I had free time, I would post. (Q4N24/10)	7. It depended on the scores. (Q4N24/49)	
8. Time was very important for me to post or not to post. If I had a lot of free time, I would post a lot. On the other hand, if I had a lot of classes to study, I had no time to post. Some days I didn't have even a post. (Q4N24/11)		
9. It depended on time and assignments. (Q4N24/12)		
10. It was about the easiness or the difficulty of the messages because if the post was easy to understand, I could answer the post right away. I posted a few if the post was difficult to understand, I had to translate first. (Q4N24/16)		
11. The free time, if I had free time, I could post a lot. (Q4N24/17)		
12. The convenient time that we had, we didn't have the same time. (Q4N24/18)		
13. It depended on the Internet speed. (Q4N24/19)		

Table 5.12 Interview Results from the Semi SRL Group: Question 4 (Cont.)

Personal Factor (Time/Mood/Internet/Language Ability)	Course Factor (Topic/Activities/System)	Social Factor (Friends/Teacher)
14. Sometimes I had lots of free time, so I logged in to interact with friends. (Q4N24/20)		
15. It depended on time for reading. (Q4N24/21)		
16. Sometimes I was busy, so I posted a few. (Q4N24/22)		
17. It depended on my free time, sometimes I was free the whole day, sometimes I didn't have even an hour. (Q4N24/24)		
18. Sometimes I had a lot of time, so I was there to read and to interact with friends. (Q4N24/25)		
19. I didn't have much time to use SNE. If I studied in the computer lab, I would post a lot. (Q4N24/26)		
20. I used SNE less when it was slow such as at night time, I also had the problem with the slow Internet signal. The teacher was a factor to support me about the posts. (Q4N24/27)		
21. We had problems about the lessons. Some classroom lessons were difficult, some parts we didn't understand and had questions, and therefore, we posted a lot of messages to ask questions and to consult our friends online. (Q4N24/30)		
22. Some days I had a lot of classes, I didn't post. Some days I didn't have Internet access. (Q4N24/31)		
23. If I felt interested, I would post a lot. If I felt so so, I would post a few. (Q4N24/33)		
24. Time effected the posts, if I had a lot of time, I could post a lot. (Q4N24/34)		
25. It depended on my free time, Internet and friends. (Q4N24/35)		
26. We had different free time. If I had a free time, I would post some messages and did homework. (Q4N24/36)		
27. I would like to share my ideas with my friends' posts. If I had a lot of time, I would answer a lot. If I had less time, I would answer less. (Q4N24/37)		
28. We had different free time. So we posted at a different time. (Q4N24/38)		

Table 5.12 Interview Results from the Semi SRL Group: Question 4 (Cont.)

Personal Factor (Time/Mood/Internet/Language Ability)	Course Factor (Topic/Activities/System)	Social Factor (Friends/Teacher)
29. I posted when I would like to practice language or when I had a free time. (Q4N24/39)		
30. It depended on my mood and feeling. (Q4N24/41)		
31. It depended on my free time. I posted less when I had less time, posted more when I had more free time. (Q4N24/42)		
32. It depended on my free time to post. (Q4N24/44)		
33. It depended on my free time. If I had a free time around 2-3 hours, I would post often. It also depended on my desire to post whether I would like to post or not and at what time. (Q4N24/45)		
34. It depended on time for thinking. (Q4N24/46)		
35. It depends on the free time because students had different free time ranges and sometimes I had an exam so that I couldn't answer the posts. (Q4N24/47)		
36. I couldn't think of what to post but I would like to have many posts so I had to post. (Q4N24/48)		
37. If I posted less, it was because I didn't have much time. It might be during lunch time. If I posted a lot, it meant that I had more free time. It might be after study or during the homework time. (Q4N24/50)		
38. It depended on my free time. (Q4N24/52)		
39. Free time (Q4N24/54)		
39 =76.47%	7=13.72%	5=9.80%

For question 5, “How did you feel when someone commented on your ideas or corrected your English writing?”, the answers from each category were grouped. The interview scripts were divided into three categories for this question, the first category was the “positive comments” covering 45 responses or 88.23% of the semi SRL students’ responses which is the majority of the responses. Many of the students mentioned that they felt good and felt glad. Some of them felt more confident to post.

They could learn from their friends' ideas. This was a good way to improve or develop their ideas and their English writing.

For the “neutral comments” covering 6 responses or 11.76% of the students' responses. Three of the students said that they did not feel anything. One of the students thought that it was their friend's rights to do so and another one said that it made him/her know about their friends' opinions. One of the students stated that it helped him/her to improve English.

The last category is the “negative comment” covering 0 response or 0%. There was no negative comment when asking about their feeling when someone wrote a post about their ideas.

Table 5.13 Interview Results from the Semi SRL Group: Question 5

How did you feel when someone commented on your ideas or corrected your English writing?

Positive	Neutral	Negative
1. It's good because I knew what was right and what was wrong. (Q5N24/1)	1. I felt that I received my friend's opinions how they thought about my posts. (Q5N24/24)	
2. It's good because I knew what was right and what was wrong. (Q5N24/3)	2. It was their rights to share opinions. (Q5N24/26)	
3. I felt that there was someone interested in my posts. (Q5N24/4)	3. I knew how to improve myself. (Q5N24/31)	
4. I felt good. (Q5N24/5)	4. I had no feeling. (Q5N24/41)	
5. I felt good. It made us know what they thought about our posts. (Q5N24/6)	5. I felt so so. (Q5N24/43)	
6. I was glad that they answered and always answered to my post. (Q5N24/7)	6. I felt so so because they were just “me too, I think so, I agree with you”. (Q5N24/48)	
7. I felt good. (Q5N24/8)		
8. That was good, we could exchange our attitudes about somethings. (Q5N24/9)		
9. I felt that I received my friends' opinions and knew what they thought about the posts and compared to my opinions on the same posts. I could see the difference. (Q5N24/10)		

Table 5.13 Interview Results from the Semi SRL Group: Question 5 (Cont.)

Positive	Neutral	Negative
10. I felt good that my friends comments on my posts. If they commented in the positive way, I was glad. If they commented in the negative way or my English was incorrect, I could apply their comments to improve my posts for the next time. (Q5N24/11)		
11. I felt good that someone agreed with our view. If they disagreed, we also shared many opinions among us. (Q5N24/12)		
12. I felt good because if we posted incorrectly, we would learn where the problem was. If someone posted to answer my posts, I knew that my post was interested by them. (Q5N24/13)		
13. It was fun and I felt good to comment on the posts. (Q5N24/14)		
14. I felt that there was someone thought in the same as we did and I gained more ideas reading friends' posts. (Q5N24/15)		
15. I felt good because I learned that someone thought the same and someone thought different from us. We were exchanging the ideas. (Q5N24/16)		
16. I felt good because someone was interested in our posts and their comments taught us how to use words and sentences. (Q5N24/17)		
17. I felt that someone was interested in my posts. (Q5N24/18)		
18. I felt good. It made us know our weak points and straight points in ourselves. (Q5N24/19)		
19. I was glad that someone read and answered my posts. (Q5N24/20)		
20. I was excited and amused with interaction. (Q5N24/21)		
21. The majority always agreed with my posts. (Q5N24/22)		
22. I felt there might be someone interested in it. (Q5N24/23)		
23 I was glad that they read my posts. (Q5N24/25)		
24. I was glad when someone answered my posts back. This made me know that I could or couldn't make others understand what I would like to communicate. (Q5N24/27)		
25. When someone answered my posts I felt good and wanted to post more. (Q5N24/29)		

Table 5.13 Interview Results from the Semi SRL Group: Question 5 (Cont.)

Positive	Neutral	Negative
26. I felt good for both criticism and compliment. If they criticized, we had to improve and develop ourselves. If they gave me compliments, this showed that I was developed. (Q5N24/30)		
27. I felt good because I could develop my writing with this. (Q5N24/32)		
28. I felt good when someone posted following my posts and I felt very good when they criticized so I brought those comments to improve myself. (Q5N24/33)		
29. I felt good. It was like we gained more experiences. (Q5N24/34)		
30. I was glad that my friends answered my posts back because it made me know that my posts were important. (Q5N24/35)		
31. I felt like I was a super star when people followed me and were interested in me. I had more confidence in English writing. (Q5N24/36)		
32. I felt good and I knew my mistakes. (Q5N24/37)		
33. I had more spiritual supports to post and answer the posts. (Q5N24/38)		
34. I felt good because I had a chance to use English to chat with others. (Q5N24/39)		
35. I felt good because it told me that at least my friends read my posts. (Q5N24/40)		
36. I felt good that someone was also interested in practicing English. I felt fun to interact, with this I didn't feel lonely. (Q5N24/42)		
37. Sometimes what we posted, they were not quite complete so people were interested and commented on them. (Q5N24/44)		
38. I felt glad that someone answered me back. It told us that someone was interested in our posts. (Q5N24/45)		
39. I was glad that someone was interested in my opinions. (Q5N24/46)		
40. I had more confidence and I thought that I did them well and interesting. (Q5N24/47)		
41. I felt glad to share knowledge with others. (Q5N24/49)		
42. I was interested in what they answered me back. (Q5No 24/50)		
43 I felt good when someone thought in the same way as we did and they were interested in what we did. (Q5N 24/51)		

Table 5.13 Interview Results from the Semi SRL Group: Question 5 (Cont.)

Positive	Neutral	Negative
44. I felt good because at least it made me know how to improve my English and how to correct it. (Q5N24/52)		
45. Considered and improved my posts to be better. (Q5N24/54)		
45=88.23%	6=11.76%	0=0%

For question 6, “In what way did you think your ideas changed during weeks 1-4 or other weeks and why? Or was there any changes of ideas at all?”, the answers from each category were grouped. The interview scripts were divided into three categories for this question, the first category is the “positive comments” covering 38 responses or 74.50% of the semi SRL students’ responses which is the majority of the responses. The students mentioned that their ideas changed to have more confidence in writing. Their attitude about English had been changed. They felt that it was fun and was excited when using English. It was not boring. They felt that English was easy. It was not difficult like what they used to understand before this. They posted more and practiced more at the same time they gained more vocabulary and daily language uses.

For the “neutral comments” covering 11 responses or 21.56% of the students’ responses. Ten out of eleven of the students in this category stated that there was no change of the idea. One of them had no idea whether there was any change because he/she worked on the SNE for a while.

The last category is the “negative comment” covering 2 responses or 3.92%. One student said that he/she had no change of idea and he/she posted to receive scores and another student said that he/she found the weakness in English when seeing friends’ posts.

Table 5.14 Interview Results from the Semi SRL Group: Question 6

In what way did you think your ideas changed during weeks 1-4 or other weeks and why? Or was there any changes of ideas at all?

Positive	Neutral	Negative
1. In week 3, I felt that it was amused to use English to post and there were people answered your posts and interacted with you there. (Q6N24/6)	1. I had no idea because sometimes I worked on SNE and sometimes stopped working. (Q6N24/3)	1. I had no change of the idea, I thought that what I did was for scores and it only supported my writing skill and also vocabularies. (Q6N24/29)
2. I turned to think that using English made me feel amused, my ideas changed since the first week. (Q6N24/8)	2. There was no change. (Q6N24/1)	2. My thought changed since the first week when I saw sentences of friends' posts, I realized that I was weak in the field of language. (Q6N24/54)
3. I thought that I wrote better. (Q6N24/9)	3. There was no change. (Q6N24/4)	
4. I was changed, I knew how to use grammar correctly. (Q6N24/10)	4. There was no change (Q6N24/5)	
5. In the second week because the first week was the beginning, I didn't dare to post and I posted sometimes right, sometimes wrong. In the second week, I had more confidence and never felt shy to post. (Q6N24/11)	5. There was no change. (Q6N24/7)	
6. I thought that I had better improved my vocabulary more since the first week. (Q6N24/12)	6. There was no change. (Q6N24/18)	
7. Yes, my thought was changed. First, there were not many people posted, I felt that it was too neat (not interesting enough). Then later, my friends posted a lot and expressed their views, so I liked it more. (Q6N24/13)	7. There was no change. (Q6N24/31)	
8. In week 3 to 4, I thought that I learned many things from my friends' written interaction. (Q6N24/14)	8. There was no change, sometimes I thought nearly the same in many situations. (Q6N24/34)	
9. In the very last weeks because I had the examples of how to give my opinions or chat with friends. (Q6N24/15)	9. There was no change. (Q6N24/37)	
10. Change was in week 3 because I had changed my attitude about English usage in a better way. (Q6N24/16)	10. There was no change because I posted following my idea only. (Q6N24/41)	
11. My view about SNE had changed. I firstly thought that it was complicated to use but when I used it for a while, I thought that it's easy to use. (Q6N24/17)	11. There was no change. (Q6N24/52)	
12. Change occurred in week 2-4. I felt that I had better writing skills and also gained more vocabularies. (Q6N24/19)		

Table 5.14 Interview Results from the Semi SRL Group: Question 6 (Cont.)

Positive	Neutral	Negative
13. Change was in a better way. (Q6N24/20)		
14. In week 2, I thought that English was not difficult like what I used to understand. (Q6N24/21)		
15. I changed to think that English was something very close to our daily life in week 4. (Q6N24/22)		
16. I was not sure about the detail but my thought changed in the positive way for sure. (Q6N24/23)		
17. Change was in the last week because I had confidence to share my ideas when my friends gave feedback to my posts. (Q6N24/24)		
18. It changed. (Q6N24/25)		
19. I felt that I increasingly developed my ability to write in English. (Q6N24/26)		
20. It changed in week 3, learning through SNE encouraged me to post my stories using English. I was diligent to search for information and I had changed my thought about English. I used to think that English was boring, now I think English is fun. (Q6N24/27)		
21. My thought started to change from the first week because it could make me understand English better. (Q6N24/30)		
22. Change was in week 1 to 2, I learned more vocabulary and knew more about English. (Q6N24/32)		
23. I started to change in week 2, my thought in English sentence was more fluent. (Q6N24/33)		
24. My thought about English had been changed in the positive way starting from week 1 until week 4. (Q6N24/35)		
25. Change was in the positive direction and it was about language in week 4. I realized that I had a confidence to use language. (Q6N24/36)		
26. Change was in the positive direction in week 4 because I had some work to do on SNE. I logged in more often and posted more often too. (Q6N24/38)		
27. I started to change in week 2 because I felt that my English usage in reflecting to friends' post was not good enough and we should adjust ourselves to become better. (Q6N24/39)		

Table 5.14 Interview Results from the Semi SRL Group: Question 6 (Cont.)

Positive	Neutral	Negative
28. My idea changed because of reading my friends' posts. We memorized some words. We had a chance to read friends' work, and we practiced reading also. (Q6N24/40)		
29. I had better attitude using SNE. I liked to post and posted more. (Q6N24/42)		
30. In week 3 to 4, I was better. (Q6N24/43)		
31. Change started since the first week because I knew many vocabularies from the posts of friends. (Q6N24/44)		
32. In the very first time I rarely posted because I didn't get used to it. Later, I posted more often. (Q6N24/45)		
33. Change was in the better way in week 4. I turned to think that there were many other options for us to study English outside class. Learning was not only restricted to happen only in the classroom. (Q6N24/46)		
34. In the first week, I felt that there was a variety of the lessons. That's so cool. I had never studied anything like this before. (Q6N24/47)		
35. Change was in the last week, I posted 40 to 50 posts within one day, I felt very excited. (Q6N24/48)		
36. It changed. First, I posted something but no one answered back to my posts. After that, people reflected to my posts. Then, I felt that I wanted to log into SNE in order to answer friends' and teacher's posts. (Q6N24/49)		
37. It was changed in the better way in week 2. (Q6N24/50)		
38. It was changed in the better way in about week 2. (Q6N24/51)		
38 =74.50%	11=21.56%	2=3.92%

For question 7, “In what ways do you think that your performance in English writing has shifted during weeks 1-4 or other weeks and why? Or has there been any change in your English writing performance?”, the answers from each category were grouped. The interview scripts were divided into three categories for this question, the first category is the “positive comments” covering 45 responses or 88.23% of the semi

SRL students' responses which is the majority of the responses. The students mentioned that their writing performance had been improved in many better ways, particularly in week 3 to 4. They had developed writing skills. They took their friends' posts as an example to write. They learned more vocabulary. They had developed the organization of the sentence. They could construct English sentences. They could write longer and more creative sentences. They had more confidence to write.

For the "neutral comments" covering 5 responses or 9.80% of the students' responses. Three students had no comment about this whereas two of them felt that there was no change about their writing performance.

The last category is the "negative comment" covering 1 response or 1.96%. The student stated that he/she improved in writing performance as a result of classroom learning but it had nothing to do with the SNE.

Table 5.15 Interview Result from the Semi SRL Group: Question 7

In what ways do you think that your performance in English writing has shifted during weeks 1-4 or other weeks and why? Or has there been any change in your English writing performance?

Positive	Neutral	Negative
1. It was better. (Q7N24/1)	1. No comment(Q7N24/13)	1. There was no change with online learning, I was changed more from the classroom lectures. (Q7N24/48)
2. I improved a little bit. (Q7N24/3)	2. I felt so so, there was not much change. (Q7N24/23)	
3. It changed in a better way. (Q7N24/4)	3. No change (Q7N24/31)	
4. It improved a little. (Q7N24/5)	4. No comment (Q7N24/33)	
5. In the third week when we posted often it was like practicing our writing. (Q7N24/6)	5. No comment (Q7N24/49)	
6. I changed a lot, I had to study vocabulary to post feedback to friends. (Q7N24/7)		

Table 5.15 Interview Result from the Semi SRL Group: Question 7 (Cont.)

Positive	Neutral	Negative
7. It started from the first week, I wanted to use English more and I felt amused. (Q7N24/8)		
8. I think it was the same but when longer time passed I answered longer. (Q7N24/9)		
9. There were some changes. I didn't feel worried that my English contained grammatical mistakes. I had more confidence in speaking and writing. (Q7N24/10)		
10. There was a change in the third week. I wrote English more correctly. (Q7N24/11)		
11. It changed in a better way in week 3. (Q7N24/12)		
12. It changed in week 2-4. My writing developed by having my friends' posts as examples. (Q7N24/14)		
13. Yes, I understood sentences better. (Q7N24/15)		
14. It was changed in week 3 because I was able to write a narrative English better than before. (Q7N24/16)		
15. My writing started to become better since posting was like spelling practice for me. (Q7N24/17)		
16. It was changed in a better way. I was able to use more and more of new and strange vocabulary better. (Q7N24/18)		
17. It was changed in week 3-4 of posting in SNE. I developed my English writing skills in a better way. (Q7N24/19)		
18. It was changed in week 3-4 in a better way. (Q7N24/20)		
19. It was changed in week 3, the forming of sentence structure is well-organized. (Q7N24/21)		
20. My English writing was improved because I knew more vocabulary and reflection skill. (Q7N24/22)		
21. It was changed in a better way in week 3. (Q7N24/24)		
22. It was changed in a better way in week 3-4. (Q7N24/25)		
23. I developed writing skill. I learned about orders of words in sentences. (Q7N24/26)		
24. It was changed in a better way in week 2 of posting. I developed some writing skills and had more vocabulary. (Q7N24/27)		

Table 5.15 Interview Result from the Semi SRL Group: Question 7 (Cont.)

Positive	Neutral	Negative
25. It was changed since the first week. I was a lot better. I knew how to organize sentences correctly. (Q7N24/29)		
26. It was changed in a better way, I knew more vocabulary. I could read better so I could write better in week 2-4. (Q7N24/30)		
27. I could write better. It changed in week 3-4. I could reflect on my friends' posts. (Q7N24/32)		
28. It was better, I could write more comprehensible messages. (Q7N24/34)		
29. It started from week 2-4 because of posting more, learning more vocabulary, knowing more about sentence construction; so my writing was better. (Q7N24/35)		
30. I changed in a better way in the last week. I started to feel that I memorized more words. (Q7N24/36)		
31. I had better English writing. (Q7N24/37)		
32. In a better way in week 4 because I learned more about English. (Q7N24/38)		
33. It changed a little bit in week 4 because I knew more words. (Q7N24/39)		
34. My English changed and I could write better. (Q7N24/40)		
35. I was better in week 4. (Q7N24/41)		
36. I changed in a better way, I had more confidence to write in English, I knew more vocabularies. (Q7N24/42)		
37. In week 3-4, it was better. I knew more vocabularies. (Q7N24/43)		
38. I changed every time after I was thinking about my stories to post. (Q7N24/44)		
39. I didn't feel much changes because I felt that it was like a usual learning in the classroom. However, the application of the lessons posted on SNE and daily life matters there caused a number of changes to me. (Q7N24/45)		
40. I changed in a better way in week 4 and I could organize better sentence structures. (Q7N24/46)		
41. In the second week because I gained more knowledge. I had experiences to answer each post longer. I had more confidence to answer other's posts. (Q7N24/47)		
42. I was changed a little bit in week 2. (Q7N24/50)		

Table 5.15 Interview Result from the Semi SRL Group: Question 7 (Cont.)

Positive	Neutral	Negative
43. I improved a little bit in week 2. (Q7N24/51)		
44. It was changed in a better way and it was a little bit change in week 3 to 4. (Q7N24/52)		
45. My English use was changed since the first week because I had to try to compose more and more creative sentences. (Q7N24/54)		
45 =88.23%	5=9.80%	1=1.96%

For question 8, “Do you have any other views relating to English writing using the SNE?”, the answers from each category were grouped. The interview scripts were divided into four categories for this question, the first category is the “compliment” covering 9 responses or 17.64% of the semi SRL students’ responses. The students mentioned that the system of the SNE was good already. It was interesting, convenient and fast. It provided them an opportunity to practice English. It supported students to have better English.

The second category “no idea” covering 26 responses or 50.98% which is the majority of this question responses. All students in this category said that they have no idea when they were asking about any other view about the SNE and their English writing.

The third category “suggestion” covering 12 responses or 23.52% of the students’ responses. The system should be more beautiful and more interesting. There should be more media and games there. The cartoon stickers should be added to the system. The system speed should be higher. Personal chat function should be added. Self-correction computer program should be added to automatically correct students’ writing. The teacher should explain the functions of use to the students. The teacher

should create more questions for the students. The students should be free to talk about the topics of their interest like in Facebook.

The last category is the “complaint” covering 4 responses or 7.84%. The Internet was slow and difficult to access for sometimes. It was difficult for the students to use the system through their mobiles. There was not enough listening and grammar practice provided on the system.

Table 5.16: Interview Result from the Semi SRL Group: Question 8

Do you have any other views relating to English writing using the SNE?

Compliment	No idea	Suggestion	Complaint
1 I had no idea because I thought that it was already good. (Q8N24/10)	1 No (Q8N24/1)	1 I thought that there should be cartoon stickers there. (Q8N24/13)	1 There were many limitations found in SNE such as the chat functions. (Q8N24/11)
2 It was an interesting form of learning that provided us with directions and suggestions. (Q8N24/15)	2 No (Q8N24/3)	2 The teacher needed to explain the functions that students didn't understand. (Q8N24/14)	2 The Internet system was slow so it was difficult to access sometimes. (Q8N24/18)
3 I had no idea because what they had was already good. (Q8N24/24)	3 No (Q8N24/4)	3 I recommended that SNE had to provide personal chat function to support students' interaction when we had problems so we could easily consult our teacher. (Q8N24/17)	3 I thought that we didn't practice listening outside class so we had low listening scores and it was the same with the grammar, it was not improved at all. (Q8N24/29)
4 SNE was an interesting teaching aid to develop students. It was a very good social networking site. (Q8N24/30)	4 No (Q8N24/5)	4 There should be more writing practice programs offered there, for example, if we wrote something, the program was able to tell whether our writing was correct or incorrect and how. (Q8N24/35)	4 I was unable to post on SNE through my mobile. I had difficulties in posting. (Q8N24/34)
5 No because SNE was a social networking site that allowed students to practice English and it was already good. (Q8N24/38)	5 No (Q8N24/6)	5 Its looks should be adjusted to be more beautiful and to be more interesting. (Q8N24/36)	
6 It was a very good application. I saved my time for traveling to hand in my homework and I could follow the work by myself. (Q8N24/40)	6 No (Q8N24/7)	6 If the teacher created more questions for students to answer, there must be a variety of answers and I could learn many vocabulary also. (Q8N24/37)	

Table 5.16: Interview Result from the Semi SRL Group: Question 8 (Cont.)

Compliment	No idea	Suggestion	Complaint
7 SNE made me become better in English learning. (Q8N24/42)	7 No (Q8N24/8)	7 There should be vocabulary games there to attract more students. (Q8N24/39)	
8 It was convenient and fast. (Q8N24/43)	8 No (Q8N24/9)	8 It should provide chat functions and games to play with friends. (Q8N24/45)	
9 No because SNE provided a good system already. (Q8N24/50)	9 No (Q8N24/12)	9 Please develop the speed of SNE. (Q8N24/46)	
Compliment	No idea	Suggestion	Complaint
	10 No (Q8N24/16)	10 There should be more media there. (Q8N24/47)	
	11 No (Q8N24/19)	11 It should not force students to do about the topics. If they were free to talk on any topics following their interest like in Facebook, it would be better. (Q8N24/48)	
	12 No (Q8N24/20)	12 It should have chat functions like Facebook. (Q8N24/49)	
	13 No (Q8N24/21)		
	14 No (Q8N24/22)		
	15 No (Q8N24/23)		
	16 No (Q8N24/25)		
	17 No (Q8N24/26)		
	18 No (Q8N24/27)		
	19 No (Q8N24/31)		
	20 No (Q8N24/32)		
	21 No (Q8N24/33)		
	22 No (Q8N24/41)		
	23 No (Q8N24/44)		
	24 No (Q8No24/51)		
	25 No (Q8No24/52)		
	26 No (Q8N24/54)		
9=17.64%	26=50.98%	12=23.52%	4=7.84%

5.2.4 Discussion of Interview Results of the Semi SRL Group

Similar to the fully SRL group, the majority of students in the semi SRL group had positive perceptions of the SNE. By social interaction with peers and instructor, this group of students felt that they could develop many skills of English. They could write better, read better, gain more vocabulary, understand more about grammar principles, and so on. The SNE had enhanced their language skills through practicing English writing online. The students thought that English was easier than what they used to think. They had more confidence to write in English.

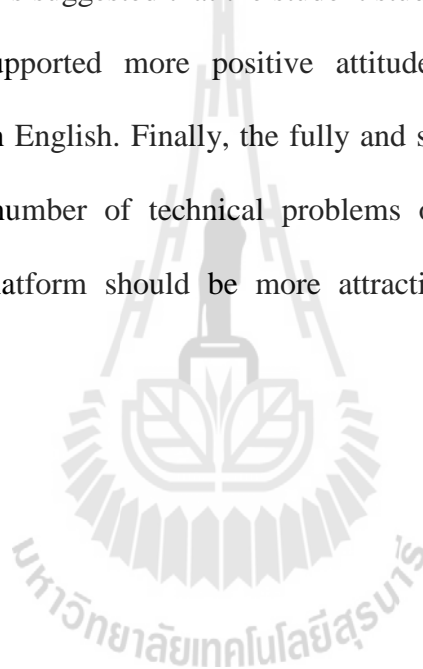
On the other hand, there were some disadvantages found when interacting on the SNE. There was not enough tutorial systems provided. More media and games should be added. The SNE application to use with the mobile was impossible. Automatic self-correction program should be provided. The teacher should provide more questions at the same time students should talk about anything they felt interested in. The system should be more interesting and more beautiful.

In conclusion, students' opinion reflected the effectiveness of the SNE. The SNE was effective for developing their skills in English. This interview results confirmed the quantitative results reported in Chapter 4. However, there were many features there that were incomplete and required to be improved.

5.3 Summary of the Chapter

This chapter reports on the qualitative results from the semi-structured interview. The results revealed in detail how the SNE had changed their perspectives in English writing. Unlike young children who depended mostly on their mothers, these EFL students were at critical development stage who might increasingly seek to

write with their control over their circumstance with their own awareness and rhizomatic planning, especially the fully SRL group who was aware of problems or difficulties in English writing. These fully and semi SRL groups expressed their positive reaction toward the SNE intervention. After the experiment, both groups reported higher confidence and enjoyment to write, specifically the fully SRL group who revealed more percentages of results on confidence and amusement in writing. This qualitative analysis suggested that the student studying through the SNE without teacher mediation supported more positive attitudes, confidence, and relaxing atmosphere to write in English. Finally, the fully and semi SRL groups reported that they encountered a number of technical problems of the platform used. It was suggested that the platform should be more attractive and should contain more functions.



CHAPTER 6

CONCLUSION

6.1 Introduction

This chapter presents a concluding remark of this research project with discussions of the findings and implications together with recommendations for further studies and limitations of the study. First, a summary of this study is presented. Second, a summary of the results is reported. Third, discussions of the findings are provided. Finally, implications, recommendations for further study and limitations are presented. The chapter is organized in the following sections.

6.2 Summary of the Research Study

6.3 Summary of the Results

6.4 Discussion of the Results

6.5 Implications of the Research Study

6.6 Limitations of the Research Study

6.7 Recommendations for Further Study

6.2 Summary of the Research Study

This study was a quasi-experimental research utilizing a two-group pretest-posttest design. It aimed to explore the effects of the SNE in an English 1 course (203101) on the English writing abilities of the first and second year undergraduate

students in Nakhon Ratchasima province, Thailand. It also investigated the perceptions of these students toward the SNE intervention.

The population in this study consisted of 1,501 students enrolled in the English 1(203101) course at Suranaree University of Technology, studying in the second trimester of the 2014 academic year. The sample groups were two intact classes consisting of 102 (51+51) students. These two groups (102 students) were selected from the total of 28 groups (1,501 students) by the university to be the participants of the current research project. Then, one group was selected to act as a fully Self-Regulated Learning (SRL) group whereas the other group was assigned as the semi Self-Regulated Learning (SRL) group.

The researcher developed the SNE on the basis of a SRL framework with two different levels of autonomy, called 1) a fully SRL group and 2) a semi SRL group. The objectives of the SNE lessons were designed and presented online in the SNE pages. They described that the course would cover four lessons with the first lesson being about “Education” and others being about “Personal Stories”, “Interesting Lives” and “Our World” according to the four chapters from the “*Four Corners*” course book which was assigned by the university as a classroom material in face-to-face session in every group who was studying the same subject.

After that, the SNE, the course objectives, and the course plan were developed and they were undergone the process of reviewing. There were four instruments used to collect data in this study which was consisted of writing pretest, writing posttest, OES (other English skills) pretest, OES posttest, perception questionnaire, and semi-structured interview questions. The researcher adapted the perception questionnaire from Zumor et al. (2013) in order to collect data from the participants about their

perceptions of the SNE under the four main categories; language areas, advantages, limitations, and suggestions. After reviewing the completed questionnaires, the researcher interviewed 102 students and asked them to write brief notes on what they had been interviewed to reconfirm their answers in order to prevent misunderstanding about what they said.

The researcher constructed, adapted, and validated all the instruments for the implementation of the online section of the SNE that was embedded as a supplementary activity in the English 1 course. The treatment instruments used consisted of four online lessons and the online discussion topics that were created by the researcher or the teacher of the course before the implementation. The instruments employed for collecting data consisted of: 1) a writing pretest and a parallel writing posttest with different topics that were used to measure writing abilities of both groups of students before and after the experiment. 2) an OES pretest and a parallel OES posttest were used to measure other English skill abilities, consisting of listening, dialogue completion, vocabulary, grammar, and reading for both groups of students before and after the experiment. Then, 3) identical perception questionnaires were administered to both groups after the experiment. Lastly, 4) identical interview questions were used to interview both groups of students. All instruments were validated with three experts (interview) to five experts (tests and questionnaire) in the field. The instruments were also piloted with the first year students at Suranaree University of Technology who were not in the experimental groups before they were used in the main study.

Next, the main study was conducted. The students from both fully and semi SRL groups took the writing pretest (essay writing with the same topic for both

groups) designed and developed by the researcher to measure their writing abilities. Then, they also took the OES pretest that was designed and developed by the team of university lecturers to measure other English skill abilities, included listening, dialogue completion, vocabulary, grammar, and reading. Then, the course orientation for the SNE was arranged for both groups of students for approximately two weeks. After that, the course was carried out over four weeks. Both groups of students were required to work on the SNE as their out-of-class activities for at least 30 hours for the whole study. The researcher was the teacher of the course. Students attended their normal class in face-to-face sessions twice a week. Each week the meeting lasted for two sessions, one of 100 minutes and one of 50 minutes. Altogether they spent 150 minutes in weekly face-to-face sessions. For each face-to-face session, the fully SRL group received around 5 minutes of teacher' talk about the SNE whereas the semi SRL group received about 10 minutes of teacher's talk to encourage them to use the SNE. Both groups were assigned to study lessons provided on the SNE as online lessons and activities at their convenient time and place and they were required to post on the discussion pages for an hour a day under the topics that were related to the course content and these topics were created by the researcher before the experiment. During the four weeks, the students were required to complete their assignment of the four lessons, online activities. At the end of the course, a parallel writing posttest was administered to both groups to assess the impact of the SNE on their English writing abilities. At the same time, the parallel OES posttest was administered to both groups to assess the effects of SNE on their other English skills, excluding their writing skill ability. After that, the perception questionnaire was administered to investigate students' perceptions of the SNE. Then, the researcher interviewed all of these

students to collect qualitative data about their perceptions of SNE and other additional opinions they might have. Finally, the data received from each instrument from the main study were analyzed quantitatively using the SPSS program then they were analyzed qualitatively using thematic based units.

6.3 Summary of the Results

According to the impact of SNE on English writing abilities of the students, the results revealed a statistically significant difference between the pretest and posttest mean scores of each of the two groups at 0.05 level. In other words, the posttest mean scores were found higher than the pretest mean scores in these two groups from the two tests, namely the writing test and the OES test. Hence, the treatment of SNE had a significant effect in developing students' English writing abilities. In addition, the SNE had a significant effect in developing other English skills, including listening, dialogue completion, vocabulary, grammar, and reading as well. In conclusion, the social networking environment (SNE) for both fully and semi SRL groups had improved the participants' writing abilities and other English skill abilities at a statistical significance level of 0.05. However, in their posttests, the writing abilities and other English skills of the two groups were not significantly different from each other by having P-value equaled to .105 for the writing test, and P-value equaled to .992 for the OES test. These revealed that P-values of both groups in the two posttests were higher than .05 ($P > 0.05$), as calculated by the ANCOVA analysis). The fully SRL group seemed to have undergone a greater improvement while spending less time on task.

Regarding students' perceptions toward the SNE, results of the perception questionnaires and the semi-structured interview indicated that the majority of participants in the fully SRL and semi SRL groups were satisfied with the SNE. The questionnaire result yielded no significant difference in their perceptions of all categories (language areas, advantages, and limitations) between these two groups— with the exception of results from questions under the category of “suggestions”, specifically the item stating “*all technical problems should be solved*”. This could be interpreted that the fully SRL group with higher mean scores ($\bar{x}=4.25$; $SD=.62$) was more committed to the SNE; therefore, they discovered some problematic technological functions there. On the other hand, the semi SRL group who had lower mean scores ($\bar{x}=3.82$; $SD=.86$) might actually pay less attention when using the system; therefore, they found fewer problems with the technological functions of the SNE system. However, the overall view of the perceptions results of both groups looked quite similar for all items. This brought to the conclusion that the majority of them had positive perceptions toward the SNE that helped them improved their language skills, particularly vocabulary, reading, writing and spelling respectively in the first four priorities. It was found that the majority of the students in both groups expressed positive attitudes toward the SNE and claimed that it supported their writing abilities in English including other English skills, for example, listening, speaking, reading, writing, vocabulary, grammar, spelling, and sentence composition. Moreover, they had more confidence and more amusement writing in English. Some problems that the students experienced were also reported, for example, the platform of SNE had some technical problems, such as unattractive features, and slow application system.

6.4 Discussion of the Results

The objectives of this research were to investigate the impact of SNE on the English writing abilities of English 1 university students in Nakhon Ratchasima province and the perceptions of students toward the SNE. Consequently, the results will be discussed from two perspectives consisting of 1) students' writing abilities in English and 2) students' perceptions toward the SNE.

1. Students' writing abilities in English

Regarding the scores on the writing pretest and posttest of each group, their writing abilities in English developed significantly after taking the SNE or after the experiment. It was noted that the SNE had a significant impact on students' writing abilities in English for these two groups. Regarding the review of literature, the researcher identified two major factors that may affect students' improvement of their English writing: 1) the design of the SNE 2) the self-regulation of the students

1.1 Effects of the design of the SNE

The results of this study supported other research projects in the previous studies, that emphasized favorable results of integrating additional online learning, or blended learning to increase learning achievement of students (Sharpe et al., 2006; Tshabalala et al., 2014; Smyth et al., 2012). Based on those research projects, it was believed that the blended course brought together the benefits of both face-to-face and online learning. The out of class online learning was to ensure that students got enough practice of the lessons learned by interacting with their peers about the topics they had studied or related the topics studied to their daily situations. Whenever they had problems or comments about the lessons, they could get immediate feedback from their friends and/or teacher at certain levels differently

between groups by the semi SRL groups received more feedback from the teacher. Moreover, live interaction ensured high quality communication. This helped students understand the lessons deeply and when they needed explanations, their friends or community were there to support them. The SNE made the learning more flexible. The students could study at a time and place convenient to them. It also allowed individual students with different rates of learning to study at their own pace. This solved the problem of individual difference when each student needing different amounts of time to understand the same content. In addition, the SNE encouraged them to construct their own knowledge rather than passively receive knowledge that was offered by their teacher every time. Within this environment, the students were encouraged to learn actively and collaboratively with others through the social networking capacities available for them on the system of social networking sites, such as instant chatting, information sharing tools, language help tools, search engine tools, etc. These tools supported students' needs about the information required in order to present, post or write about topics of interest.

The SNE through the "Schoology" social networking site was used as a working platform for students' writing or posting that could give them the opportunities to construct a presence in a collaborative community through online interactive places where they could display their works or interact with peers through posting comments, uploading pictures, and sending private messages. Hence, using a social networking site as an additional part of the course to increase students' effort in their own learning was both interesting and helpful for them. Students became more motivated both in-class and out-out-class. Accordingly, the findings from the current

research project supported the results from previous studies (Nielsen, 2013; Wyss & Siebert, 2014; Lee & Kim, 2012; Abawajy, 2012; Shih, 2013).

1.2 Effects of self-regulation of the students

The SNE provided for both groups; fully SRL and semi SRL, were the same in terms of contents, discussion topics and other activities. The predetermined learning objectives were also stated in SNE course outline when each class met, the teacher talked about activities in the online SNE to both groups, however, the teacher spent twice as much time talking to the semi SRL group than what she did with the fully SRL group. Hence, the semi SRL group's learning was more influenced by the teacher's expectations and directions than the fully SRL group in that they tried to fulfil teacher's expectations. This resulted in them having bigger number of online posts and also spending more time of page views compared to their counterparts.

In terms of students' motivation, both groups indicated that they took part in the SNE and had positive perceptions toward the SNE, which was a place, where they could interact freely without caring too much about grammatical errors and other kinds of language mistakes. It was easier for them to follow their friend's ways of posting through online interaction. These students took their friends' posts as examples of what they should do. The community and feedback given from their peers played a significant role to cause students to stay online regularly. However, the semi SRL group seemed to post when they were required to do so as they were encouraged to post by their teacher, not necessarily when they wanted to. Results showed that the semi SRL group posted more often than the fully SRL group. This may indicate that their source of motivation was sometimes beyond their will and actual interest. Meanwhile, students in the fully SRL group also posted whenever and

wherever they wanted to do so. This group of students created posts by themselves beyond the posts from the discussion topics that were assigned by the teacher. They also posted on the “Updated Post” pages that was not required from the course. The interaction were initiated by the students themselves whereas the students in the semi SRL groups had a few posts in the “Updated Post” pages. Because the fully SRL group were never obliged to post online but they did so voluntarily, the motivation of this group may come from their personal interest or spontaneous desire to post. This group was found having more creative ways of thinking and posting, more self-confidence to express English opinions, and more amusement to share ideas. Therefore, higher degree of self-regulated learning yielded more positive perceptions to students.

6.5 Implications of the Research Study

Pedagogical implications

The findings from this research bring some suggestions for learning environments, curriculum designers, instructors and students as follows.

6.5.1 Learning Environments

This study may highlight the importance of pedagogical values of the SNE within the learner community to help them write together collaboratively. These learners practiced writing over some periods of time, with a lot of examples there, students wrote to reflect their friends’ posts, they received feedback from friends, and they had various opportunities to interact applying their knowledge of English, monitoring their process in different writing situations and topics. They became conscious writers who wrote independently based on their personal learning

preference and needs without much attention paying to grammatical mistakes like what they did before. They gradually became a fluent writer who had a capacity of writing continuously. They wrote creatively and produced longer sentences and passages that they had never imagined they could do. Their abilities in writing not only surprised themselves but also surprised the teacher who had never taught or trained them how to write in English.

The results were found that the semi SRL group who reported working more on the SNE activities seemed to have more extrinsic motivation than intrinsic motivation. Having high intrinsic motivation may be related to high autonomous learners to work on their own that was found in the fully SRL group. Hence, the extrinsic motivation was related to lower autonomous learners to do language tasks outside the classroom. Therefore, the SNE could be used to enhance students' intrinsic motivation to become autonomous learners even without teacher mediation. This was because the SNE provided opportunities to use target languages and the system allowed learners to work independently with their friends' online community. The system provided the links to many language resources necessarily for them to do the tasks. Therefore, the teacher may not be a significant indicator to support students to work online. Simply provide a well-organized supportive environment for learning of the SNE may be enough for students' need to have interests or be motivated to make the most of their learning material and environment.

The SNE is one of the autonomous learning environments that was designed to discover the fact that if the online environment was supportive enough, the teachers may not be necessary to instruct anything to their students. This is without a doubt the most important and most remarkable outcome of this research: the demonstration that

the presence and contributions of a knowledgeable, experienced, well-meaning and hard-working teacher was unnecessary to bring about desired improvements in the writing skills of the students involved. This result, which is based on the notion of rhizomatic self-adjusting, personally-based, learning environments (Lian 2004, 2011, 2014), actually converges with outcomes from work and studies performed in the context of Sugata Mitra's self-organized learning environments (SOLEs) (Mitra et al., 2010; Mitra, 2012, 2013), the Sudbury Valley School experiences (Oppenheimer, 2014; Greenberg & Sadofsky, 1992), the work done with young children on play environments (Sykes & Reinhardt, 2013) and the recommendations of the major study on learning performed in many contexts. All of which argued for and demonstrated the ability of people of all ages to learn in ways appropriate to the conditions of the 21st century (Lian, 2012) through the development of metacognitive skills. While these studies are developing weight in the educational literature, they tend to be ignored by the majority of teaching and learning systems throughout the world, especially those which, like in Thailand, place central reliance on the teacher as the person in charge of learning.

The present study like others, e.g. He, Sangarun & Lian (2014), Mitra et al. (2010), Mitra (2012, 2013), Sudbury Valley School (Oppenheimer, 2014; Greenberg & Sadofsky, 1992) demonstrates the possibility of personalized, self-managed learning even within a typical authoritarian government-and teacher-directed structure.

6.5.2 Institution/ Curriculum Designers

Regarding the results of this research, it is recommended that the SNE approach may provide a more flexible learning platform. Therefore, universities

should adopt a flexible course design to integrate some kinds of online learning environments for the students to give them an optional way of learning. The structure of any course should be flexible and changeable to integrate online learning environments into the course so as to provide more opportunities for bringing lesson learned to connect with real life practice of language use, particularly in the countries that use English as a second or foreign language like Thailand.

6.5.3 Instructors/Lecturers/Teachers

The instructors should re-examine the English course design for freshman or other levels. It is suggested that some activities such as the SNE can establish students' engagement by creating an interactive learning environment to support and enrich classroom learning. When designing discussion activities, the instructors should arrange for them to have opportunities to use the language and the lessons learned in everyday context. Therefore, the lessons were found more valuable and more interesting because it could be used in their daily life contexts.

The use of familiar content or daily life conversations in the SNE was very helpful for students. It made the course lessons less difficult as they were not required to understand the unfamiliar concepts. They could focus on their writing and relevant language features only. They did not have to create any background knowledge about the topic to write about. Therefore, they could learn to write more quickly and effectively. Hence, in developing writing skills, instructors may set familiar topics for students. The instructors may assign students to write about their daily routines or everyday life or personal opinions about topics they know very well such as something about Thailand or within their culture.

The training of how to use the platform may be another factor to support or to stop students from posting. It was found that some students experienced technical problems when studying using the Schoology platform. They did not understand the instructions or the online lessons provided for them. Moreover, they could not find the area in the SNE where the assignments were placed. Thus, it is suggested that the instructors give tutorials of how to use the platform at the beginning allowing students to practice using the system before assigning them to post anything to ensure that they will not be stopped from writing to post by other reasons much more than their language problems.

6.5.4 Students/Learners

Regarding the overall research findings, the SNE is an effective way of learning. The students indicated that the SNE supported the face-to-face sessions of the course and brought a great improvement to their writing and many other English skills as well. The students found that it was useful in a number of dimensions e.g. it provided writing practice opportunities for students. Having more opportunity to write regularly and freely will gradually help students become more confident and they will be able to write fluently. According to the interview information, the students did not have sufficient practice in English writing prior to this course like the majority of Thai students in upper secondary level. It is therefore suggested that instructors may use this SNE intervention as an online practice of the lesson learned in other English courses and other subject courses if possible.

This study provides a sample of new dimension possibility on Thai educational system against the belief that the responsibility should be depending on and initiated by the teacher. However, the SNE provided positive effects that

promoted individualized learning as supported by peers without teacher mediation like in the fully SRL group. Having students look at other students' post as example of written tasks could provide many good writing styles to promote other students to easier start their writing with higher confidence. They may also leave or get feedback from their friends that made them know about their writing ability and mistakes. They also felt more comfortable to improve their writing following their peers' suggestions. Having seen other students worked on written posts made them learn by comparing their own works with their peers' writing and thought of how to integrate the language learned to improve their sentences or paragraphs to be in a better way of writing. Working this way, the students had a chance to see others' work, to share their ideas with others, to create new forms of sentences, and to edit their own written works more effectively (Ho & Usaha, 2013). University lecturers should include this SNE activity to the writing classes to provide a number of opportunities to write and lead to a large amount of writing experience to students who had never had any opportunity in write in second language in their daily life. One way to do this is to implement the SNE through any suitable social networking platform such as Schoology. This platform and others are also available online as a free of charge service.

6.6 Limitations of the Research Study

There were some limitations for the current study as illustrated below.

6.6.1 Limitations of the Participants

The sample in the current study was derived from Thailand undergraduate students enrolled in a limited number of courses in only one university. Therefore, the

participants in this study were limited in terms of country, number of courses, number of participants, and number of universities.

6.6.2 Limitations of Data Collection Instruments

The instruments for data collection employed in this study were the SNE, two kinds of tests, the questionnaire and the interview questions. The results would be more reliable if more instruments could be added, for example, classroom observation, online observation, teacher's journal, and student's journal.

6.7 Recommendations for Further Study

On the basis of the findings from the current study, the following areas might be investigated in further studies.

1. This study investigated the impact of the SNE using English 1 course content on English writing abilities and perceptions of mainly the first students in Nakhon Ratchasima province, Thailand. Replication studies should be conducted to explore the impact of the SNE treatment on the writing abilities and perceptions of students in other educational levels, students from other faculties, other English courses, other universities, or other provinces to reconfirm the effect of the SNE.

2. This research study employed a two-group pretest-posttest design. One group was named as a fully SRL group and the other group was assigned as a semi SRL group. Further studies should add more groups to enable a more precise comparison and to gain more accurate and more reliable results. For example, two groups may be assigned as the fully SRL groups and the other two groups may be assigned as the semi SRL groups.

3. This study emphasized on investigation of learners' writing abilities. Therefore, it would be useful to investigate deeply about other English skills, such as reading, speaking, listening, grammar, vocabulary, and dialogue completion. Moreover, a similar research study may be conducted to observe the effect of the SNE treatment on other integrated skills, such as reading-writing, or listening-speaking.

4. This study was implemented over a 30-hour period of online participation. The participants were required to study online materials and to post on the discussion pages by themselves for at least 1 hour a day. Future research should be conducted over different time periods to measure whether differences in time range may bring any different results using the SNE. For example, a study comparing 30 hours, 45 hours, 60 hours, and 90 hours should be investigated to discover whether there might be any difference resulting from different time allocations.

5. It is recommended that a similar study may be conducted by collecting different forms of qualitative data, such as writing logs, students' journals, teachers' journals or classroom observation. These research instruments may bring more in-depth information concerning the process of writing that students have developed.

6. This study investigated students' overall perceptions of the SNE from the questionnaire results. It is recommended that the impact of the SNE should be related to motivation to achieve the written tasks. A future research study may aim to observe how and what kind of motivation helps students to become effective writers by using the SNE.

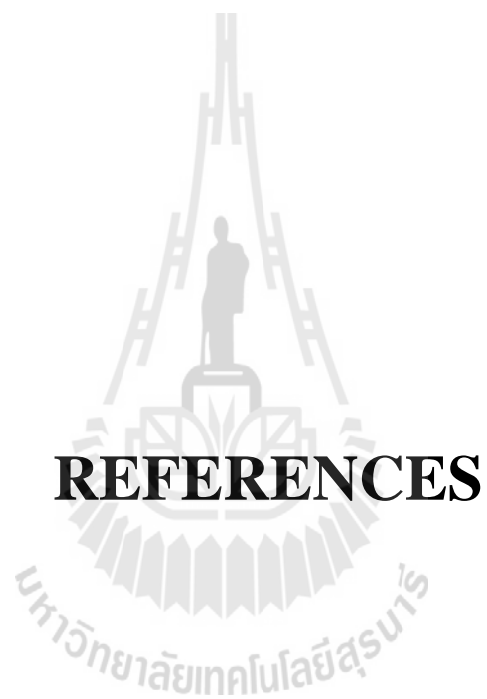
The underlining purpose of this research project was to fill the gap of linking theories and practice into the field of self-organized learning environment. It is obviously presented that the results were supportive to learner autonomy in numerous

ways. First, this study provided evidence which had been proved as effective results of the SNE that could be used to increase many skills of English, particularly writing skills. Moreover, it fostered many skills necessary for learning in the 21st century, such as critical thinking skills, problem-solving skills, self-organizing skills (Lian, 2012). The outstanding feature of this study was the balance of statistical results and the qualitative results received from the semi-structured interviews that went into the same direction. The online discussion practices had made the EFL students “see” and “understand” their own thinking and their peer’s ideas in the writing formats. At the same time, experiences of thinking and sharing encouraged these students to make their thinking visible to others. Therefore, it caused more awareness in thinking, reading or writing for the next time. This may be called “thinking about thinking” that is to create higher metacognitive skills in learning. They learned how to modify their learning strategies when they encountered problems during their reading or writing phrases.

Writing is one of the English skills that foreign language learners need to master. This study used the SNE to enhance collaborative online writing as a supplement to a mainstream course. It was found that students’ writing achievements were increased and their perceptions about the SNE were mainly positive. This study found that the fully SRL group received a greater impact on the students’ academic performance in comparison with the semi SRL group. Moreover, the results obtained from students’ interview showed that most of the students liked to work with others because they could see their friend’s work, and that helped them to create their own work by seeing their friends’ work as a contrast model. The fully SRL group had more confidence and amusement to write. They seemed to be happier. This made

them write with more confidence and they could produce more and longer written posts to interact with others. Moreover, the SNE encouraged students to interact with others and exchanged ideas which created a friendly and relaxing atmosphere. It also supported students' self-confidence to create written work and it could lower students' anxiety about all kinds of language mistakes. Results obtained confirmed that the SNE yielded a positive development on students' writing and also other English skill abilities that were not necessarily depending on teacher mediation or time spent on tasks. It also increased a positive emotional support to students in many situations.





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APPENDIX C

TOEFL iBT

Independent Writing Rubrics

(Educational Testing Service, 2014)

Scores	Description
5	<p>An essay at this level largely accomplishes all of the following:</p> <ul style="list-style-type: none">-effectively addresses the topic and task-is well organized and well developed, using clearly appropriate explanations, exemplifications, and/or details-displays unity, progression, and coherence-displays consistent facility in the use of language, demonstrating syntactic variety, appropriate word choice, and idiomaticity, though it may have minor lexical or grammatical errors
4	<p>An essay at this level largely accomplishes all of the following:</p> <ul style="list-style-type: none">-addresses the topic and task well, though some points may not be fully elaborated-is generally well organized and well developed, using appropriate and sufficient explanations, exemplifications, and/or details-displays unity, progression, and coherence, though it may contain occasional redundancy, digression, or unclear connections-displays facility in the use of language, demonstrating syntactic variety and range of vocabulary, though it will probably have occasional noticeable minor errors in structure, word form, or use of idiomatic language that do not interfere with meaning
3	<p>An essay at this level is marked by one or more of the following:</p> <ul style="list-style-type: none">-addresses the topic and task using somewhat developed explanations, exemplifications, and/or details-displays unity, progression, and coherence, though connection of ideas may be occasionally obscured-may demonstrate inconsistent facility in sentence formation and word choice that may result in lack of clarity and occasionally obscure meaning-may display accurate but limited range of syntactic structures and vocabulary
2	<p>An essay at this level may reveal one or more of the following weaknesses:</p> <ul style="list-style-type: none">-limited development in response to the topic and task-inadequate organization or connection of ideas-inappropriate or insufficient exemplifications, explanations, or details to support or illustrate generalizations in response to the task-a noticeably inappropriate choice of words or words or word forms-an accumulation of errors in sentence structure and/or usage
1	<p>An essay at this level is seriously flawed by one or more of the following weaknesses:</p> <ul style="list-style-type: none">-serious disorganization or underdevelopment-little or no detail, or irrelevant specifics, or questionable responsiveness to the task-serious and frequent errors in sentence structure or usage
0	<p>An essay at this level merely copies words from the topic, rejects the topic, or is otherwise not connected to the topic, is written in a foreign language, consists of keystroke characters, or is blank.</p>

APPENDIX D

TOEFL iBT

Converting Writing Rubric Scores to Scaled Scores

(Adapted from Educational Testing Service, 2014)

Writing Mean	Scaled Score
5.00	30
4.75	29
4.50	28
4.25	27
4.00	25
3.75	24
3.50	22
3.25	21
3.00	20
2.75	18
2.50	17
2.25	15
2.00	14
1.75	12
1.50	11
1.25	10
1.00	8
0.75	7
0.50	5
0.25	4
0.00	0

APPENDIX E

Perception Questionnaire

Adapted from Zumor et al. (2013)

Students' Perceptions of the Social Networking Environment (SNE)

Name Position:

Instructions: This questionnaire aims at exploring your perceptions regarding the use of SNE in teaching the English 1 course: advantages, limitations and suggestions for improvement. Your objective and truthful answers will help us get a realistic assessment of this experience.

Part 1: This questionnaire is divided into two major parts. Please answer the questions honestly. Your answer will not affect your grades for the English 1 course.

1. Level:		
2. Major:		
3. GPA:		
4. Number of online courses you have taken so far:		
5. How do you rate your computer literacy?	<input type="checkbox"/> Weak <input type="checkbox"/> Good <input type="checkbox"/> Very Good <input type="checkbox"/> Excellent	
6. Do you have a computer at home?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
7. Do you have access to the Internet at home?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
8. Where do you prefer to use the Internet for online learning?	<input type="checkbox"/> At home <input type="checkbox"/> At the university <input type="checkbox"/> At an internet café	
9. Do you enjoy talking with others about online learning?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
10. Do you agree with those who say that online learning is a waste of time?	<input type="checkbox"/> Yes	<input type="checkbox"/> No

Part II: For each of the statements below, please indicate the extent of your agreement or disagreement by ticking (✓) in the appropriate box.

Language Areas

Statements	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
1 The SNE helped me to improve my listening skills.					
1 The SNE helped me to improve my speaking skills.					
3 The SNE helped me to improve my reading skills.					
4 The SNE helped me to improve my writing skills.					
6 The SNE helped me to improve my spelling.					
7 The SNE helped me to improve my grammar.					
8 The SNE helped me to improve my vocabulary.					

Advantages

Statements	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
1 The SNE was more convenient for me than face-to-face learning.					
2 The SNE improved communication between students and teachers.					
3 The SNE made teaching and learning more effective because it integrates all forms of media, print, audio, video, and animation.					
4 I found the SNE interesting and useful.					
5 I liked the SNE because I could work according to my own pace.					
6 The SNE helped me to develop knowledge of computers and the Internet.					
7 I felt more confident when I used English online than when I used it in the classroom.					
8 The SNE helped me to use time effectively.					
9 I benefited from the feedback given by my peers through the SNE.					
10 I benefited from the feedback given by my instructor through the SNE.					
11 The SNE gave me access to authentic materials in the second language.					

Limitations

Statements	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
1 The SNE was difficult to handle and therefore frustrating to use.					
2 Slow Internet connectivity was a major problem I faced in using the SNE.					
3 I faced technical problems when I used the SNE.					
4 I preferred to learn from course book rather than from the course website.					
5 The SNE facilitated cheating and plagiarism.					
6 Asynchronous interactions through the SNE were less effective than face-to-face interactions in the classroom.					
7 I did not have a computer and therefore I found it difficult to use the SNE.					
8 The instructions provided on the SNE were difficult to follow.					

Suggestions

Statements	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
1 We should increase the number of online courses.					
2 We should increase the number of Internet labs.					
3 We should solve all technical problems.					
4 The SNE training should be provided to all students.					
5 We should reduce the number of online courses.					



APPENDIX F

Interview Questions for Students

(adapted from Ziden, 2007)

Question No.	Interview Questions
1	Did you think that the SNE has made a difference to your learning or English writing? Could you please tell me about the difference (if any)?
2	How did you think that the lectures in this course were supported by the SNE? Did the SNE support the lectures at all?
3	Did you think that your experience in using the SNE changed the way you learn or the way you write in any way?
4	Could you please explain why in some weeks you contributed more to the comments or the posts and in other weeks you just responded only once or twice? What did you think encouraged you to contribute more?
5	How did you feel when someone commented on your ideas or corrected your English writing?
6	In what way did you think your ideas changed during weeks 1-4 or other weeks and why? Or is there any shifting of ideas at all?
7	In what ways did you think that your performance in English writing changed during weeks 1-4 or other weeks and why? Or has there been any change in your English writing performance?
8	Did you have any other views relating to English writing using the SNE?

APPENDIX G

IOC Analysis of Writing Pretest/Posttest

Item	Statements	E1	E2	E3	E4	E5	IOC	Interpretation
1	Pre-tests Writing topic: An Impressive Moment	+1	+1	+1	+1	0	0.8	Acceptable
2	Post-tests Writing topic: A Frightening Moment	+1	+1	0	+1	0	0.6	Acceptable
3	Words: 120Words up	+1	-1	+1	+1	+1	0.6	Acceptable
4	Time : 1 Hour	+1	+1	0	+1	+1	0.8	Acceptable
5	Type of Writing: Essay Writing	+1	0	+1	+1	+1	0.8	Acceptable

IOC Formula: EX/N

IOC Value = $\frac{0.8+0.6+0.6+0.8+0.8}{5}$

5

$IOC = (0.8 \times 3) + (0.6 \times 2) = 2.4 + 1.2 = 3.6 / 5 = 0.72 \geq 0.5$

***IOC Value was 0.72 and it was more than 0.5, therefore these tests were acceptable to be used.

APPENDIX H

IOC (Index of item objective congruence) Analysis

Questionnaire Adapted from Zumor et al. (2013)

Students' Perceptions of the Enhanced Social Networking Environment (SNE)

Name Position:

Instructions: This questionnaire aims at exploring your perceptions regarding the use of SNE in teaching the English 1 course: advantages, limitations and suggestions for improvement. Your objective and truthful answers will help us get a realistic assessment of this experience.

Part I: User backgrounds

Statements	E1	E2	E3	E4	E5	IOC	Interpretation
1	+1	+1	+1	+1	-1	0.6	Acceptable
2	+1	-1	+1	-1	+1	0.2	Unacceptable
3	+1	+1	+1	+1	+1	1.0	Acceptable
4	+1	+1	+1	0	+1	0.8	Acceptable
5	+1	-1	+1	+1	+1	0.6	Acceptable
6	+1	+1	+1	+1	+1	1.0	Acceptable
7	+1	0	+1	+1	+1	0.8	Acceptable
8	-1	+1	+1	+1	+1	0.6	Acceptable
9	+1	+1	0	+1	+1	0.8	Acceptable
10	+1	+1	+1	+1	+1	1.0	Acceptable

Part II: Perceptions of Social Networking Environment

Language Areas

Statements	E1	E2	E3	E4	E5	IOC Value	Interpretation
1	+1	+1	+1	+1	0	0.8	Acceptable
3	+1	-1	+1	+1	+1	0.6	Acceptable
4	+1	+1	+1	+1	0	0.8	Acceptable
6	-1	+1	+1	+1	+1	0.6	Acceptable
7	+1	0	+1	0	+1	0.6	Acceptable
8	+1	+1	+1	+1	+1	1.0	Acceptable

Advantages

Statements	E1	E2	E3	E4	E5	IOC Value	Interpretation
1	+1	+1	+1	+1	0	0.8	Acceptable
2	+1	0	+1	+1	+1	0.8	Acceptable
3	+1	+1	+1	+1	+1	1.0	Acceptable
4	+1	0	+1	+1	0	0.6	Acceptable
5	+1	+1	+1	+1	-1	0.6	Acceptable
6	+1	+1	+1	+1	+1	1.0	Acceptable
7	0	+1	+1	+1	+1	0.8	Acceptable
8	+1	+1	+1	+1	0	0.8	Acceptable
9	+1	+1	0	+1	+1	0.8	Acceptable
10	+1	0	+1	+1	+1	0.8	Acceptable
11	+1	+1	+1	+1	+1	1.0	Acceptable

Limitations

Statements	E1	E2	E3	E4	E5	IOC Value	Interpretation
1	+1	+1	+1	+1	+1	1.0	Acceptable
2	+1	+1	0	+1	+1	0.8	Acceptable
3	0	+1	+1	+1	0	0.6	Acceptable
4	+1	+1	0	+1	+1	0.8	Acceptable
5	+1	+1	+1	+1	+1	1.0	Acceptable
6	0	+1	+1	0	+1	0.6	Acceptable
7	+1	0	0	+1	+1	0.6	Acceptable
8	+1	+1	0	+1	+1	0.8	Acceptable

Suggestions

Statements	E1	E2	E3	E4	E5	IOC Value	Interpretation
1	+1	+1	+1	+1	+1	1.0	Acceptable
2	+1	+1	+1	+1	+1	1.0	Acceptable
3	+1	0	+1	+1	+1	0.8	Acceptable
4	+1	+1	-1	+1	+1	0.6	Acceptable
5	0	+1	+1	+1	+1	0.8	Acceptable

$$\text{IOC} = \text{EX}/\text{N}$$

$$\text{IOC Value} = \text{Part1}=10 \text{ items}=0.6+0.2+1.0+0.8+0.6+1.0+0.8+0.6+0.8+1.0=7.2$$

$$\text{IOC Value} = \text{Part2}=8 \text{ items}=0.8+0.8+0.6+0.8+1.0+0.6+0.6+1.0=6.2$$

$$\text{IOC Value} = \text{Part3}=11 \text{ items}=0.8+0.8+1.0+0.6+0.6+1.0+0.8+0.8+0.8+0.8+1.0=9$$

$$\text{IOC Value} = \text{Part4}=8 \text{ items}=1.0+0.8+0.6+0.8+1.0+0.6+0.6+0.8=6.2$$

$$\text{IOC Value} = \text{Part5}=5 \text{ items}=1.0+1.0+0.8+0.6+0.8=4.2$$

$$\text{IOC Part1+2+3+4+5}=42 \text{ items}$$

$$\text{IOC Part1+2+3+4+5}=7.2+6.2+9+6.2+4.2=32.8/42=0.78 \geq 0.5$$

***IOC Value was 0.78 and it was more than 0.5, therefore this questionnaire was acceptable to be used.

APPENDIX I

IOC Analysis of Interview Questions for Students

(adapted from Ziden, 2007)

Statement No.	E1	E2	E3	IOC	Interpretation
1	+1	0	+1	0.67	Acceptable
2	0	+1	+1	0.67	Acceptable
3	+1	+1	+1	1.00	Acceptable
4	+1	+1	+1	1.00	Acceptable
5	+1	+1	+1	1.00	Acceptable
6	+1	+1	0	0.67	Acceptable
7	+1	+1	+1	1.00	Acceptable
8	+1	+1	0	0.67	Acceptable

Formula: $IOC = EX/N$

$$IOC \text{ Value} = \frac{0.67+0.67+0.67+1.0+1.0+1.0+0.67+1.0+0.67}{9}$$

9

$$IOC = 0.67 \times 5 = 3.35 + (1 \times 4) = 7.35 / 9 = 0.816 \geq 0.5$$

$$IOC = 0.81$$

***IOC Value was 0.81 and it was more than 0.5, therefore this interview questions were acceptable to be used.

APPENDIX J

Samples of SNE First Page

Course Profiles

The screenshot displays the Schoology interface for a course titled "English 101: Section 1". On the left, a navigation menu includes "Materials", "Updates 942", "Gradebook", "Badges", "Attendance", "Members", and "Analytics". The main content area features a post by Wisatchana Kasvijinda with the text "Everybody is somebody's daydream." and a post by THIRAT THEERATHIWANOR with the text "Love is not always everything.". On the right, there are sections for "Reminders" (10 ungraded discussion posts) and "Upcoming" (events for Saturday, September 13, 2014, and Sunday, September 14, 2014). Annotations with arrows point to the "942" in the navigation menu, the "Upcoming" section, and the left navigation menu.

942 indicates total numbers of recent update posts

Upcoming feed indicates assignments, due dates, and calendar events

Left side navigation allows learners to access their personal blogs, messages, apps, etc.

APPENDIX K

Users' Posts on the SNE

Total Posts and Page Views

	Fully SRL Posts	Semi SRL Posts
Total page views	10,781	11,390
Total comments	4,981	9,408

Number of Posts by Topic

Unit	Discussion topic	Fully SRL Posts	Semi SRL Posts	Fully & Semi SRL Total Posts
1	Homeschooling	269	884	1,153**
1	Home Alone	226	398	624
1	Can you read this?	174	52	226
1	English Class	124	107	231
1	English Speaking by Kid	183	373	556
1	Speak English	168	119	287
2	Sentence Adverbs	218	442	660
2	An Embarrassing Moment	275	366	641
2	I was really frightened!!	165	260	425
2	Around the Campfire	126	241	367
2	Personal Stories: My Life	230	73	303
2	The Worst Experience	59	41	100
2	Jealous	168	214	382
2	Sleepy	166	396	562
2	My Friend	182	261	443
4	Exotic Food	335	794	1,129**
4	Unusual Habits	126	101	227
4	Life of Astronauts	145	229	374
4	Life at SUT : VDO 1	89	359	448
4	Life at SUT : VDO 2	81	264	345
4	Life at SUT : VDO 3	72	284	356
4	Life at SUT : VDO 4	64	252	316
4	Life at SUT : VDO 5	75	283	358
4	Life at SUT : VDO 6	76	171	247
4	Life at SUT : VDO 7	74	123	197
4	Life at SUT : VDO 8	82	241	323
5	My Dream Vacation: Thailand	127	323	450
5	Thailand Wonders	122	243	365
5	The Monument of Thao Suranaree	164	560	724
5	Natural Wonders	233	388	621
5	Things to do in Bangkok	126	295	421
5	Superlative Adjectives	138	192	330
5	Group Discussion	119	79	198
Total		4,981	9,408	14,389

APPENDIX L

A comparison of numbers of posts between groups as counted by the system of SNE

No	Fully SRL		Semi SRL	
	St. No	Number of Post	St. No	Number of Post
1	1	67	1	36
2	2	146	3	12
3	3	121	4	212
4	4	134	5	187
5	5	122	6	151
6	6	-	7	152
7	7	151	8	177
8	8	8	9	153
9	9	156	10	153
10	10	151	11	177
11	11	158	12	152
12	12	138	13	167
13	13	102	14	150
14	14	157	15	174
15	15	116	16	152
16	16	156	17	153
17	17	149	18	377
18	18	106	19	160
19	19	126	20	177
20	21	111	21	131
21	22	110	22	151
22	23	68	23	177
23	24	107	24	263
24	26	144	25	155
25	27	209	26	155
26	28	157	27	173
27	29	135	29	159
28	30	143	30	156
29	31	151	31	209
30	32	101	32	151
	Fully SRL		Semi SRL	

No	St. No	Number of Post	St. No	Number of Post
31	33	162	33	151
32	34	164	34	164
33	35	117	35	151
34	36	58	36	160
35	37	129	37	164
36	38	111	38	151
37	39	131	39	166
38	40	143	40	153
39	41	137	41	13
40	42	121	42	259
41	43	47	43	406
42	44	150	44	154
43	45	148	45	152
44	46	135	46	157
45	48	107	47	152
46	49	76	48	182
47	50	142	49	156
48	51	42	50	158
49	52	121	51	163
50	54	78	52	163
51	55	132	54	151
Total		4,981		9,408

APPENDIX M

Writing Test Results of Fully SRL Group

Fully SRL Subject	Pre-test	Post-test	Difference
1	6.75	6.75	.000
2	3.25	2.75	-.500
3	7.25	8	.750
4	1.25	9.5	8.250
5	2.5	14.75	12.250
6	9.5	11	1.500
7	7.25	9.75	2.500
8	10.25	11.75	1.500
9	1.25	8	6.750
10	8.75	13.25	4.500
11	17	17.75	.750
12	8	19.5	11.500
13	12.5	11	-1.500
14	7.25	11.75	4.500
15	8	17.75	9.750
16	4.5	11.75	7.250
17	2.5	11	8.500
18	11	18.5	7.500
19	7.25	12.5	5.250
20	3.25	16.25	13.000
21	7.25	17.75	10.500
22	7.25	8	.750
23	12.5	11	-1.500
24	5.25	12.5	7.250
25	14.75	19.5	4.750
26	8	10.25	2.250
27	5.75	17.75	12.000
28	7.25	8	.750
29	7.25	11	3.750
30	7.25	15.5	8.250
31	12.5	21.75	9.250
32	7.25	11.75	4.500
33	7.25	14	6.750
34	11	17	6.000
35	7.25	17	9.750
36	5.25	14	8.750
37	25	26.5	1.500
38	8	14	6.000
39	11.75	16.75	5.000
40	8	11.75	3.750
41	7.25	13.25	6.000
42	7.25	9.5	2.250
43	11	15.5	4.500

Fully SRL Subject	Pre-test	Post-test	Difference
44	4.5	9.5	5.000
45	8	8.75	.750
46	8	16.75	8.750
47	12.5	19	6.500
48	7.25	14	6.750
49	4.5	14.75	10.250
50	7.25	12.5	5.250
51	8	15.25	7.250

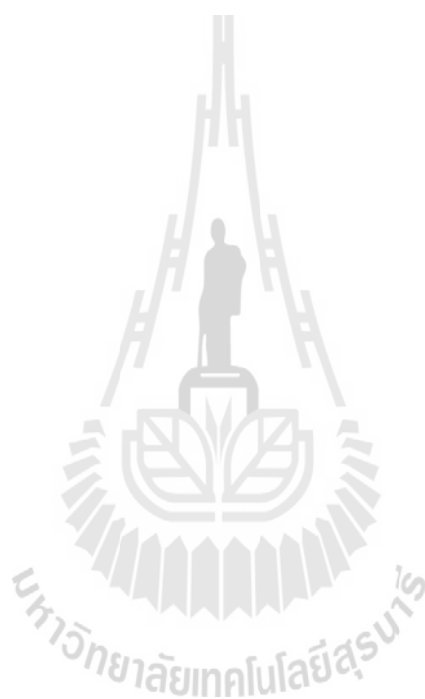


APPENDIX N

Writing Test Results of Semi SRL Group

Semi SRL Subject	Pre-test	Post-test	Difference
1	8.75	11	2.250
2	7.25	16	8.750
3	7.25	14	6.750
4	8.75	16.75	8.000
5	14.75	21.25	6.500
6	7.25	14	6.750
7	8	16	8.000
8	8.75	12.5	3.750
9	8	16.25	8.250
10	8.75	19.5	10.750
11	11.75	20.25	8.500
12	7.25	16.75	9.500
13	8.75	14	5.250
14	3.75	12.25	8.500
15	7.25	11.75	4.500
16	8	13.25	5.250
17	7.25	10.25	3.000
18	8	15.5	7.500
19	7.25	23.75	16.500
20	7.25	18.25	11.000
21	12.5	19	6.500
22	8	17.5	9.500
23	7.25	9.5	2.250
24	7.25	18.25	11.000
25	12.5	13.25	.750
26	11.75	17.75	6.000
27	19	25	6.000
28	7.25	11	3.750
29	25	26.5	1.500
30	7.25	8	.750
31	11.75	15.5	3.750
32	11	12.5	1.500
33	8	8.75	.750
34	7.25	11.75	4.500
35	8.75	12.5	3.750
36	16.25	17.75	1.500
37	8	13.25	5.250
38	15.5	20.25	4.750
39	11	15.5	4.500
40	15.5	19	3.500
41	10.25	15.5	5.250
42	8.75	14.75	6.000
43	8	14.75	6.750

Semi SRL Subject	Pre-test	Post-test	Difference
44	7.25	8	.750
45	19	23.75	4.750
46	16.25	21.75	5.500
47	7.25	17.75	10.500
48	7.25	17	9.750
49	7.25	17	9.750
50	7.25	13.25	6.000
51	9.5	17.75	8.250



APPENDIX O

OES test results of fully SRL group

Subject	Pre-OES	Post-OES	Difference
1	9.50	6.50	-3.00
2	11.00	20.00	9.00
3	11.50	18.50	7.00
4	13.00	16.00	3.00
5	14.00	21.00	7.00
6	14.00	14.00	.00
7	13.50	13.50	.00
8	11.00	14.00	3.00
9	7.00	5.00	-2.00
10	11.00	19.00	8.00
11	22.00	29.00	7.00
12	18.00	23.00	5.00
13	17.00	31.00	14.00
14	15.00	20.00	5.00
15	19.50	22.50	3.00
16	15.50	19.50	4.00
17	16.50	17.50	1.00
18	20.00	21.00	1.00
19	9.50	19.50	10.00
20	13.50	18.50	5.00
21	20.00	19.00	-1.00
22	13.00	20.00	7.00
23	22.50	22.50	0.00
24	16.50	26.50	10.00
25	23.50	27.50	4.00
26	14.00	19.00	5.00
27	17.00	22.00	5.00
28	15.00	16.00	1.00

Subject	Pre-OES	Post-OES	Difference
29	15.00	21.00	6.00
30	14.50	25.50	11.00
31	24.50	26.50	2.00
32	18.50	23.50	5.00
33	14.00	23.00	9.00
34	17.00	22.00	5.00
35	16.50	25.50	9.00
36	19.00	22.00	3.00
37	27.50	27.50	.00
38	16.00	13.00	-3.00
39	18.50	23.50	5.00
40	9.50	14.50	5.00
41	21.50	21.50	.00
42	17.50	11.50	-6.00
43	23.00	24.00	1.00
44	18.50	25.50	7.00
45	10.50	18.50	8.00
46	21.50	28.50	7.00
47	19.00	27.00	8.00
48	18.00	29.00	11.00
49	13.50	32.50	19.00
50	14.50	30.50	16.00
51	17.50	21.50	4.00

APPENDIX P

OES test results of semi SRL group

Subject	Pre-OES	Post-OES	Difference
1	15.00	21.00	6.00
2	17.50	24.50	7.00
3	16.50	19.50	3.00
4	8.50	20.50	12.00
5	26.50	19.50	-7.00
6	18.50	16.50	-2.00
7	17.50	21.50	4.00
8	25.00	24.00	-1.00
9	18.00	23.00	5.00
10	20.00	18.00	-2.00
11	15.50	20.50	5.00
12	17.00	26.00	9.00
13	15.50	19.50	4.00
14	9.00	18.00	9.00
15	20.00	21.00	1.00
16	16.50	15.50	-1.00
17	17.50	23.50	6.00
18	16.00	24.00	8.00
19	16.50	23.50	7.00
20	12.50	26.50	14.00
21	17.00	28.00	11.00
22	16.50	23.50	7.00
23	16.00	7.00	-9.00
24	16.50	25.50	9.00
25	22.00	24.00	2.00
26	23.50	24.50	1.00
27	26.50	27.50	1.00
28	14.00	21.00	7.00

Subject	Pre-OES	Post-OES	Difference
29	27.00	31.00	4.00
30	12.50	19.50	7.00
31	20.00	27.00	7.00
32	18.00	22.00	4.00
33	14.50	18.50	4.00
34	20.00	17.00	-3.00
35	17.00	17.00	0.00
36	21.00	24.00	3.00
37	20.50	22.50	2.00
38	23.50	28.50	5.00
39	21.00	23.00	2.00
40	21.50	32.50	11.00
41	19.00	30.00	11.00
42	12.00	20.00	8.00
43	18.00	22.00	4.00
44	20.50	20.50	0.00
45	20.00	29.00	9.00
46	24.00	26.00	2.00
47	15.00	23.00	8.00
48	11.50	13.50	2.00
49	15.50	21.50	6.00
50	17.00	19.00	2.00
51	20.00	24.00	4.00

APPENDIX Q

Examples of Writing Pretest

Writing Pretest 1

"An Impressive Moment"

My Impressive Moment... I travel every where with
family with my friend I feel happy if I meet
every body I was very happy because it was the family
Do not eat food have fun singing it was sprking

Writing Pretest 2

"An Impressive Moment"

My Impressive Moment mostly about my family
I was delighted when my sisters graduation
medicine Prim. My family was impressed by the
events of that day. Another event that imprescd me is
that I have had the opportunity to meet the princess.
I'm excited Now that I am in study pratom 6.

APPENDIX R

Examples of Writing Posttest

Writing Posttest 1

"A Frightening Moment"

A Frightening Moment is accident. Last year, I rode motorcycle for went school, I ride 120 km/h, it very fast because distance from my home to school are 25 kilometers. If I de 80 km/h, I will late. I rode motorcycle for my home on 07.30 A.M. I rode 5 kilometers from my home. What happen? Motorcycle ran pass in front of my motorcycle in near distance. I very frightened. I used brake for stop my motorcycle. But distance for my motorcycle to other motorcycle, brake is useless. My motorcycle crashed behind other motorcycle with 120 km/h. I and my motorcycle bounce off to middle street and other motorcycle bounce off to beside street. Luckily, Other cars and trucks don't crashed my again and I caught my motorcycle tight, I didn't bounce off from my motorcycle. If I bounce off from my motorcycle, My neck will break and I will dead. After My motorcycle crashed, someone helped me from middle street. I ache my hand and my leg very much. I pour alcohol on lesion, it very mordant. Ahhhh!! After I take my lesion, I reproach her and her accept. I very angry because my motorcycle can't ride. My motorcycle break for in front of part

Writing Posttest 2

"A Frightening Moment"

.....frightening moment for me was happen long times ago since...
I was 10 years old, I went to canal with my aunt for fishing and...
swimming. While I was jumping on a canal bank I slipped and...
fell into canal. In that time I couldn't swim and I was very...
frightened and I thought I was going to die because I can't breathe...
under water. Suddenly I heard my aunt yelled off and she pulled my...
shirt and took me up. Short time later she shook my body and...
asked "are you OK". I told her "I'm OK" but honestly I was...
so frightened and then we went back to home. My mom knew that...
and she complained my aunt and me. I realized that was really...
frightening but now I can swim so it's not going to happen to me...
again.

CURRICULUM VITAE

Miss Suchada Chaiwiwatrakul was born in Ubon Ratchathani, Thailand. She received a Bachelor of Arts (English) from Chiang Mai University, Chiang Mai, Thailand in 1997. After graduation, she worked as a teacher in English Program in a private school in Chiang Mai Province. While studying in Master's level, she had been working as a teaching assistant in a government university in Chiang Mai. She received a Master of Education (TESOL) from Chiang Mai University in 2001. Her master thesis topic was "Implementation of Extensive Reading Activities to Enhance English Reading-Writing Abilities and Reading Habits of Mathayom Suksa 4 Students". After that, she has worked as a lecturer in Thai universities. In year 2011, she pursued her doctoral degree in English Language Studies, School of Foreign Language, Suranaree University of Technology, Nakhon Ratchasima, Thailand. Her research interests involve personalized learning, and virtual learning environments.