

Students' Strategy Use in the Online English Learning

Settha Kuama

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# บทคัดย่อ

งานวิจัขนี้มีวัตถุประสงค์เพื่อศึกษาการใช้กลขุทธในการเรียนภาษาอังกฤษแบบ ออนไลน์ ศึกษาการจัดการทางด้านอารมณ์ในการเรียนภาษาอังกฤษแบบออนไลน์ ศึกษาระดับ ความสัมพันธ์ระหว่างการใช้กลขุทธในการเรียนภาษาอังกฤษแบบออนไลน์กับผลสัมฤทธิ์ในการ เรียน และการจัดการทางด้านอารมณ์กับผลสัมฤทธิ์ในการเรียน และศึกษาปัญหาในการเรียน ภาษาอังกฤษแบบออนไลน์ กลุ่มตัวอย่างคือนักศึกษาระดับมหาวิทยาลัยที่เรียนภาษาอังกฤษแบบ ออนไลน์จำนวน 346 คน แบ่งออกเป็น 2 กลุ่ม ได้แก่ นักศึกษาที่ประสบความสำเร็จหรือนักศึกษาที่ ได้รับผลการเรียนหรือผลการสอบเป็นที่พอใจ (S) จำนวน 262 คน และนักศึกษาที่ไม่ประสบ ความสำเร็จหรือนักศึกษาที่ได้รับผลการเรียนหรือผลการสอบยังไม่เป็นที่พอใจ (U) จำนวน 82 คน กลุ่มตัวอย่างตอบแบบสอบถามระดับการใช้กลขุทธในการเรียนภาษาอังกฤษแบบออนไลน์ ได้แก่ กลขุทธด้านความกิด กลขุทธด้านการนำไปสู่ความสำเร็จ และกลขุทธด้านการเรียนภาษาอังกฤษแบบ ออนไลน์ รูปแบบและเนื้อหาในการเรียนภาษาอังกฤษแบบออนไลน์ ข้อมูลเพิ่มเติมเชิงคุณภาพได้ จากการสัมภาษณ์เชิงลึกและกระบวนการกระดุ้นเรียกคืนจากกลุ่มด้วอย่าง 10 คน ได้แก่ นักศึกษาที่ ประสบความสำเร็จ 5 คน และนักศึกษาที่ไม่ประสบความสำเร็จ 5 คน

ผลการวิจัย พบว่าระดับการใช้กลยุทธด้านความคิดและด้านการนำไปสู่ กวามสำเร็จของนักศึกษาทั้ง 2 กลุ่ม มีความแตกต่างอย่างมีนัยสำคัญ แต่ไม่พบความแตกต่างอย่างมี นัยสำคัญของระดับการใช้กลยุทธด้านการจัดการทรัพยากร ในส่วนการจัดการทางด้านอารมณ์ พบว่าระดับความเห็นของนักศึกษาทั้ง 2 กลุ่มมีความแตกต่างอย่างมีนัยสำคัญ นอกจากนี้ กลยุทธ ด้านความคิด กลยุทธด้านการนำไปสู่ความสำเร็จ และการจัดการทางด้านอารมณ์มีความสัมพันธ์กับ ผลสัมฤทธิ์ในการเรียนอย่างมีนัยสำคัญทางสถิติ กลุ่มตัวอย่างทั้ง 2 กลุ่มระบุว่าประสบปัญหาขณะ เรียนภาษาอังกฤษแบบออนไลน์ และพบความแตกต่างอย่างมีนัยสำคัญทางสถิติของปัญหาที่ผู้เรียน ทั้ง 2 กลุ่มประสบ ปัญหาซึ่งกลุ่มผู้เรียนที่ประสบความสำเร็จประสบมากที่สุดคือปัญหาเกี่ยวกับ เทคโนโลยี ปัญหาซึ่งกลุ่มผู้เรียนที่ไม่ประสบความสำเร็จประสบมากที่สุดคือปัญหาแรงจูงใจ ผู้เรียน มีความพอใจในรูปแบบบทเรียนและเนื้อหา โดยพอใจบทเรียนกำศัพท์มากที่สุด อย่างไรก็ตาม ผลการวิจัย พบว่าผู้เรียนทั้งสองกลุ่มมีความพอใจในระดับที่แตกต่างกันอย่างมีนัยสำคัญทางสถิติใน ด้านเนื้อหาบทเรียนไวยากรณ์ งานวิจัยนี้แสดงให้เห็นว่านักศึกษาที่มีความสามารถทางภาษาอังกฤษ ในระดับต่ำซึ่งขาดทักษะการเรียนแบบออนไลน์อาจไม่มีความพร้อมในการเรียนภาษาอังกฤษแบบ ออนไลน์

คำสำคัญ: ผู้เรียนที่ไม่ประสบความสำเร็จ การเรียนภาษาแบบออนไลน์ กลขุทธในการเรียน ภาษาแบบออนไลน์ ระบบการจัดการเรียนรู้ ปัญหาในการเรียนแบบออนไลน์ ผลสัมฤทธิ์ในการเรียน Thesis TitleStudents' Strategy Use in the Online English LearningAuthorMr. Settha KuamaMajor ProgramTeaching English as an International LanguageAcademic Year2015

## ABSTRACT

This study aimed to explore what online language learning strategies (OLLS) are used by online English students, to investigate students' perceptions of affection in online learning, to identify the relationships between OLLS use, affection in online learning and online English learning outcomes, and to examine students' perceptions of problems related to learning English online. The participants included 346 online English university students. The participants were divided into two groups; successful online English students (SLs, n=262) and unsuccessful online English students (ULs, n=84). Participants' rated their use of three online language learning strategies: cognitive, metacognitive, resource management, their perceptions of affection in online learning, problems related to online learning. Additional data from individual in-depth interviews and Stimulated Recall (SR) was gathered from 10 participants; 5 from each group.

The results revealed that there were significant differences between SLs and ULs use of cognitive and metacognitive strategies; however, no significant difference of resource management strategies was found. Regarding affection in online learning, there was a significant difference between SLs and ULs' level of agreement. Cognitive, meta-cognitive strategies, and affection in online learning had significant correlations with online English learning outcomes. Both groups agreed that when learning online, they encountered problems. The study also revealed that there were significant differences related to problems in online learning between SLs and ULs. SLs experienced problems associated with technology the most while ULs experienced problems associated with self-motivation the most. SLs and ULs were satisfied with contents of vocabulary lessons the most. However, both groups had significant different perceptions on contents of grammar lessons. The study suggests that low English proficiency students who lack online learning skills may not be ready for online English learning.

**Keywords:** Unsuccessful learners; online language learning; online language learning strategies; LMS; online learning problems; learning outcome

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## **LIST OF PAPERS**

This thesis is based on the following papers, which will be referred to in the text by their roman numerals:

- I. University Students' Perceptions of an Online English Language Course
- Kuama, S., & Intharaksa, U. (2016). University students' perceptions of an online English language course. *Proceedings of ICHiSS 2016: 8th International Conference on Humanities and Social Sciences*. National Defence University of Malaysia.(pp 226-336).Selangor, Malaysia.
- II. Is Online Learning Suitable for All English Language Students?
- Kuama, S., & Intharaksa, U. (In press). Is online learning suitable for all English language students? PASAA: Journal of Language Teaching and Learning in Thailand. (Accepted Manuscript, Publish in Volume 52: December 2016)



Prof. / Assoc. Prof. / Dr. /Mr. /Mrs,

Settha Kuama & Usa Intharaksa

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#### CONFIRMATION OF ABSTRACT ACCEPTANCE FOR 8th ICHISS 2016

Thank you for your kind interest in participating in the 8<sup>th</sup> International Conference on Humanities and Social Sciences (ICHiSS) 2016 "Innovation in Humanities and Social Sciences: Opportunities and Challenges" to be held on 27 – 29 May 2016 at The Hotel Royale Chulan Damansara, Selangor, Malaysia.

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The panel of evaluators is of the opinion that your paper does contain information linking your paper to one of the sub-themes of our conference. It will be better and more relevant if it shows linkage to the main theme of the conference which is "Innovation in Humanities and Social Sciences: Opportunities and Challenges". We hope, if possible, you will try to improve on this when you write your full paper.

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Should you have any inquiries or require further clarifications, kindly contact us at: <u>amnah@upnm.edu.my</u> and <u>norlaila@upnm.edu.my</u>.

Thank you for your kind cooperation and attention on the above matter. We look forward to see you at the conference.

'DUTY, HONOUR, INTEGRITY"

With best regards,

Organizing Committee of 8th ICHISS 2016

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No. 0512.28/

Chulalongkorn University Language Institute Prem Purachatra Building Phyathai Road, Patumwan, Bangkok 10330

June 14, 2016

Dear Mr. Settha Kuama,

Thank you very much for choosing our journal, *PASAA*, for your article entitled "Is Online Learning Suitable for All English Language Students?" as co-authored with Dr. Usa Intharaksa.

The editorial team finds that your article is interesting, providing potential pedagogical implications for the field of second/foreign language education. We are therefore pleased to inform you that your article will be published in *PASAA* (Vol. 52: December 2016).

We are privileged to inform you that *PASAA* is an international journal indexed in ERIC, ACI, and TCI(1). We look forward to receiving your future contributions to our journal should you prepare any manuscripts related to the fields of ELT/TESOL, applied linguistics, and language assessment and evaluation.

Yours sincerely,

Porme Solphalych

Pramarn Subphadoongchone, Ph.D. Deputy Director of Research Chulalongkorn University Language Institute

## **1. INTRODUCTION**

At the turn of 21st century, the role of technology in education has become more and more prominent due to its distinct characteristics (Chapelle, 1989; Kramsch, 2014). One of the most significant characteristics of technology is information accessibility; learners can get access anytime and anywhere. Consequently, course delivery is increasingly shifted from the traditional or face-toface classroom setting to an online one. Anderson (2008) defined online learning as the learning process that use Internet as a platform to access learning materials. Students are able to interact with the content, instructors, and other students, and students gain knowledge and new experiences in learning.

Online learning has rapidly gained popularity in all fields of education, including learning English (Vovides, Sanchez-Alonso, Mitropoulou & Nickmans, 2007). It has become an essential component of modern education in all fields including higher education because of the potential advantages of online learning in learning process (Appana, 2008; Dolence & Norris, 1995; Katz & Associates, 1999; Shopova, 2014).

Anderson (2008) pointed out that online learning provides numerous of benefits. For students, they could access the online course anytime when they are free and from anywhere they can access the Internet. Moreover, students are able to use the Internet to access up-to-date and relevant learning materials. Synchronous features allow students to interact with students and instructors in real time. In addition, it promotes communication with experts in the field of their study. With good online learning applications or software, students have an opportunity to participate in discussions, express opinions and share knowledge equally, regardless of classroom size and time (Harasim, Calvert & Groeneboer, 1997). It can help shy students to participate more in online learning environment and lead to students' satisfaction (Appana, 2008). Clarke and Hermens (2001) posited that online learning is learner-centered; learners can control their own learning pace, and learn independently to suit their learning style. Online learning also creates opportunities for active learning (Dolence & Norris, 1995).

Despite the benefits of online learning environments, students taking online courses may face challenges that they might never have encountered in a faceto-face learning environment (Tsai, 2009). These challenges include cognition, metacognition, technical anxiety, and learning style and preferences (Barnard, Lan, To, Paton & Lai, 2009; Hung, Chou, Chen & Own, 2010; Piccoli, Ahmad & Ives, 2001; Tyler-Smith, 2006; Vonderwell, 2003; Warschauer & Healey, 1998; Wood, 2002).

Relating to cognitive challenges learners need higher cognitive ability to deal with more multi-dimension learning tasks and complex contents (Tyler-Smith, 2006). Normally, online courses are equipped with dynamic functions, such as online exercises, audio, video and text downloads. Students learning online have to know how to click, drilldown, open new windows and save files. If learners lack the skills to make use of diverse information ranging from low to high quality and from relevant to irrelevant, they can be bombarded with information they do not know how to access in order to use them (Warschauer & Healey, 1998).

With regard to metacognitive challenges, learners need higher metacognitive abilities in online learning than in a face-to-face learning environment. Online learners have a lot of freedom in learning due to the lack of specific class schedules and attendance requirements, resulting in learners' total independence. Online learners, therefore, need to be more self-aware. They need to monitor their own learning by setting up learning schedules to make sure that they can catch up with the lessons. In addition, students need to have self-regulation to be able to follow the study plan. Research has shown that students with poor meta-cognitive skills appear to have less successful learning experiences in an online environment than they do in a face-to-face environment (Barnard, Lan, To, Paton & Lai, 2009).

The third challenge involves computer and Internet anxiety. According to Piccoli, Ahmad and Ives (2001), computer anxiety has a significant negative impact on learners' achievement. When a computer or network system is down, and cannot be used as normal, students feel frustrated because they might not be able to follow the lessons as planned. This causes anxiety for students who are less skilled in the technology (Saadé & Kira, 2009). Consequently, these students have no motivation to pursue their learning (Hung, Chou, Chen & Own, 2010). In addition, Conrad (2002) posited that students comfort and familiarity of the Internet-based learning must be obtained before the course started. Students need mental preparation for the upcoming tasks in a new environment; otherwise, the anxiety would increase.

In the areas of learning styles and preferences, the absence of a teacher and other students in an online environment may cause learners to feel that they are isolated (Vonderwell, 2003; Wood, 2002). Without teachers, when learners need immediate assistance with problems that arise, they might become frustrated and feel hopeless (Arbaugh, 2000; Thurmond, Wambach, Connors & Frey, 2002). Similarly, without their classmates, learners have no social interaction, which is important for the learners of all ages.

The numerous challenges students face in online learning has led to research on possible solutions. Previous research has revealed that learners' use of effective and appropriate online learning strategies has led to successful academic achievement (Fuller, Chalmers, & Kirkpatrick, 1994; Hattie, Biggs, & Purdie, 1996; Pintrich & Johnson, 1990; Shih, 2005; Zimmerman, 1998). Additionally, Solak and Cakir (2015) posited that the use of online learning strategies is essential because it simplifies online learning, helps students learn faster, more efficiently and effectively and more pleasurably.

Other related studies investigating challenges students face in an online learning environment revealed that students' computer anxiety, instructors' attitudes towards online-learning, flexibility, e-learning course quality, perceived usefulness and ease of use, and diversity in assessments are all critical factors affecting students' satisfaction and learning outcomes (Sun, Tsai, Finger, Chen & Yeh, 2008). Furthermore, the poor quality of the materials, design, and contents of an online course could have a negative effect on students' learning. In addition, there are some other factors affecting students' achievement in online learning. These factors include students' motivation and attitude towards online learning; interaction within online learning; technology and Internet quality and accessibility; computer skills; Internet and online learning skills; self-learning skills; and course and content quality and flexibility (Cantoni, Cellario & Porta, 2004; Kerr, Rynearson & Kerr, 2006; Sun, Tsai, Finger, Chen & Yeh, 2008). Similarly, a study by Song, Singleton, Hill and Koh, (2004) concluded that most students agreed that course design, students' motivation, time management, and convenience of online technologies impacted the success in online learning.

Online learning courses are rapidly developing and adopting at all levels of education (Hung, Chou, & Chen, 2010) in many countries around the world. In Thailand, many universities are offering online learning through Learning Management System (LMS). One of the universities in southern Thailand is also in the process of a shift to using more online learning environments. This university tries to motivate all faculties to offer more online courses. The Department of Languages and Linguistics in the Faculty of Liberal Arts has been using an online English course, Preparatory Foundation English for almost 10 years. First year students whose Ordinary National Education Test (ONET) English scores are equal to or less than 30% are required to enroll in this course as a pre-requisite for taking Fundamental English courses.

The management of the course is based on a self-directed learning approach. No classroom instruction is provided. Instead, throughout the semester, during a time and at a place of their preferences, students need to log in to Learning Management System (LMS) and complete learning tasks. It is a fully online language learning mode. Grades are given for the course based on students' performance on the midterm (35%) and final examination (35%), completion of listening, vocabulary and grammar lessons (28%), and 60 hours of attending English self-learning program "Tell Me More" (2%). Students who obtain scores of 50% or more earn a score of "Satisfactory" (S); those who obtain less than 50% earn an "Unsatisfactory" (U). During the Academic Year 2012-2015, the number of students enrolling in this course was approximately 2,300 to 2,800 and the number who did not pass the minimum requirement was continually increasing from 11% in the academic year 2012 to 20% in the academic year 2014 (Department of Languages and Linguistics, 2016).

Possible learning difficulties students may encounter in an online learning environment requires that attention be paid to how to help students cope with these difficulties. Previous research has revealed that learners' use of effective and appropriate online learning strategies will lead to successful academic achievement (Fuller, Chalmers, & Kirkpatrick, 1994; Hattie, Biggs, & Purdie, 1996; Pintrich & Johnson, 1990; Shih, 2005; Zimmerman, 1998). With regard to Online Learning Strategies (OLS), they are defined as students' ability to understand and control their learning by employing a range of cognitive, meta-cognitive, and resourcemanagement skills in order to achieve online learning goals (Hu & Grambling; 2009; Schunk & Zimmerman, 1994; Tsai, 2009; Zarisky & Styles, 2000). Solak and Cakir (2015) pointed out that employing effective online learning strategies is essential because, in doing so, students learn faster, have more pleasure, and learn more efficiently and effectively.

Some studies related to online learning were conducted at the university in southern Thailand (Sukseemuang, 2009; Waemusa, Srichai & Wongphasukchote, 2008). Sukseemuang (2009) explored the relationship between student academic success in coursework, student preference for self-directed (online) or (teacher-directed) face-to-face classroom settings and instructional strategies of pedagogy and andragogy in a university course offering. Waemusa, Srichai and Wongphasukchote (2008) examined students' responsibilities in learning English in a self-directed online course. However, none of them has focused on using OLS and student's perceptions of the online English course.

Accordingly, the current study was conducted to examine students' use of online language learning strategies (OLLS), and the relationship between OLLS and student learning outcomes as well as students' perceptions of the online English course. The study serves to fill a gap in the literature, focusing on the use of OLLS and challenges perceived by university students after completing an online English course. The results present new information on students' perspectives of the OLLS. The discovery of challenges as perceived by the students can help guide faculty and course administrators in developing and improving the online English course and provide students with important insights into how to be a more successful online student.

## 2. OBJECTIVES OF THE STUDY AND RESEARCH QUESTIONS

The purpose of this study was to explore online language learning strategies students used and the differences of strategies used by successful and unsuccessful online learners as well as the relationship between OLLS and academic outcomes. It also aimed at investigating students' perceptions towards the problems, the design and contents of the learning tasks in this particular online English course.

The research questions being addressed in this study were:

1. What kind of online language learning strategies do successful and unsuccessful learners employed?

2. Are there any significant differences in online language learning strategies use between successful and unsuccessful learners? If so, what are those differences?

3. Are there any significant relationships between the use of online language learning strategies, affection in online learning and online English learning outcomes?

4. Are there any significant differences between successful and unsuccessful learners' perceptions of problems related to online learning? If so, what are those differences?

5. Are there any significant differences between successful and unsuccessful learners' perceptions towards the design and content of learning tasks in an online course? If so, what are those differences?

## **3. SIGNIFICANCE OF THE STUDY**

With the rapid technological advances in the 21st century, the current study aims to contribute to the research on online language learning strategies.

It is expected that the findings of this study would add some new information and knowledge to the literature on online language learning strategies frameworks and provide knowledge about online language learning strategies employed by successful and unsuccessful online students.

The findings can reveal types of strategies these students employ to aid their language learning, the strategies they prefer to use more and less, and challenges in online learning environment that affect their online learning. Results could shed light on strategies that can help students achieve their study goals, and overcome the challenges they face in online language courses.

Moreover, it might provide a basis for other researchers to collect more empirical data to be able to help instructors, educational institutions, instructional designers and educators to prepare for an effective instructional online-based curriculum.

### **4. LITERATURE REVIEW**

This review of literature is divided into four parts.

## 4.1 Online learning

Internet technology has been widely used in this age of globalization and has had a tremendous impact on people's ways of life, work and education (Cox, 2013). In the educational context, the Internet platform has been used as an alternative teaching method. Teachers and students who participate in online learning environment need to realize the unique features of online learning which are different from face-to-face setting, as pointed out by Miller and Miller (2000), and Tsai (2009). The first feature is that online learning is associative, nonlinear and hierarchical in nature. In other words, Internet and online software create dynamic learning interfaces through multiple links and websites that Internet users or online learners can utilize in order to access or search for information related to their interests. This makes learning more convenient and interesting when compared to learning from traditional textbooks. However, such a process can be endless and more complicated because of the drill down features such as when students access various sub-items of online learning materials and do online exercises and quizzes ; therefore, it can be problematic for learners who are unfamiliar with computers and the Internet. Learners might be overwhelmed with too much information and feel anxious while participating in online lessons because they have to deal with technology and subject content at the same time. Clearly, online learners require additional skills to cope with a much more dynamic learning environment.

The second feature, because of the enhancement of multimedia capability, such as video, audio, online dictionary, and download functions, is that students are likely to encounter an abundance of information resources available on the Internet. They will require appropriate skills to search for information. Another higher level of skill they should have is the ability to evaluate information to determine if it is meaningful to them. A lack of skill in this area can also lead to an increase in learner anxiety.

The next feature of online learning is students/teachers have to deal with communication opportunities, namely, synchronous and asynchronous. Synchronous communication, for instance, online chat rooms, internet conference, audio call and video call, offers real-time interaction between teachers and students, students and students and possibly other unknown knowledgeable persons. In addition, asynchronous communication, occurring through e-mail, blogs, and webboards, provides no real-time opportunities. They are platforms that teachers and learners, and learners and other learners can indirectly interact in online learning. Both synchronous and asynchronous communication could replace direct interaction and at the same time reduce anxiety as face-to-face environment. Students should acquaint themselves with these features. However, according to Petrides, (2002)

without face-to-face interaction in online learning, some learners might be frustrated as they may need immediate responses from teachers when problems arise.

The last feature of online learning is flexibility in terms of both time and space. Students gain more freedom in learning due to no specific schedule and or location. With such freedom, students need to discipline themselves much more than they do in face-to-face classrooms. A lot of learners are still not aware of their responsibilities and are not prepared to learn in an online environment. For example, they should learn how to set learning goals and plan study schedules (Hsu & Shiue, 2005). They also need to have time management skills to keep up with the class, complete tasks on a timely basis and be active contributors while in online learning (Garrison, Cleveland-Innes & Fung, 2004).

## 4.2 Online language learning challenges

Because of the distinct characteristics of online learning, when learning is shifted from face-to-face to more self-directed, self-regulated learning, online learners face some challenges. E-learning challenges can be grouped into four major categories (Andersson & Grönlund, 2009; Sun, Tsai, Finger, Chen & Yeh, 2008).

#### **4.2.1 Individual challenges**

These challenges include individual characteristics, personal skills and ones' own abilities to cope with e-learning. In terms of students' individual challenges, they face the problems related to motivation, attitude, conflicting priorities, academic confidence, technological confidence, social support and support from home. Each student might have anxiety with computers and Internet.

#### 4.2.2 Course challenges

The quality of course design, course flexibility and support provided are the three main areas found in course challenges/problems. These challenges cannot be controlled by students. In terms of course design and flexibility, the challenges are related to the curriculum, pedagogical model, content, and learning activities, localization of the online learning system that suits with students' culture and other conditions, and flexibility. Regarding support provided the responsible parties such as faculty and university administrators should be aware of their responsibilities to fully support students. Lack of these supports could create serious problems in online learning processes because students are left behind and finally they might give up learning. Instructors can also be the key problematic in this type of problems because they might not be good at teaching online. They should change their own attitude towards e-learning and provide timeliness response in order to give sufficient support for students in online learning environment which is different from face-to-face classroom.

### **4.2.3 Contextual challenges**

Two of the main areas in terms of contextual challenges are "organization" and "society/cultural". Regarding the organization aspect, in order to avoid problems, organization should maintain knowledge management, funding, and training of teachers and staff. For the society and cultural aspects, teachers and students need to realize their role and possess positive attitudes about e-leaning. It is also very important to follow rules, regulations and maintain ethics in online learning environment. Furthermore, the interaction with others in and online learning environment could also create problems and impact learning performances. Another key important factor is diversity in assessment. Proper and valid assessment in this learning environment is needed.

## 4.2.4 Technological challenges

Technology is considered one of the most problematic areas. Challenges include accessibility, cost, software and interface design, infrastructure, and the appropriateness of technology provided for online learners. This kind of challenge also focuses on technology quality and Internet quality.

The challenges in online learning are summarized in Table 1.

Variables	Sun et al. (2008)	Cantoni et al. (2004)	Paechter et al. (2010)	Kerr et al. (2006)	Andersson & Gronlund (2009)	Song et al. (2004)
T 2 / / / 1 1 1 1					/	1
Learners' motivation towards online learning					v	v
Learners' attitude towards online learning				$\checkmark$	$\checkmark$	
Interaction within online learning	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Technology & internet quality /accessibility	$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$
Computerized skills				$\checkmark$		
Internet/online learning skills				$\checkmark$		
Self-learning skills		$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$
Course & Content quality/Flexibility	$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$

**Table 1**: Summary the challenges in online learning by various researchers

### 4.3 Online learning strategies (OLS)

Due to the distinct characteristics of online-learning described earlier, it can be clearly seen that learners might face challenges in an online class because the involved features are different from those in a face-to-face classroom. Consequently, those learners need certain learning strategies in order to successfully cope with the new learning mode (Hu & Grambling, 2009; Zariski & Styles, 2000).

There have been a considerable number of studies investigating learning strategies in face-to-face classroom contexts. However, once online learning environments became popular, some scholars started to pay particular attention to the online learning environment. They were trying to study what strategies that help students achieve online learning. Hu and Grambling (2009), Pintrich, Smith, Garcia, and McKeachie (1991), Tsai (2009), and Zarisky and Styles (2000) coined their online learning strategies in a slightly different manner, but in essence those strategies share more or less the same characteristics. To achieve online learning goals, students need to control their learning by employing the following strategies:

**4.3.1. Cognitive strategies** are defined as the behaviors to acquire knowledge while engaging in the learning process. These behaviors include selection, acquisition, construction and integration of information. According to Cook and Mayer, 1983; Payne, 1992; Pintrich, Smith, Garcia and McKeachie, 1991 and Puzziferro, 2008, cognitive strategies are sub-divided into other 5 strategies.

1) Rehearsal strategies are activities that learners employ for identifying important elements of the provided materials, selecting and encoding information in a verbatim manner such as copying out, re-reading, memorizing, listing concepts, putting special marks, underlining and taking notes (Hu & Grambling; 2009; Simsek, 2006; Zarisky & Styles , 2000).

2) Elaboration strategies are the ways learners use cognitive skills to go beyond the given content in order to make meaningful information. They also build connections between information given in the learning material and prior knowledge through various activities such as editing notes, comparing reading assignments with lecture notes, summarizing, paraphrasing, and finding their own examples from real-world events and problems (Hu & Gramling, 2009; Talbot, 1997).

3) Organization strategies are the activities that learners do to rearrange or restructure the content to arrive at a new structure or construct internal connections among information given in learning material such as re-grouping, connecting pieces and generating concept maps (Hu & Gramling, 2009; Simsek, 2006).

4) Comprehension/Critical thinking strategies refer to the ability of learners to apply their existing schema to new situations so as to solve problems, make decisions and evaluate information based on standards or knowledge (Miltiadou & Savenye, 2003). This activity involves high levels of cognitive abilities to process the information provided in an open-ended learning system, especially in the Internet environment (Tsai, 2009).

5) Internet skills refer to students' basic skills employed for successfully undertaking online learning tasks such as online searching skills and online communication skills (Tsai, 2009).

**4.3.2 Meta-cognitive strategies** refer to the ways learners monitor their cognitive processes by preparing and planning to learn as well as regulating and evaluating their learning process (Pentrich et. al, 1991). Meta-cognitive strategies are sub-divided into 7 strategies.

1) Self-regulation/volitional strategies refer to a learner's awareness and control of cognition (Pintrich et al., 1991) in order to set a goal and manage one's own learning performance. In other words, it is a conscious effort, supported by determination or extrinsic motivation, to persist in one's pursuit of learning goals and resist temptation and stifle impulses to abandon those goals.

2) Time management strategies are activities learners employ to schedule, plan, and manage their study time. These strategies also include learners' active time management skills to follow their online learning schedule and finish the tasks (Hu & Grambling, 2009; Tsai, 2009).

3) Goal setting strategies refers to students' determination to achieve target results of online learning tasks (Hu & Grambling, 2009).

4) Self-monitoring/Self-management strategies refer to students' intentional observation and record keeping of behavior, cognition and motivation of learning so as to set proper goals and self-monitor their progress towards attaining those goals (Hu & Grambling 2009; Tsai, 2009).

5) Self-evaluation strategies refer to students' ability to make selfjudgments about their learning performance (Hu & Grambling, 2009)

6) Concentration/effort regulation strategies are students' ways of making effort and giving attention in order to prevent being distracted by (such as entertainment or uninteresting tasks) or attracted to online multimedia (Hu & Grambling, 2009; Tsai, 2009).

7) Self-awareness strategies refer to meta-cognitive knowledge about learners themselves as online learners and about the nature of e-learning so that learners can adopt appropriate behaviors to solve their own learning problems.

**4.3.3 Resource management strategies** are defined as the ability of learners to deal with learning resources such as their study environment and learning time and how to learn from peers or more knowledgeable others and seek help from peers and instructors (Pintrich & De Groot, 1990). This category is further divided into 3 sub-strategies.

1) Environmental management strategies refer to students' abilities to create a quiet learning environment free of visual and auditory distractions. Examples are selecting quiet laboratory times, organizing study materials (hardware and software), and arranging collaboration with peers (Hu & Gramling, 2009; Zarisky & Styles, 2000).

2) Help seeking strategies refer to students' ability to secure assistance from others or possessing the tools to cope with academic difficulties (Hu & Gramling, 2009; Zarisky & Styles, 2000).

3) Use of resources/resourcing strategies are defined as the ability of learners to use available resources in order to simplify their learning. This involves the use of help functions, an online dictionary and grammar check, and spell check.

## 4.4. Affection in online learning

According to Tsai (2009), affection in online learning refers to students' perceptions about the benefits they will gain from online learning. It also includes the willingness to learn by establishing positive attitude, motivation and ways to reduce anxiety in online learning environment. It is sub-divided into 3 sub-strategies.

1) Attitude is defined as students' perceptions of learning through the Internet and students' willingness to use the Internet for learning. Students are required to change the attitude toward face-to-face classroom setting which is different from online learning.

2) Motivation refers to students' willingness to learn based on goals and objectives and their learning preferences.

3) Internet anxiety refers to students' tools for reducing anxiety resulting from Internet use in online learning, for instance, updating, upgrading or changing characteristics of e-learning systems may put pressure on students when they are in online learning environment.

Table 1 summarizes OLS described above.

S	trategies	Researcher/Year	Pintrich, et al (1991)	Zarisky & Styles (2000)	Hu & Grambling (2009)	Tsai (2009)
		a) Rehearsal strategies	$\checkmark$	$\checkmark$	$\checkmark$	
ve		b) Elaboration strategies	$\checkmark$	$\checkmark$	$\checkmark$	
niti		c) Organization strategies	$\checkmark$	$\checkmark$	$\checkmark$	
Cog		d) Comprehension/Critical thinking strategies	$\checkmark$			$\checkmark$
		e) Internet skill		$\checkmark$		$\checkmark$
		a) Self-regulation/Volitional strategies	$\checkmark$	$\checkmark$		
0		b) Time management strategies	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
itive		c) Goal setting strategies			$\checkmark$	
0gn		d) Self-monitoring/Self-management strategies	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
sta-c		e) Self-evaluation strategies		$\checkmark$	$\checkmark$	
Me		f) Concentration/Effort regulation strategies			$\checkmark$	$\checkmark$
		g) Self-awareness strategies			$\checkmark$	$\checkmark$
	n	a) Environmental management strategies		$\checkmark$	$\checkmark$	
urce	geme	b) Help seeking strategies	$\checkmark$	$\checkmark$	$\checkmark$	
Reso	mana t	c) Use of resources/Resourcing strategies		$\checkmark$		

**Table 2:** Summary of online learning strategies used by various researchers

## **5. RELATED STUDIES**

This section consists of three main parts: 5.1) Studies related to perceptions and challenges faced by online language learning students 5.2) Studies of LLS using Oxford's framework and LLS in general under online language learning contexts, and 5.3) Studies of LLS under online language learning contexts using Motivated Strategies Learning Questionnaire (MSLQ) proposed by Pentrich et. al (1991), Online Learning Strategies Scale (OLSS) by Tsai (2009) and other tools

# 5.1 Studies related to perceptions and challenges faced by online language learning students

In Taiwan, Liaw, Huang and Chen (2007) conducted a survey on 30 instructors and 168 college learners' attitudes towards online-learning as it was considered one of the major problems in e-learning. The results indicated that instructors had very positive attitudes towards using online-learning as a learning tool. Most teachers also had good experiences with computers and Internet and had high competency levels using the tools. Students also expressed very positive attitudes towards e-learning. However, they had less capability in using Microsoft Office, particularly PowerPoint, and Word. This resulted in some difficulties in learning online. Students also expected teachers to assist them when they had problems with learning online.

In Taiwan, Sun, Tsai, Finger, Chen and Yeh (2008) looked at the critical factors affecting learners' satisfaction in e-learning. The study was conducted with 295 students from 16 public universities in Taiwan. The results revealed that learners' computer anxiety, instructors' attitudes toward e-learning, e-learning course flexibility, e-learning course quality, perceived usefulness, perceived ease of use, and diversity in assessments were the critical factors affecting students' satisfaction. In order to increase students' satisfaction and further improve the effectiveness of e-learning, it was important to provide training in order to give students better understanding of computers and related technology. Instructors played key roles in students' learning processes in either face-to-face teaching or learning environments or in distance learning environments. A well-designed delivery process, with

appropriate assistance to students for solving their curriculum and technical difficulties, can decrease e-learners' uncertainty and frustration with e-learning, further leading to better learning experiences. Hence, e- learning course quality significantly influenced e-learners' satisfaction.

In Thailand, Nooyod (2012) evaluated the satisfaction of the student in e-learning based study through LMS at the Rajamagala University of Technology Tawan-ok. The sample group used in this study was 44 third-year undergraduate students enrolling the Dynamic Web Programming course in 1/2012 and 2/2012 academic year. The study compared two groups of students in the same course, one using LMS, and the other using traditional instruction. The result indicated that the students who learned through LMS obtained higher academic achievement than students who learned in face-to-face classrooms. The students who learned through LMS were highly satisfied with designs and learning materials in LMS and the ways instructors instructed via the LMS. It could be concluded that e-learning through LMS was effective.

In New Zealand, Sun (2014) conducted a research to investigate perspectives of students taking a fully online language course. One hundred and forty students completed two online questionnaires. The findings revealed that major problems in online language learning were lack of opportunities for peer interaction and difficulty in participating and engaging with others, interactions being limited to small groups and knowing few classmates, poor self-motivated and self-directed learning skills. Furthermore, the researcher reported that students appreciated diverse learning materials embedded in the online language course.

Conducting a survey research in the USA, involving 76 graduate students, Song, Singleton, Hill and Koh (2004) gained insights into students' perceived challenges based on their online learning experiences. Interestingly, the findings showed that design of the course, comfort with online-technology, motivation and time management were the keys components to successful outcomes in online learning. The majority of the participants reported that the lack of community interactions, difficulty in understanding instructional goals and technical problems were challenges in their online learning environment. The biggest challenge for them was technical problems and it was suggested that these problems be minimized at the early stage of the learning.

In Zamzari, Adnan, Idris and Yusof's (2012) study, 100 students from various faculties in Universiti Teknologi Mara Perak, Malaysia were asked to give feedback in questionnaires about their perceptions of using online language learning materials, the challenges they faced when using online language learning materials and whether the online language learning materials promoted students' interest in learning English. The results indicated that most of the students used online language learning materials because it was the requirement not by their own interest. In other words, if it was not a must, they would not have done it. It was also reported that students faced difficulties related to Internet connection, difficulty in printing the materials and in understanding confusing learning materials. Finally, all of the problems and difficulties that they faced discouraged them in their learning. Additionally, the online language learning materials did not help promote students' learning interests.

# 5.2 Studies of LLS use under online language learning contexts using Oxford's framework and O'Malley's Learning Strategies framework

After the introduction of online instruction, researchers in the field of foreign and second language learning based their studies on Oxford's framework (Strategy Inventory for Language Learning: SILL) to investigate language learning strategies (LLS) within the online learning context.

The research done by Ganjooei and Rahimi (2008) in Iranian context showed that there was no significant difference between the LLS used in face-to-face environments and those used in online environments. However, many researchers argued that the different platforms of learning, particularly in an online setting, could account for the differences in LLS choices because e-learners use different learning styles and strategies (Azemi, 2004; Fedderholdt, 1997). In addition, differences may be based on different personalities, proficiencies and styles, with learners using different strategies to derive different kinds of benefits from the course.
In Iran, 2015 with online learning tool, Moodle (one type of LMS platform) by Khabbaz and Najjar (2015) examined to what extent Moodle-based language learning program could help learners to be autonomous and to find the relationship between distance LLS and language learning achievements. One hundred undergraduate students of Information and Technology (IT) participated in the study. The instruments used in the study were Oxford (1990)'s SILL, interviews and observations. The results revealed that the new technology prevented language learners from being autonomous due to students' unfamiliarity with its features that resulted in the unsatisfactory. This resulted in lower level of LLS use even the metacognitive one. Researchers of the study also suggested that studies should be conducted on technology-based language learning strategies using a new instrument to evaluate learning strategies since Oxford's instrument was designed for conventional language learning contexts.

Altunay, Campus and Antakya (2014) investigated the use of LLS by 63 Turkish distance university students through Oxford (1990)'s SILL and interviews. The findings revealed that students sometimes used all types of LLS, but rarely used affective strategies. In the interviews, the participants shared that they did not use affective strategies because they felt relaxed and less tense than when in a face-to-face classroom. However, the lower proficiency students still had more anxiety than the higher proficiency ones.

Ulitsky (2000) studied learning strategies used by 27 pre-service and in-service language teachers enrolling in a Master's program in language education in the United States. They were asked to perform specific designed tasks in a multimedia environment. SILL and the O'Malley's Learning Strategies framework were employed in the study. The results revealed that the participants appeared to be well acquainted with many of the general learning strategies, especially metacognitive and affective strategies, which kept them focusing on the tasks and motivating them to continue their learning when overwhelmed. The study suggested that the participants should be trained how to learn independently, how to use technology, and how to use appropriate strategies in an online learning environment. Based on what are presented above, there are a number of studies that adopt Oxford's (1990) taxonomy to explored general language learning strategies (LLS) that students used in the Internet/Web-based, distance and online contexts. However, Meurant (2006) indicated in his qualitative study that Internet-based language learning is qualitatively different from face-to-face learning, and mentioned that different language strategies apart from those outlined in the Oxford (1990) taxonomy are needed. Therefore, in online learning context, when exploring LLS use, studies should be considered a strategic online-learning framework (Tsai, 2009) rather than the framework that was developed purely from face-to-face classroom contexts.

5.3 Studies of LLS under online language learning contexts using Motivated Strategies Learning Questionnaire (MSLQ) proposed by Pentrich et. al (1991), Online Learning Strategies Scale (OLSS) by Tsai (2009) and other tools

Shih (2005) conducted in Taiwan on a one semester-long study to assess online learning strategies of thirty-seven college level Taiwanese EFL learners. Data were collected through observations and formal interviews. It was found that the research participants employed ten learning strategies in their online correspondence: a) responsive dialogue, (b) translation, (c) responding to tutors' questions, (d) asking tutors questions (e) explanation, (f) elaboration, (g) decision-making, (h) selfreflection, (i) meta-cognitive strategies, and (j) transfer. Moreover, the asynchronous nature of e-mail technology allowed Taiwanese students to participate in personal reflections; something they never did in conventional face-to-face classroom. It was also found that successful learners applied a larger variety of strategies and more frequently than their counterparts.

Liu and Feng (2011) attempted to find out the relationship between meta-cognitive strategies and online learning behaviors and test achievement with 93 students from thirteen different majors in Beijing University of Technology, China. The study adopted Wen's Questionnaire on English Learning Strategies. The results of the study concluded that the students in the high scoring group of test takers used more meta-cognitive strategies than the lower scoring group. The significant differences were from the time and frequency of online self-learning. In addition, the study found that the students who spent more time and engaged in online self-learning and who completed more online tests, achieved higher scores on average on the final examination. The researchers recommended that meta-cognitive strategies influenced students' online learning behavior and test achievements. Therefore, future studies should focus on strategy training. Strategy training for online self-learning was a new area for study and practice, particularly in the area of meta-cognitive strategies. The findings suggested that ability to engage in self- directed learning could help students improve their test scores.

Puzziferro's (2008) study conducted in the USA examined the relationship between self-regulated learning strategies and college students' learning outcomes and satisfaction with online learning using the Motivated Strategies for Learning Questionnaire (MSLQ) in the USA. The study involved 815 community college students enrolling in a Liberal Arts online course. The top strategies used were effort regulation followed by time and study environment; peer learning and help seeking were the least used strategies. It was also found that the online strategies that can predict students' grades were time and study environment. Students with higher grades seemed to manage the scheduling, planning and managing of their study time better than students with lower grades. This ability also appeared to contribute to learner satisfaction at the end of the online course. The researcher suggested future research investigating students' behavior for resource management strategies in other institutions due to lack collaboration among peers. This might due to various factors such as institutional culture and instructor cues.

Chang's (2013) study explored the effects of the use of self-monitoring strategies for study time and study environment. Furthermore, prediction of test score in a web-based course resulted from the motivational effects were examined. Ninety Taiwanese EFL National Pingtung University of Science and Technology freshmen from the faculty of engineering, agriculture and management acted as the participants. The modified version of the Motivated Strategies for Learning Questionnaire (MSLQ) by Pintrich et al., (1991) was used in the survey study. The results indicated that the students who adopted the self-monitoring strategy performed academically better than

those who did not on the test of general English proficiency but not on the coursebased test. Self-monitoring seemed to contribute to students' improvement in general English proficiency. Moreover, the results showed that the students who used the selfmonitoring strategy reported a significantly higher level of control of learning beliefs and task value by the end of the course. The study suggested that students should be strongly encouraged to apply self-monitoring strategies in a web-based learning environment as a way to build greater learner autonomy.

In Thailand, a study conducted by Samruayruen, Enriquez and Samruayruen (2013) aimed at finding out the correlation between the demographic information and self-regulated learning (SRL), and measured significant predictor of prior experiences on SRL using MSQL. It involved 88 students of both graduate and undergraduate students of Chulalongkorn University. The findings indicated that intrinsic goal and self-efficacy were correlated between cognitive strategy and study management, but test anxiety was not significantly related with any component. From the statistical analysis, multiple regressions indicated that Internet and hybrid-course experiences were significant predictors of study management. The results also indicated that learners who had more Internet experiences reported a significantly higher level of self-efficacy and cognitive strategy.

(2009)Using Tsai's Online Learning Strategies Scale (OLSS), Marimuthu, Chone, Heng, Nah, and Fen (2013) compared the online learning strategies of male and female diploma students who took an English language course at a college in Penang, Malaysia, One-hundred and eight students completed the questionnaire. The findings revealed no significant differences in the online learning experience between the male and female students. The motivation, self-monitoring and self-regulated strategies used were high in both the male and female groups. Internet anxiety impacted both groups moderately. In terms of relationships among the five variables, it was evident that motivation, self-monitoring, Internet literacy and concentration when engaged in online learning were positively correlated with each other. The researchers recommended conducting a study looking at other factors besides gender.

In conclusion, there are a number of studies examining online language learning using Oxford (1990)'s taxonomy. Still other researchers adopted Pintrich et. al's MSLQ (1991). This raised a question as to which instrument is more appropriate to measure online language learning strategies. Khabbaz and Najjar (2015) argued that Oxford's instrument has been designed for face-to-face language learning contexts. Supported by previous research, MSQL (Chang, 2013; Puzziferro, 2008) was used to measure sub-scale strategies of online language learning since it was designed to measure any specific context, which included the online learning context. Nevertheless, both Oxford's (1990) and Pintrich et., al 's (1991) instruments were not developed based on the consideration of distinct characteristics of online learning environment. Tsai's (2009) instrument seems to be more suitable for measuring online learning context strategies. However, it was designed for general online leaning purposes. Therefore, this study employed OLS used by Schunk and Zimmerman, 1994; Zarisky and Styles, 2000; Hu and Grambling; 2009; Tsai, 2009 and factors affecting learners' achievement in online learning explored by Cantoni, Cellario and Porta, 2004; Kerr, Rynearson and Kerr, 2006; Song, Singleton, Hill and Koh, 2004; Sun, Tsai, Finger, Chen and Yeh, 2008 as basic frameworks for developing OLLS questionnaire.

# 6. DEFINITION OF TERMS

The key terms used in this study were defined as follows:

a. Online language learning or online English course refers to the learning of English language via the Internet, Web-Based, Moodle, Learning Management System (LMS), etc.

**b.** Online language learning strategies (OLLS) refers to students' ability to understand and control their learning by employing a range of cognitive, metacognitive, and resource management in order to achieve online learning goals (Schunk & Zimmerman, 1994; Zarisky & Styles, 2000; Hu & Grambling; 2009; Tsai, 2009).

**c.** Online Language Learning Strategy Questionnaire (OLLSQ) is a self-developed instrument to evaluate student online language learning strategies based on Hu and Grambling (2009); Pintrich, Smith, Garcia, and McKeachie (1991); Tsai (2009); and Zarisky and Styles (2000).

**d. Stimulated recall technique (SR)** is a family of introspective research procedures which involves the retrospective verbalization of cognition. An event is observed and recorded. SR procedures include, participant interviews, the use of a stimulus to prompt recall of the event and require participants to verbalize the thoughts they had during the event (not reflections on the event) (Grass and Mackey, 2000).

e. Successful Online Language Students (SLs) refers to students earning "S" (Satisfactory) grades from an online English course, Preparatory Foundation English (890-100) in the first semester of 2015 academic year.

**d. Unsuccessful Online Language Students (ULs)** refers to students earning "U" (Unsatisfactory) grades from an online English course, Preparatory Foundation English (890-100) in the first semester of 2015 academic year.

# 7. METHODOLOGY

### 7.1 Research setting

The study was conducted at one of the universities in the South of Thailand. The course selected is Preparatory Foundation English (890-100), a remedial course designed for students obtaining Ordinary National Examination Test (ONET)'s score in English equal to or below 30 out of 100. These students need to take this pre-requisite course before taking the other two required English courses. The course is a learner self-taught approach, so it is designed for students to learn English by themselves via Learning Management System (LMS). They meet with an English instructor 3 times within a 15 week semester. The first two during the first two weeks of the semester are managed to provide students with handouts, materials and demonstrations of how to learn by themselves via LMS. Then the class meeting is done again before the midterm exam to review the contents to be covered in the midterm exam. This means that without coming to normal classes students need to do all the tasks by accessing the Internet.

The tasks of the course consist of three areas, namely, grammar, vocabulary and listening practice. In addition, a commercial Online English Learning Software, Tell Me More, is a part of the course. Students need a course book providing the content of grammar lessons to study along with video presentations. Students are required to complete all the assignments online according to the schedule, and take both midterm and final exams.

The evaluation of the course is based on taking the midterm examination (35%) and the final examination (35%); and doing learning tasks including listening lessons, vocabulary lessons and grammar lessons (28%), and Tell Me More (2%). Students who obtain 50% or more earn "Satisfactory" (S) grades; however, those who obtain less than 50% earn "Unsatisfactory" (U) grades.

#### 7.2 Participants

The population of this study involved 2,359 university students who enrolled in Preparatory Foundation English (890-100), an online English course in the first semester of the 2015 academic year and earned "S" or "U" grades. The sample size was calculated by Yamane Formula (1967). The participants were purposively selected from the top group and the bottom group based on the grades of an online English course they obtained from the first semester of the 2015 academic year. As a result the participants of the study were 453 students: 322 students receiving a grade of "S" and 131 students getting the "U" grades. Nevertheless, the participants who completed and returned the questionnaires were 346 students, 262 SLs and 84 ULs. Out of 256 SLs and 84 ULs, five from each group was randomly selected for Stimulated Recall (SR) with in-depth interview. SR is the process that stimulates the participants to answer the questions more accurately by recalling their memory. At the same time, the actual strategies used are observed (Gass & Mackey, 2000). Table 3 presents the characteristics of the participants, based upon the information reported in the survey.

General Information	SI	Ĺs	U	Ls	Total		
	n=262	%	n=84	%	N=346	%	
1) Faculty							
1.1 Natural Resources	35	13.36	20	23.81	55	15.90	
1.2 Medical Technology	5	1.91	0	0	5	1.45	
1.3 Nursing	19	7.25	0	0	19	5.49	
1.4 Traditional Thai Medicine	4	1.53	1	1.19	5	1.45	
1.5 Medicine	5	1.91	0	0	5	1.45	
1.6 Pharmaceutical	1	0.38	0	0	1	0.29	
1.7 Management Sciences	42	16.03	12	14.29	54	15.61	
1.8 Sciences	62	23.66	34	40.48	96	27.75	
1.9 Engineering	42	16.03	7	8.33	49	14.16	
1.10 Liberal Arts	14	5.34	6	7.14	20	5.78	
1.11 Economics	14	5.34	1	1.19	15	4.34	
1.12 Agro-Industry	10	3.82	3	3.57	13	3.76	
1.13 Dentistry	1	0.38	0	0	1	0.29	
1.14 Law	8	3.05	0	0	8	2.31	
2) Year of study							
2.1 Freshman	248	94.66	76	90.48	324	93.64	
2.2 Sophomore	13	4.96	6	7.14	19	5.49	
2.3 Junior	0	0	1	1.19	1	0.29	
2.4 Senior	1	0.38	1	1.19	2	0.58	

**Table 3 :** Characteristics of the participants (N = 346)

# 7.3 Instrumentation

In this study, two instruments were employed: 1) Online Language Learning Strategy Questionnaire (OLLSQ), and 2) SR with in-depth interviews.

To answer all research questions, OLLSQ was constructed based on the previous studies (Hu & Grambling, 2009; Pintrich, et al, 1991; Tsai, 2009; Zarisky & Styles, 2000) that investigated online learning strategies as well as the previous study related to students' perception of online learning (Andersson & Gronlund, 2009; Cantoni et al., 2004; Kerr et al., 2006; Paechter, Maier & Macher, 2010; Song et al., 2004; Sun et al., 2008). In addition, the Stimulated Recall (SR) with in-depth interviews was conducted for two main purposes. First, the SR was focused on observing the cognitive behaviors of the SLs and ULs when they learned English online. In addition, the SR helped the SLs and ULs to more accurately reply to the interview questions. The information from the SR and in-depth interview was used to triangulate the OLLSQ. Pseudonyms were used for all of them so that participants could not be identified.

#### 7.3.1 Online Language Learning Questionnaire (OLLSQ)

The questionnaire was divided into five parts: Part one) General information, Part two) OLLSQ for Cognitive, Meta-cognitive and Resources management strategies, Part three) OLLSQ for Affection in online learning, Part four) Perceptions towards the design and content of learning tasks in an online course, Part five) Perception of problems related to online learning.

### Part one: General information

This section consisted of 6 items which were used to elicit the participants' general information to confirm their identity. The questions included faculty, year of study, students' preference in English learning, number of times enrolled in Preparatory Foundation English (890-100), use of textbook or course book and, other sources or links that used to learn Preparatory Foundation English (890-100)

Part two: OLLSQ for cognitive, meta-cognitive and resources management strategies

This section, it aimed to elicit online language learning strategies' level of use. SLs and ULs had to complete 27 items and two open-ended questions. This section included three types of OLLS: Cognitive, Meta-cognitive, and Resource management strategies. Five-point Likert scale, ranging from 1 (never use) to 5 (always use) was employed.

Part three: OLLSQ for affection in online learning

In this section, there were 12 items and one open-ended question of OLLS regarding affection in online learning's level of agreement. The questionnaire items were adapted from Tsai, 2009. Each item of the questionnaire was measured by Four-point Likert scale, ranging from 1 (strongly disagree) to 4 (strongly agree).

Part four: Perceptions towards the design and content of learning tasks in an online course

This section included five main closed-questions, 18 sub-questions and five open-ended questions and focused on students' perceptions of the design and content of the learning tasks in the online English course. Each item of the questionnaires was measured by Four-point Likert scale, ranging from 1 (strongly disagree) to 4 (strongly agree).

Part five: Perceptions of problems related to online learning

In this section, nine closed-questions and one open-ended question were used to check problems students faced when taking an online course. Each item of the questionnaire was measured by Four-point Likert scale, ranging from 1 (strongly disagree) to 4 (strongly agree).

OLLS	Item no.	OLLS	Item no.
Cognitive strategies		Meta-cognitive strategies	
1) Rehearsal strategies	1,3	1) Self-	12
		regulation/Volitional	
		strategies	
2) Elaboration strategies	2,4,9	2) Time management	13,14,20
		strategies	
3) Organization strategies	6,7	3) Goal setting strategies	11
4) Comprehension/Critical	5,8	4) Self-monitoring/Self-	15,
thinking strategies		management strategies	
5) Internet skill	10	5) Self-evaluation	17,18
		strategies	
		6) Concentration/Effort	19
		regulation strategies	
		7) Self-awareness	16
		strategies	
Total	10	Total	10
Resource management		Affection in online	
strategies		learning	
1) Environmental	21,22	1) Attitude	2,3
management strategies			
2) Help seeking strategies	23,24,25,26	2) Motivation	1,4,5,6,7,8,1
3) Use of	27	3) Internet Anxiety	9,10,12
resources/Resourcing			
strategies			
Total	7	Total	12

**Table 4:** Summary of closed-questionnaire items classified by types of OLLS, content

 and learning tasks and problems in online learning

Perceptions towards the	Item no.	Perception of problems	Item no.
design and content of		related to online learning	
learning tasks in an online			
course			
1) Content of grammar	1,2,3	1) Lack of motivation in	1
lessons		online learning	
2) Content of listening lessons	1,2,3	2) Preference in studying	2
		English	
3) Content of vocabulary	1,2,3	3) Lack of interaction	3
lessons		between instructors and	
		students	
4) Content of Tell Me More	1,2,3	4) Unfamiliarity with self-	4
program		learning	
5) Overall designs	1-6	5) Lack of computer skills	5
		6) Insufficient computers	6
		for online learning	
		7) Connectivity of the	7
		Internet	
		8) No internet connection	8
		at home or at dormitory	
		9) Limitation of online	9
		operating system	
Total	18	Total	9

The questionnaire items were written in Thai in order to avoid language problems and to ensure the respondents clearly understood all the items. The content validity was checked by three experts who later rated the 66 items based on the criteria of index of Item Objective Congruence (IOC) proposed by Rovinelli and Hambelton (1977) as shown below.

+1 refers to a definite feeling that the item is a measure of objective

0 refers to an undecided feeling that the item is a measure of objective

-1 refers to a definite feeling that the item is a measure of objective

The data rated by the experts was calculated and only those with the range above 0.5 were kept and those below 0.5 were modified. The IOC was 0.89. The questionnaire had been revised before being tried out to check the reliability.

# 7.3.2 The Try-out of OLLSQ

The try-out of OLLSQ was conducted in December 2015 at a university in southern Thailand with 40 students. Twenty of them were from "Successful" student group and the other twenty were from "Unsuccessful" student group who enrolled and earned grades from the "Preparatory Foundation English course (890-100)" in the first semester of academic year 2015, but were not the samples of the study. Next, Cronbach's alpha index had been performed to measure the reliability of OLLSQ. The items which were below 0.6 of Cronbach's alpha would be modified (Dörnyei & Taguchi, 2009). The summary of reliability results is presented below:

Cronbach's Alpha	Number of Items
.902	27
.622	12
.896	18
.785	9
	Cronbach's Alpha .902 .622 .896 .785

**Table 5:** Summary of the results of reliability of OLLSQ items

To assess the OLLS's level of use, the statistical calculation of interval was used. Based on Phongwichai, (2008), five levels of interpretation of the questionnaire items in part two are as follows:

> Mean score 1.00-1.80 means the level of use is "Very Low" Mean score 1.81-2.60 means the level of use is "Low" Mean score 2.61-3.40 means the level of use is "Medium" Mean score 3.41-4.20 means the level of use is "High" Mean score 4.21-5.00 means the level of use is "Very High"

To assess the affection in online learning's level of agreement, perceptions towards the design and content of learning tasks in an online course and perception of problems related to online learning, the statistical calculation of interval was used. Based on Phongwichai, (2008), four levels of interpretation of the items in part three, four and five of the questionnaires are as follows:

Mean score 1.00-1.75 means the level of agreement is "Very Low" Mean score 1.76-2.51 means the level of agreement is "Low" Mean score 2.52-3.27 means the level of agreement is "High" Mean score 3.28-4.00 means the level of agreement is "Very High"

To assess the level of correlation between OLLS, affection in online learning and online learning outcomes, the interpretation of the correlation was based on Brown (1988, p. 150), three levels of interpretation of the questionnaire are as follows:

> Correlation score 0.10-0.29 means the level of correlation is "Low" Correlation score 0.30-0.49 means the level of correlation is "Medium" Correlation score 0.50-1.00 means the level of correlation is "High"

#### 7.3.3 The Stimulated Recall (SR) with in-depth interviews

Stimulated recall technique was used to triangulate the data from the questionnaire as well as to answer the first and second research questions. Stimulated Recall technique is a family of introspective research procedures through cognitive processes. It can be investigated by inviting the subjects to reflect their thinking when prompted by viewing a video of their behavior. Actually, general questionnaire elicits what people think or perceived as it is asking only a limited amount of information without explanation. "It should be augmented with additional measures such as semi-structured interviews and observation of behavior if richer and more precise inferences are to be made" (Mackey, cited in Lyle, 2002).

In Stimulated recall procedure, five SLs and five ULs online learners were invited to participate. This session was a volunteer work which prompted the participants by asking him/her to perform an actual online learning. The researcher prepared a laptop for participants to perform the online lessons while observing them performing the tasks. For example, in the part of listening comprehension lesson, while the participants were doing the learning tasks or doing quizzes online, the researcher observed the learners' behaviors. Some questions related to the actual strategies they used and problems and difficulties they encountered during learning via LMS were asked. The process was recorded by audio recorders.

### 7.3.4 Data collection procedure

The data was collected during January and February 2016, after the final examination of the first semester of 2015 academic year. The followings were the procedures of the questionnaire administration and SR with in-depth interviews.

### 7.3.4.1 Administration of OLLSQ

The researcher collected data using the OLLSQ written in Thai. The paper-based OLLSQ were distributed to students. In OLLSQ, the purpose of the study and the instruction were explained by the researcher. Respondents were asked to complete all the OLLSQ items honestly. The time allotted to complete the questionnaire was 15-20 minutes.

#### 7.3.4.2 Stimulated Recall (SR) and in-depth interviews

In order to get additional information from students, Stimulated Recall (SR) and in-depth interviews were conducted in February 2016 after OLLSQ were completed. For the SR and in-depth interviews, it took about 50 minutes for each participant. The questions related to OLLS' use, problems and challenges that both SLs and ULs encountered during the course were asked. While conducting the in-depth interviews, the interview session was recorded.

### 7.4 Data analysis

The overall response rate of the questionnaire was 76.38% (81.37% from SLs and 64.12% from ULs). Descriptive statistics was employed to analyze the data. To find out students' OLLS level of use and affection in online learning's level of agreement, perceptions towards the design and content of learning tasks in an online course and perception of problems related to online learning, means, and standard deviations were used. In addition, Point Biserial Correlation analysis was performed in order to find the relationship between OLLS, affection in online learning, and learning outcomes. The independent-sample t-test was employed to determine the differences between the mean scores of SL and UL's OLLS's level of use, affection in online learning's level of agreement, the level of correlation among OLLS, affection in online learning tasks in an online course and perceptions towards the design and content of learning tasks in an online course and perceptions towards the design and content of learning tasks in an online course and perception of problems related to online learning.

In addition, data from open-ended questions were classified based on the emerging themes. The data gained through interview was also analyzed according to the content analysis.

# 8. FINDINGS

The findings of this study are organized into four parts as follows:

#### 8.1 The OLLS use and affection in online learning's perceptions of

# SLs and ULs, and the differences in OLLS use, and perceptions of affection in online learning between SLs and ULs

Table 6 summarized the level of OLLS used by SLs and ULs.

Strategies	SLs (n=262)			ULs (n:				
	Mean	SD	Level of	Mean	SD	Level of	t	p-
			use			use		value
Cognitive	3.25	0.63	Medium	3.08	0.56	Medium	2.19*	.028
Meta-cognitive	3.61	0.62	High	3.41	0.63	High	2.66**	.008
Resources	3.13	0.69	Medium	3.01 0.66		Medium	1.44	.150
management								
Total	3.35	0.56	Medium	3.18	0.51	Medium	2.50**	.010

Table 6: OLLS employed by SLs and ULs

\*\* Statistically significant at 0.01, \* Statistically significant at 0.05

According to the mean scores showed in Table 6, the overall use of OLLS was in a medium level (SLMean=3.35, ULMean=3.18). The highest OLLS use of both SLs and ULs was meta-cognitive strategies (SLMean=3.61, ULMean=3.40) and was considered as a high level of use. Resource management strategies was the least used by SLs and ULs (SLMean=3.13, ULMean=3.01) and was considered as a medium level of use.

The result of t-test showed that there was a significant difference at the level of 0.01 (p<.01) for the level of use (t= $2.50^{**}$ ). SLs employed the overall OLLS significantly more than ULs (SLMean=3.35, ULMean=3.18). Among the three strategy types, significant differences were found at the level of 0.01 (p<.01) between the mean values of SLs and ULs for metacognitive strategies (t= $2.66^{**}$ ). There is no significant difference between SLs and ULs for resources management strategies. Both SLs and ULs used metacognitive strategies at the highest level of use while resources management strategy was the least used.

		SLs (n=262)			τ	JLs (n=			
Strategies	Sub-strategies	Mean	SD	Level of use	Mean	SD	Level of use	t	p- value
	Rehearsal	3.06	0.74	Medium	2.89	0.69	Medium	1.88	.06
	Elaboration	3.23	0.72	Medium	2.94	0.66	Medium	3.22**	.00
<i>i</i> e	Organization	3.04	0.86	Medium	2.91	0.85	Medium	1.23	.21
Cognitiv	Comprehension/Critical thinking	3.61	0.78	High	3.58	0.79	High	0.30	.76
	Internet skills	3.35	1.17	Medium	3.19	1.21	Medium	1.08	.27
	Total	3.25	0.63	Medium	3.08	0.56	Medium	2.19*	.28
	Self-	3.76	0.91	High	3.45	0.86	High	2.70**	.00
	regulation/Volitional								
	Time management	3.77	0.79	High	3.48	0.72	High	2.94	.00
	Goal setting	3.67	0.90	High	3.48	0.81	High	1.77	.07
tive	Self-monitoring&	3.98	0.92	High	3.68	1.04	High	2.41*	.01
ogni	management								
letac	Self-evaluation	3.48	0.89	High	3.36	0.82	Medium	1.09	.27
2	Concentration/Effort	3.14	1.25	Medium	3.01	1.04	Medium	0.92	.36
	regulation								
	Self-awareness	3.31	0.91	Medium	3.25	0.93	Medium	0.52	.60
	Total	3.61	0.62	High	3.41	0.63	High	2.66**	.00
t	Environmental	3.94	0.77	High	3.67	0.77	High	2.63**	.00
mer	management								
anage	Help seeking	2.68	0.89	Medium	2.67	0.85	Medium	0.11	.91
es mi	Use of	3.33	1.12	Medium	3.02	0.97	Medium	2.44**	.01
ourc	resources/Resourcing								
Res	Total	3.13	0.69	Medium	3.01	0.66	Medium	1.44	.15

Table 7: Sub-strategies of OLLS employed by SLs and ULs

\*\* Statistically significant at 0.01, \* Statistically significant at 0.05

Table 7 shows that SLs employed OLLS with the mean score between 2.68 and 3.98. ULs used OLLS with the mean score between 2.67 and 3.68. Self-monitoring/self-management strategies were used most by SLs and ULs (SLMean=3.98, ULMean=3.68), the environmental management strategies were second (SLMean=3.94, ULMean=3.67), and the third most used strategies were time management strategies (SLMean=3.77, ULMean=3.48). The least used by both groups was help seeking strategies (SLMean=2.68, ULMean=2.67). Among 15 sub-strategies, there were significant differences at the 0.01 level (p<.01) between SLs and ULs for 4 sub-strategies namely, elaboration strategies ( $t=3.22^{**}$ ), self-regulation ( $t=2.70^{**}$ ), environmental management ( $t=2.63^{**}$ ), and use of resources ( $t=2.44^{**}$ ).

Five SLs and another five ULs took part in an interview and in a SR. All of five SLs respondents reported that they always used metacognitive strategies. SLs allocated sufficient time to access the online course and finished the tasks consistently. One of the SLs mentioned:

"I always access the online lessons during the weekend because there is no distraction and I had plenty of free time. I determined in advance that what online quizzes and exercises I should complete. I noted my study schedule on the calendar to remind me and I strictly follow it." SL1

In contrast, all five ULs respondents lacked this type of strategy. Four ULs reported that they did not plan their study time and depended on friends to remind them when it was a time to study.

With regard to cognitive strategies, four of the SLs used all of cognitive sub-strategies, especially elaboration strategies. SLs took notes on important language structures and summarized each lesson for study. ULs did not report using these same strategies and stated that they were not able to summarize the lessons due to the abundance of information in the online course. One of the ULs pointed out that:

"There are so many, ....too many learning materials. I do not know where to start." UL1

In terms of resources management strategies, all the SL respondents reported that they used resources management strategies (environmental management and use of resources) to cope with various problems while learning English online. For example, they could find quiet places and good Internet connectivity. They could ask peers about language ambiguities when they had problems with computers. However, all of ULs reported that they rarely used resources provided in the online course (e.g. online Dictionary or other useful links) because they did not know how to find or use them.

	SLs (n=262)				ULs (1	n=84)		
affection	Mean	SD	Level of agreement	Mean	SD	Level of agreement	t	p- value
Attitude	3.10	0.52	High	3.04	0.53	High	0.97	.33
Motivation	2.85	0.39	High	2.64	0.39	High	4.15**	.00
Internet Anxiety	2.27	0.57	Low	2.26	0.62	Low	0.19	.84
Total	2.75	0.35	High	2.61	0.38	High	2.94**	.00

Table 8: Perceptions of affection in online learning reported by SLs and ULs

\*\* Statistically significant at 0.01, \* Statistically significant at 0.05

Regarding affection in online learning's perception, Table 8 presents the agreement level of SLs and ULs' perceptions of the online English course. Both SLs and ULs expressed a high level of beliefs in the usefulness and advantages of the online English course (SLMean=2.75, ULMean=2.61). According to the results of the three sub-affections, perceptions of attitude and motivation were at a high level of agreement while Internet anxiety was at a low level of agreement. There was, however, a significant difference at the 0.01 level (p<.01) between SLs and ULs (t=2.94\*\*). This indicates that SLs had a higher positive attitude and motivation compared to ULs.

One of the three sub-affections within the affection domain was perceived differently by SLs and ULs, with a significant difference at the 0.01 level (p<.01) for motivation  $(t=4.15^{**})$ .

According to the SR and interview, all of SLs had a very high level of motivation for learning and perceived that the online course was beneficial. Even though four of them preferred face-to-face classroom learning to the online course, they continued to study with low levels of anxiety in the online course because they believed the online course was beneficial. One of the SLs said,

"Even though, I prefer to study with teacher, but in my opinion, online learning is able to save my time because I can skip the parts that I have already known and study only a new topic. Sometimes teacher teaches what I have already known because he/she also needs to teach others students." SL2

In comparison, even though most of the ULs perceived the online course was beneficial, they felt that they were not familiar with this new learning environment and were quite anxious and worried about it. Therefore, they were not willing to learn via the online English course. Three of ULs mentioned that they did not think online course promoted self-learning. Below is a statement from one of the ULs.

"I have never taken an online course before. I feel so nervous and I am not sure I can solve the problems while learning online." UL2

# 8.2 The relationships between the use of OLLS, affection in online learning and the online English learning outcomes

Table 9 shows the results related to the relationship between students' use of OLLS and their learning outcomes.

Table 9: Relationships between OLLS's level of use and learning outcomes

G	Online learning outcomes						
Strategies rpb		Correlation level	p-value				
Cognitive	0.118*	Low	0.020				
Metacognitive	0.142**	Low	0.004				
Resources management	0.077	No correlation	0.075				
Total	0.134*	Low	0.006				

\*\*Correlation is significant at the 0.01 level (1-tailed)

\* Correlation is significant at the 0.05 level (1-tailed)

As shown in Table 9, overall OLLS and online English learning outcomes were significantly correlated at the low level ( $r=0.134^*$ , p<0.05). In other words, students who used OLLS more were likely to achieve better learning outcomes. Two OLLS, cognitive and metacognitive, were correlated with the online English learning outcomes at a low level ( $r=0.118^*$ , p<0.05 and  $0.142^{**}$ , p<0.01 respectively). Metacognitive strategies had the highest correlation among the three strategies. On the other hand, no significant relationship between the use of resources management and the outcomes were found.

~		Unline learning outcomes				
Strategy	Sub-strategy	<b>r</b> pb	Correlation level	p-value		
	Rehearsal	0.101*	Low	0.030		
	Elaboration	0.171**	Low	0.001		
itive	Organization	0.066	No correlation	0.109		
logni	Comprehension/Critical thinking	0.016	No correlation	0.383		
0	Internet skills	0.058	No correlation	0.140		
	Total	0.118*	Low	0.020		
	Self-regulation/Volitional	0.144**	Low	0.004		
	Time management	0.157**	Low	0.002		
è	Goal setting	0.095*	Low	0.039		
șnitiv	Self-monitoring/Self-management	0.137**	Low	0.005		
tacog	Self-evaluation	0.059	No correlation	0.137		
Mei	Concentration/Effort regulation	0.045	No correlation	0.203		
	Self-awareness	0.028	No correlation	0.303		
	Total	0.142**	Low	0.000		
t	Environmental management	0.140**	Low	0.005		
rces	Help seeking	0.006	No correlation	0.458		
esou inage	Use of resources/Resourcing	0.121*	Low	0.012		
R	Total	0.077	No correlation	0.080		

Table 10: Relationships between OLLS sub-strategies and learning outcomes

\* Correlation is significant at the 0.05 level (1-tailed)

\*\* Correlation is significant at the 0.01 level (1-tailed)

As illustrated in Table 10, eight out 15 of the OLLS were significantly correlated with the online English learning outcomes at the low level. Among OLLS's sub-strategies, the first three correlations were elaboration strategies ( $r=1.71^{**}$ , p<0.01), time management ( $r=0.157^{**}$ , p<0.01), and self-regulation ( $r=0.144^{**}$ , p<0.01). However, it should be noted that seven of the OLLS were not significantly correlated with the online English learning outcomes.

The results from SR and interview confirmed that SLs used both cognitive and metacognitive strategies in order to complete the online English learning tasks. For instance, all of the SLs took notes, made a summary of the online lessons and repeated some difficult lessons before taking mid-term and final examination. In addition, all of SLs tended to manage study time and be discipline. In contrast, none of the ULs used many cognitive and metacognitive strategies. One of the SLs stated:

"I am not worried that I would not have enough time to study. Just once a week, if you access the course...... take some notes and do the exercises immediately after reviewing the lessons, you will understand the lesson and you will not waste the time to review it again for the exam." SL3

**Table 11:** Relationships between affection in online learning's level of agreement and learning outcomes

		Online learning outcomes	
Sub-affections	<b>r</b> pb	Correlation level	p-value
Attitude	0.052	No correlation	0.166
Motivation	0.218**	Low	0.000
Internet Anxiety	0.010	No correlation	0.423
Total	0.157**	Low	0.000

\* Correlation is significant at the 0.05 level (1-tailed)

\*\* Correlation is significant at the 0.01 level (1-tailed)

As illustrated in Table 11, the correlation between affection in online learning's level of agreement and the online English learning outcomes was significant at the low level (r= $0.157^{**}$ , p<0.01). It indicates that students with a higher degree of motivation, but lower anxiety could have more possibilities to success in the online English course. Among sub-affections, motivation had the highest correlation with the online English outcomes (r= $0.218^{**}$ , p<0.01). No correlation was found in the rest.

Relevant comments stated in SR and the interviews corroborate the statistical results. The SLs said that they possessed a strong level of motivation to successfully complete the course; moreover, they had a good attitude towards online learning. One of SLs stated:

"This course helped me to be more responsible. Scores obtained from the tasks made me motivated. Arranging time-table to finish those exercises kept me motivated too and I did it with enthusiasm." SL4

In comparison with SLs, the ULs tended to lack positive attitudes and strong motivation as exemplified in the following statement:

"I felt motivated when I studied in the classroom. Class attendance motivated me to attend the class. The teacher can answer my question. In online learning environment no one can help me to clarify the points; I do not want to ask my friends because I trust the teacher more." UL3

### 8.3 Problems related to online learning

As shown in Table 12, nine problems related to online learning were reported. The overall students' perceptions of problems were in the range of high ( $\overline{X}$ = 2.56). Among the nine problems, the first three highest means of perceptions were limitation of online operating system ( $\overline{X}$ = 2.90), connectivity of the Internet ( $\overline{X}$ = 2.81), and lack of interaction between instructors and students ( $\overline{X}$ = 2.76). Lack of computer skills ( $\overline{X}$ = 2.17) was ranked as the lowest problems. The first three highest rated problems by SLs were limitation of online operating system ( $\overline{X}$ = 2.95), connectivity of the Internet ( $\overline{X}$ = 2.85), and lack of interaction between instructors and students ( $\overline{X}$ = 2.78). The lowest mean was lack of computer skills ( $\overline{X}$ = 2.15). For ULs, the first three highest means of perceptions were lack of motivation in online learning ( $\overline{X}$ = 2.79), connectivity of the Internet ( $\overline{X}$ = 2.73), and lack of interaction between instructors and students ( $\overline{X}$ = 2.68). The lowest mean was lack of computer skills ( $\overline{X}$ = 2.21).

The results of the t-test showed a significant difference at the 0.05 level (p < .05) between the mean scores of SLs and ULs in terms of the limitation of online operating system (t =  $2.59^*$ ) and lack of motivation in online learning (t =  $1.89^*$ ).

		Т	otal	S	SLs	τ	JLs	
Ra	nk Problems	(n=	=346)	(n=	262)	(n	=84)	t
		$\bar{\mathbf{X}}$	SD	$\overline{\mathbf{X}}$	SD	$\overline{\mathbf{X}}$	SD	
					52		52	
1.	Limitation of online operating system	2.90	0.82	2.95	0.79	2.68	0.87	2.59*
2.	Connectivity of the Internet	2.81	0.81	2.85	0.81	2.73	0.78	1.20
3.	Lack of interaction between instructor	2.76	0.68	2.78	0.68	2.68	0.64	1.23
	and students							
4.	Lack of motivation in online learning	2.66	0.75	2.63	0.77	2.79	0.64	-1.89*
5.	Unfamiliarity with self-learning	2.56	0.74	2.53	0.74	2.67	0.70	-1.48
6.	Preference in studying English	2.51	0.83	2.48	0.84	2.64	0.80	-1.58
7.	Insufficient computers for online	2.37	0.76	2.34	0.74	2.44	0.81	-1.06
	learning							
8.	No internet connection at home or at	2.32	0.81	2.30	0.82	2.40	0.78	-1.05
	dormitory							
9.	Lack of computer skills	2.17	0.73	2.15	0.73	2.21	0.75	-0.66
	Total	2.56	0.46	2.55	0.46	2.58	0.47	-0.44

Table 12: Students' perceptions of the problems related to online language learning

\* Statistically significant at 0.05

The responses from the open-ended questions supported the findings from the questionnaires. Six students commented that Media stream could be run on "Internet Explorer" only and this caused them inconvenience since it took time to install the "Internet Explorer" platform. They suggested that the administrators should enhance the operating system to be able to run on any Internet browser platform or to develop a way to run Media Stream via a smart phone. In addition, nine students mentioned that they lacked motivation in learning English online due to the complexity of learning tasks, access to lessons and materials, and the unattractive designs. The results from SR and interview were also consistent with the responses from the questionnaire, which revealed that SLs and ULs encountered the problems of limitation of online operating system, Internet connection and lack of interaction between instructors and students. Nevertheless, interaction between instructors and students seemed to be the most salient problem derived from the SR and interview. All of the respondents from both SLs and ULs expressed concern over a lack of interaction between teachers and students. They needed teachers to clarify the language points when they learned grammar. Sufficient explanation as to why the answers were not correct was required. Participants believed that class meetings were better than studying without teachers because teachers were sources of knowledge and could give clearer explanations. They still required scaffolding from teachers. Interactions made the learning more interesting and kept them more motivated than studying by themselves. Teachers had a number of techniques to make the learning more interesting. Fully online English courses were more difficult, inconvenient and confusing for them. Two of ULs expressed the concern as shown below:

"I have no problem using the computer to access LMS. However, I think learning English online is still difficult because when I don't understand English lessons, no one can help me. When I study in the classroom, I am sure teachers can answer everything I want to know." UL3

"I prefer to study with teacher in a classroom because he/she can explain the lessons clearly. I think studying via LMS might be good for doing quizzes and exercises only." SL4

With regard to online operating system problems, SLs seemed to have more concern than ULs. Two of SLs stated below:

*"It took me about two weeks to know that I need to install the Internet Explorer in order to use Media Stream. I have been wasting the time."* SL5

"I did not know how to install Internet Explorer and I asked my friend who was good at computerize system to help. It took me quite sometimes to do this." SL4 Furthermore, it has been found out that ULs had lower motivation than SLs. An excerpt from one of ULs' SR and interview sessions was reported below.

"I do not have much motivation to study English online. It's quite boring to me. I have to sit at the table, watch, listen to the multimedia and do the exercises repetitively." UL4

Interestingly, ULs reported some problems they encountered. The problems mentioned in the SR and interview sessions are listed below:

1) Computer skills problems:

"I haven't used computers for a long time since high school. After I enter the university, I start to use computer again. I need some time to recall how to use computer and I have a lot of problems using the learning materials in online learning such as how to use PowerPoint to study grammar lesson." UL4

2) Unfamiliarity with self-learning:

"In my opinion, the biggest problem in online learning is I do not have any experiences or am not familiar with online learning. In high school, teachers taught, assisted and supported me in the classroom all the time. Unlike online learning, most of the time I learn by myself and sometimes I cannot solve the problems by myself." UL3

3) Insufficient numbers of computers available for online learning:

"I do not have my own laptop or desktop. Many of the students also do not have their own computers. My friend lent me her laptop when I need to do the tasks in LMS. When my friend's laptop was occupied, I had to use central library computers. It is not convenient to study online when I do not have my own laptop or desktop. That's why I failed this subject" UL5 4) Unavailability of Internet connection at home or at dormitory:

"I live at the dormitory number 5; the connectivity of the internet at my dormitory is very poor. I have to go to my friend's dormitory to get a good Internet connection to study online course." SL1

In addition, the problems not mentioned in the questionnaire were also revealed. Three emerging problems were 1) poor time management, 2) lack of determination and goal setting to achieve online English course, and 3) ethical issues in online English course.

Poor time management caused a lot of problems for ULs because they were not able to adjust themselves to university learning environment. One of the ULs mentioned that:

"First year university students have a lot of other activities to do besides classroom learning. It is hard to manage the study time. I could not find a time to study English in LMS. Moreover, there are so many difficult subjects." UL1

Lack of determination and goal setting to achieve online English course was another problem that ULs pointed out and it was associated with motivation problems. Since online English course is a course that provides a chance for students to repeat enrollment, therefore, some of the ULs procrastinated working on the online English course. They focused more on other subjects; they thought other subjects were more important partly because this subject offered only Satisfactory (S) or Unsatisfactory (U) grade. One of the ULs reported in SR and interview sessions below:

"I do not have a goal to pass this course and I think it is easy to pass it. Therefore I did not pay much attention to this course. This subject does not require any credit; therefore, I paid more attention to others." UL5

The last problem is concerned with ethical issues in online English course. There were a few incidents of misbehavior that hampered online language learning outcomes. Both SLs and ULs reported in the SR and interview session that they could get the tasks done with good scores by asking help or using answer keys from friends. Students who had higher proficiency and/or finished the exercises could give answer keys to students who wanted them. Some students helped other students to do the online learning tasks by logging in using his/her friends' ID. In addition, in order to collect 60 hours of required learning hours in Tell Me More, Some SLs and ULs used the "autoclick" software or let the Tell Me More program turn on and then Tell Me More would record the learning time. Students did not need to do any exercises or quizzes. These behaviors were related to ethical issues in online learning and resulted in students' poor performance in midterm and final examination since they did not have enough knowledge. Confirmed by one of the ULs in SR and interview, the citation was below:

"When I do not have time, my good friend helped me do online learning task using my own ID." UL3

# 8.4 Perceptions towards the design and content of learning tasks in an online course

As shown in Table 13, the design and content of the learning tasks are ranked from the highest to the lowest mean scores. For SLs, the content of vocabulary lessons ( $\overline{X}$ =3.14), overall design ( $\overline{X}$ = 3.11), content of listening lessons ( $\overline{X}$ = 3.08), and content of grammar lessons ( $\overline{X}$ = 3.07) were ranked at a high satisfaction level while content of Tell Me More was the lowest in rank. For ULs, content of vocabulary lessons and content of listening lessons ( $\overline{X}$ = 3.04), and overall design ( $\overline{X}$ = 3.03) were in the range of high while the lowest mean was content of Tell Me More ( $\overline{X}$ = 2.87).

For overall perceptions of the design and content of learning tasks, SLs and ULs were highly satisfied ( $\overline{X}$ =3.06). There was a statistically significant difference between both groups (t=1.97\*). The SLs group had a more positive attitude towards the design and content of learning tasks ( $\overline{X}$ =3.08) while ULs had a less positive attitude ( $\overline{X}$ = 2.80). One other significant difference between the perceptions of SLs and SLs included content in grammar lessons (t=2.19\*).

		Total	(n=346)	SL (1	n=262)	UL (	(n=84)	
Ranl	k Design and content of							
	learning tasks							t
		$\overline{\mathbf{X}}$	SD	$\overline{\mathbf{X}}$	SD	$\overline{\mathbf{X}}$	SD	
1.	Content of vocabulary lessons	3.11	0.46	3.14	0.46	3.04	0.43	1.78
2.	Overall designs	3.09	0.40	3.11	0.41	3.03	0.36	1.76
3.	Content of listening lessons	3.07	0.47	3.08	0.48	3.04	0.42	0.89
4.	Content of grammar lessons	3.03	0.44	3.07	0.45	2.96	0.37	2.19*
5.	Content of Tell Me More	2.93	0.54	2.95	0.56	2.87	0.46	1.20
	program							
Tota	1	3.06	0.37	3.08	0.38	2.80	0.33	1.97*

Table 13: Students' perceptions towards the design and content of learning tasks

\* Statistically significant at 0.05

From the open-ended questions, 43 students mentioned that the content of learning tasks in grammar lessons needed to be improved. They requested more interesting lessons as well as clear and sufficient explanations for their self-learning. The content of the vocabulary lesson should also match their proficiency; the ULs believed that the vocabulary lessons were too difficult and the complexities of the lesson should be gradually increased.

However, from SR and interview some parts of the findings are in line with the questionnaire results; some parts showed different opinions regarding overall design and content of learning tasks. SLs and ULs mentioned positive aspects as per below statements:

"The overall design and content of the learning tasks are good, the steps of learning which starts from watching Media Stream and then follows by reviewing the PowerPoints for grammar and finally practice with quizzes are considered effective. Moreover, I can check my quizzes score frequently." SL3

Nevertheless, there were some negative perceptions obtained from SLs and ULs towards design and content of learning tasks.

"The content of the learning tasks were confusing. When I accessed the first page, there were so many instructions. Some were in red, while some were in black and green. This made me confused which one was important to read. Finally, I had to read them all. Oh,... there was a message in pink too." UL3

"I had to scroll up and down a lot to find and read the questions and the multiple choices. This was inconvenient and difficult to learn. I did not like it." SL1

"The explanation of each answer in the quizzes was too short. That's not enough. It was difficult for me to understand it." UL2

"The Media Stream lessons were not updated and quite old. The grammar materials were also not interesting." SL5

### 9. DISCUSSION

The findings of this study are summarized and discussed as follows:

# 9.1 The differences in OLLS use between SLs and ULs, the different perceptions of affection in online learning between SLs and ULs

In terms of OLLS, there are significant differences between OLLS level of use between SLs and ULs. The results indicate that SLs significantly employed more OLLS than ULs. Metacognitive strategies were the highest level of use among SLs and ULs. It should be pointed out that the online English learning required all students to be more self-regulated since in the online course the time for completing each learning task was set and nonnegotiable. Moreover, students had to review their quiz scores and check whether they had completed all of the tasks. This may be explained in relation to the nature of the online English course that requires students to be more self-monitored & management, time managed, self-regulated, goal set. Otherwise they could not accomplish the course. Most of SLs had these skills and they were more self-regulated and self-monitored/self-managed than ULs. They aimed to achieve the course, set study time, accessed the course consistently, and checked quiz scores. These behaviors resulted in good learning outcomes. This is consistent with Amir (2006), Liu and Feng (2011) and Puzziferro (2008) that metacognitive strategies are the key and mostly used by achieving online learners.

The results also showed that cognitive strategies were the second most used strategy employed by both SLs and ULs. SLs used more cognitive strategies than ULs significantly. This can be explained that SLs consistently access the course to study and this particular online course required students consistently access learning materials and do exercises and quizzes for grades. As a result, it directly promoted cognitive skills, particularly elaboration strategies. Students needed to study all the materials before summarizing, taking notes, and comprehending many lessons on their own. This required high cognitive abilities in terms of both English subject matter and Internet/computer skills. These findings are in line with Chen, Zhang, and Liu (2014) whose study revealed that 82 intermediate Chinese students used metacognitive strategies the most, followed by cognitive strategies when they learned listening lessons in Web-based CALL.

With regard to the level of agreement on affection in online learning, they were perceived by students at the high level. Attitude was at the highest degree of agreement in all three affection sub-categories. There were significant differences in the agreement level of overall affection in online learning' perceptions and sub-strategies in motivation between SLs and ULs. SLs were more positively motivated in learning English online than ULs. One possible explanation is that SLs had a specific goal and determination to accomplish the course. Passing the course was very important to them, and as stated by SLs, they gained benefits from independent learning. SLs might already have high metacognitive and cognitive abilities. Their motivation might have been higher because they were able to learn online English course without much trouble. This is consistent with Matuga's (2009) study, which indicated that high achieving online secondary students' motivation increased after finishing the course due to the confidence in their ability of learning. In contrast, low achieving students' motivation had decreased because they did not have goal-oriented behavior.

Another possible explanation of why ULs lacked motivation is that the students might have some dissatisfaction with the overall course design and the quality of the online learning tasks. Sun, Tsai, Finger, Chen and Yeh (2008) posited that the critical factors affecting students' perceived satisfaction that lessens students' motivation to learn online included course flexibility, course quality, perceived usefulness, and perceived ease of use.

# 9.2 The relationships between the use of OLLS, affection in online learning and the online English learning outcomes

This research also revealed a significant correlation at a low level between OLLS level of use, affection in online learning's level of agreement, and online English learning outcomes. For OLLS, metacognitive had the strongest relationship, followed by cognitive strategies. However, resources management strategies had no relationship with online English learning outcome.

It can be explained that students who had more metacognitive strategies were the ones who could control their study well. Accordingly, this may lead to academic achievement because they could consistently access the course, study the lessons, and complete the learning tasks on a timely basis, all of which is critical to learners' success. The results are similar to those found in Amir (2006), Liu and Feng (2011) and Puzziferro's (2008) study which found that there were the relationships between self-regulated learning strategies and college students' online learning outcomes.

Based on the results, cognitive strategies were also correlated with online English learning outcome. This is because this online English course provided an abundance of learning materials and resources, and only students being able to cope with the heavy cognitive load and the bombardment of too much information could be successful in the course.

For resource management strategies, no relationship with online English learning outcome was found. This might be because the learning environment they were in was suitable enough for online learning, for example, the university provides a good Internet connection for all students. Therefore, it required minimum efforts to overcome the resource problems. Both SLs and ULs could use this type of strategy equally. In addition, students could immediately ask peers for clarification when it was needed since they might stay in the university dormitory and it was convenient for them to contact and ask for help from peers with minimum efforts.

According to affection in online learning, motivation was found to be the strongest correlation with online English achievement compared to other affection sub-strategies. One possible explanation may be related to self-learning skills. Students who did not possess self-learning skills tended to lack motivation associated with anxiety and lack levels of interest. ULs still preferred learning English in a faceto-face classroom since they were not ready to learn independently. Ushida (2005) found that, in general, students had high anxiety at the beginning of the course due to a lack of familiarity, but later, as the course went on, that anxiety lessened.

Interestingly, even though correlations between OLLS and online English outcomes existed, it was only at the low level. There may be other possible factors that influenced online English learning outcomes. In fact, OLLS might help individual online students to overcome difficulties or problems in online learning in certain ways. However, there might still be other challenges in online English learning environment which students would encounter. Additionally, ULs used OLLS at the low level and had low motivation in learning online English course. It might imply that ULs are not ready to study online English course due to many factors, not only the factor of lacking of OLLS and motivation. This is in line with Chen, Chou, and Hung's study (2010) who examined online learning readiness of 1,051 students in three Taiwanese universities in 5 dimensions (1) computer/Internet self-efficacy, 2) self-directed learning,3) learner control, 4) motivation for learning, and 5) online communication self-efficacy). It was found that the higher grade year students were more ready to study online course when compared to lower grade year students in all dimensions of online readiness scales. This was because most students still needed time to adapt themselves to a new learning mode since they had been learning within traditional mode for a long time and are still attached to it. Therefore, proficiency, maturity, and experiences in online learning could also play an important role in online learning.

#### 9.3 Problems related to online learning

In terms of problems in an online English course, as shown in Table 12 and the SR and an in-depth interview, SLs and ULs perceived problems related to technology and lack of motivation. With regard to technological problems, it is consistent with several studies (Piccoli, Ahmad & Ives, 2001; Song et al., 2004; Webster & Hackley, 1997) which found that technical problems seemed to be the biggest challenges for online learners, which in turn could cause dissatisfaction for online learners. Similarly, the reliability in IT and the Internet quality could affect online learners (Aydin, 2007; Lyashenko & Malinina 2015). Singhal (1997) and Tsai (2009) pointed out that unfamiliarity and lack of Internet skills could cause anxiety in online learning environment. From in an open-ended question, the students commented that "Media Stream" should be able to run on any Internet platforms and not be limited to only Internet Explorer. Even though both groups reported problems related to technology in online learning, SLs had more concerns about technological problems than ULs.

With regard to the problem of lack of motivation in online learning, both SLs and ULs encountered motivation problems. The findings are supported by studies done by Tsai, (2009); Song et al., (2004); Zamsari et al., (2012) which indicated that student's motivation was one of the difficulties that affected students' success in online learning environment. From the findings, however, ULs had greater motivation problems than the SLs. This might be because the ULs required much more time to adjust to the new learning environment to increase their motivation in online learning. They might not have been familiar with environment and did not know how to cope with online learning. They had higher anxiety because they had to cope with both language problems and unfamiliarity with online learning environment, which was different from face-to-face classroom setting. This can be explained that most of the inexperienced self-learning students cannot cope with the problems in a new learning environment very well due to their lower proficiency in computer literacy and English subject matters. One of the most serious problems related to motivation mentioned in SR and an in-depth interview was interactions between students and teachers. Hurd 's (2006) study showed that insufficient interactions had an adverse effect on motivation. Anderson and Garrison (1998) contend that to interact with learning materials only is insufficient especially in language learning and it requires more interactions among teachers and learners and learners themselves. As a result, they might need teachers and peers as assistant and scaffolding resources.

For lack of determination and goal setting problems, it can be implied that ULs seemed to have less goal orientation than SLs. They did not have very high motivation to pass the course and did not consider the online English course important for them. According to Matuga's (2009) study, successful online learners were concerned about getting good grades and attending the online learning tasks would help them getting good grades also. Therefore, they were determined to pass the course.

The ethical problem is one factor causing failure in online learning. The findings from SR and an in-depth interview indicated that ULs used the tactics to help them collect the learning hours and they obtained the answer keys for the quizzes from more knowledgeable peers. This caused ULs inadequate knowledge when taking an examination since they had learnt nothing. As a result, they failed the course. Brown (2014) stated that inappropriate tutoring to other students and breaches of computers ethics are considered one of the educational frauds.

# 9.4 Perceptions towards the design and content of learning tasks in an online course

In the area of the design and content of learning tasks, SLs and ULs agreed that the design of the course was satisfactory. In terms of course content, they responded that the degree of difficulty was appropriate to their proficiency level, and the content was interesting. However, SLs and ULs had different opinions about the grammar learning tasks. ULs reported that the grammar lessons were not interesting
enough. In their responses to the open-ended questions, and SR and interview, SLs and ULs stated that they preferred more interesting and a variety of more up-to-date exercises. They also mentioned a desire for more detailed explanations in each lesson. Since the design and content of the learning tasks are vital components in online learning, the finding implies that the grammar learning tasks need to be improved. The findings are in line with Song et al. (2004), Sun et al. (2008), and Sun (2014) who posited that course quality was very critical in online learning, as it was needed to motivate and appeal to students' interests. According to Cantoni, et.,al (2004), good course designs could improve students' retention by varying the content, such as bringing texts, images and sound together. Furthermore, the quality of online course in both designs and contents of learning tasks had a relationship with online learners' satisfaction, which was considered a factor of successful online learning (Chen, Finger, Sun & Tsai, 2008).

#### **10. IMPLICATIONS AND SUGGESTIONS**

Implications from this study can be drawn as follows:

1. Since technical problems and individual problems that students encountered are the main challenges in online learning, helping students to overcome these two challenges would increase the satisfaction with the new mode of learning and promote online learning motivation. To solve technological problems, sufficient and effective access to the Internet and twenty-four hour connectivity of the Internet are also needed.

2. Interesting and practical online course design and content is very important. Sufficient explanations for the lessons and exercises are also required. Additionally, the design and content of learning tasks must be evaluated and revised from time to time.

3. Online language learning strategies (OLLS) training should be conducted before the course begins and throughout the course to encourage students' motivation to learn online. Moreover, interesting and motivating orientation at the beginning of the course must be implemented. In addition, the interaction between instructors and students must be increased in order to motivate students to take responsibilities for and control their own online learning. 4. Students 'readiness for online learning should be measured before the course starts. Low English proficiency students need to prepare themselves to deal with changing mode of learning. The measurement would include students' preference and style of learning, confidence, comfortable and competency in using Internet and computers, ability to engage in self-direct learning, and intrinsic and extrinsic motivation and positive attitude towards online learning.

5. To take an online course, online English students need assistance. The following model is proposed by the researcher as a guideline for a university offering an online course. The proposed model is illustrated in Figure 1:



Figure 1. Procedure to improve online English course learning process.

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### APPENDIX A

Thai version of Online Language Learning Strategies Questionnaire (OLLSQ)

#### แบบสอบถาม

### เรื่อง กลยุทธ์ในการเรียนภาษาอังกฤษ (890-100) ผ่าน LMS

### <u>คำชี้แจง</u>

แบบสอบถามฉบับนี้มีวัตถุประสงค์เพื่อศึกษากลขุทธ์ ปัญหาและอุปสรรคในการเรียนภาษาอังกฤษ (890-100) ผ่าน LMS ขอให้นักศึกษาตอบแบบสอบถามให้ตรงกับความเป็นจริงมากที่สุด ข้อมูลจะถูกเก็บเป็นความลับและจะไม่มี ผลกระทบใดๆกับตัวนักศึกษา

แบบสอบถามนี้แบ่งออกเป็น 5 ตอน ตอนที่ 1 ข้อมูลทั่วไปของนักศึกษา ตอนที่ 2 กลขุทธ์ในการเรียนภาษาอังกฤษ (890-100) ผ่าน LMS จำนวน 27 ข้อ ตอนที่ 3 การจัดการด้านอารมณ์ในการเรียนภาษาอังกฤษแบบ (890-100) ผ่าน LMS จำนวน 12 ข้อ ตอนที่ 4 ความคิดเห็นที่มีต่อบทเรียนและรูปแบบของบทเรียน LMS จำนวน 18 ข้อ ตอนที่ 5 ปัญหาและอุปสรรคในการเรียนภาษาอังกฤษ (890-100) ผ่าน LMS จำนวน 9 ข้อ ขอขอบคุณที่ได้ให้ความร่วมมือตอบแบบสอบถามฉบับนี้มา ณ ที่นี้ด้วย

> นายเศรษฐา เกื้อมา นักศึกษาปริญญาโท สาขาการสอนภาษาอังกฤษเป็นภาษานานาชาติ คณะศิลปศาสตร์ มหาวิทยาลัยสงขลานครินทร์ วิทยาเขตหาดใหญ่ ผู้วิจัย

### ตอนที่ 1 ข้อมูลทั่วไปของนักศึกษา <u>คำชี้แจง</u>

์ โปรดกรอกข้อมูลของท่านลงในช่องว่างที่กำหนด หรือทำเครื่องหมาย ( 🗸 ) หน้าข้อความที่ตรงกับตัวท่านมากที่สุด

1. คณะ\_\_\_\_\_\_ชั้นปี \_\_\_\_\_\_

2. นักศึกษาชอบการเรียนวิชาภาษาอังกฤษหรือไม่ ( ) ชอบมาก ( ) ชอบ ( ) ไม่ชอบ ( ) ไม่ชอบมาก

3.ประสบการณ์ในการเรียนแบบออน ไลน์ ก่อนเรียนวิชา 890-100 Preparatory Foundation English

( ) ไม่มี
 ( ) มี โปรดระบุ
 ( ) มี โปรดระบุ

4. จำนวนครั้งที่ลงเรียนวิชานี้ รวมปีการศึกษา 2558

( )1 ( )2 ( )3 ( )มากกว่า 3

5.หนังสือหรือเอกสารการเรียนของข้าพเจ้า

( ) มี ( ) ไม่มี

6. ข้าพเจ้าสืบค้นหรือหาข้อมูลเพิ่มเติมจากแหล่งเรียนรู้อื่นๆเพื่อเรียนวิชา 890-100

() มี หนังสือ () มี เอกสาร () มี Website () มี ศูนย์การเรียนรู้ด้วยตนเอง () มี อื่นๆ ระบุ\_\_\_\_
 () ไม่มี

# ตอนที่ 2 กลยุทธ์ในการเรียนภาษาอังกฤษแบบ (890-100) ผ่าน LMS

# <u>คำชี้แจง</u> โปรดทำเครื่องหมาย ( √ ) เพื่อระบุระดับการใช้ที่ตรงกับระดับการใช้จริงของท่าน

ข้อ	ข้อกวาม	ระดับการใช้				
		สม่ำเสมอ	บ่อย	บางครั้ง	นานๆครั้ง	ไม่เคย
กลยุข	เธ้ความรู้ความเข้าใจ	I	I			1
1	ข้าพเจ้าเปิดดูสื่อการเรียนการสอนในบทเรียน เช่น วีดิโอ					
	บรรยายประกอบการเรียน (Media stream) บทเรียนใน					
	พาวเวอร์พ้อยท์ (Self-study และRevision) ซ้ำมากกว่า 1					
	ครั้ง					
2	ข้าพเจ้าจดเนื้อหาสำคัญๆในขณะที่ศึกษาบทเรียนจาก					
	Media Stream/ PowerPoint					
3	ข้าพเจ้าทบทวนความรู้ โดยการอ่านเอกสารประกอบ					
	การเรียน					
4	ข้าพเจ้าสรุปใจความสำคัญของเนื้อหาไวยากรณ์และอื่นๆ					
	จากสื่อการเรียนการสอน					
5	ข้าพเจ้าทำแบบฝึกหัดทันทีหลังการเรียนบทเรียนใน					
	LMS เพื่อให้มั่นใจว่าข้าพเจ้าเข้าใจบทเรียนดีแล้ว					
6	ข้าพเจ้าจัดลำคับการเรียนอย่างเป็นขั้นตอน					
7	ข้าพเจ้าทำ แผนภาพ ผังความกิด เพื่อช่วยในการจดจำ					
	เนื้อหาวิชานี้ให้ดีขึ้น					
8	ข้าพเจ้าอ่านกำสั่งอย่างระมัคระวังก่อนเริ่มทำแบบฝึกหัด					
	หรือ เริ่มทำแบบทคสอบ					
9	ข้าพเจ้ากันคว้าเนื้อหา หรือ ข้อมูลเพิ่มเติมจากแหล่งอื่นๆ					
	หากไม่เข้าใจบทเรียนใน LMS					
10	ข้าพเจ้ามีแผนสำรองหากระบบอินเตอร์เน็ตล่มใน					
	ระหว่างเรียนวิชานี้ เช่น ใช้ smartphone หรือใช้					
	อินเตอร์เน็ตที่สูนย์คอมพิวเตอร์ หรือใช้อินเตอร์เน็ตที่					
	ร้ำน					

กลยุข	<b>เซที่นำไปสู่ความสำเร็จ</b>			
11	ง้ำพเจ้ากำหนดเป้าหมายในการเรียนอย่างชัดเจนเพราะ			
	เป็นการเรียนด้วยตนเอง			
12	ข้าพเจ้าสามารถควบคุมตนเองให้เรียนภาษาอังกฤษจาก			
	LMS ใด้อย่างสม่ำเสมอ			
13	ข้าพเจ้าเรียนภาษาอังกฤษตามตารางเอกสารแนะนำการ			
	เรียนเพื่อให้มั่นใจว่าข้าพเจ้าเรียนวิชานี้ได้ครบถ้วนและ			
	ทันเวลา			
14	ข้าพเจ้าจัดสรรเวลาเรียนภาษาอังกฤษวิชานี้ได้อย่าง			
	เหมาะสมโดยไม่กระทบเวลาเรียนวิชาอื่น หรือ การทำ			
	กิจกรรมอื่นๆ			
15	ข้าพเจ้าให้เวลากับการเรียนวิชานี้มากเป็นพิเศษเพราะ			
	เป็นการเรียนด้วยตนเอง			
16	ข้าพเจ้าตรวจสอบคะแนนของแบบฝึกหัดทบทวนและ			
	การทคสอบย่อย (Quiz) อย่างสม่ำเสมอ			
17	ข้าพเจ้าตรวจคำตอบเพื่อประเมินระดับกวามสามารถของ			
	ตัวเองหลังทำแบบฝึกหัด			
18	ข้าพเจ้าสอบถามคะแนนของเพื่อนและนำมาเปรียบเทียบ			
	กับกะแนนของข้าพเจ้าเพื่อข้าพเจ้าจะได้ปรับปรุงตัว			
19	ข้าพเจ้าไม่ทำกิจกรรมอื่นเช่น ดู Facebook เล่นไลน์ ฟัง			
	เพลง ดูโทรทัศน์ หรือทำสิ่งอื่นขณะเรียนภาษาอังกฤษ			
	ผ่าน LMS			
20	ข้าพเจ้าเลือกเวลาที่เหมาะสมในการเรียนผ่าน LMS			
	เพื่อให้มีสมาธิเต็มที่			
กลยุข	เช่ในการจัดการทรัพยากร			
21	ข้าพเจ้าเลือกสถานที่ที่ทำให้ข้าพเจ้ามีสมาธิในการเรียน			
	ผ่าน LMS			
22	ข้าพเจ้าเลือกสถานที่ที่สามารถเชื่อมต่ออินเตอร์เน็ตได้ดี			
23	ข้าพเจ้าชวนเพื่อนไปเรียนภาษาอังกฤษผ่าน LMS ด้วยกัน			

24	ถ้าไม่เข้าใจเกี่ยวกับเนื้อหาวิชานี้ ข้าพเจ้าขอกำอธิบายจาก			
	ผู้อื่นเช่น เพื่อนหรือผู้สอน			
25	ข้าพเจ้าขอความช่วยเหลือทางด้านเทคนิคจากผู้ดูแล			
	ระบบในการเรียนภาษาอังกฤษผ่าน LMS			
26	ข้าพเจ้าใช้ WEBBOARD หรือ e-mail เพื่อสื่อสารและขอ			
	คำอธิบายจากผู้สอน			
27	ข้าพเจ้าใช้ Online Dictionary และ/หรือ Link อื่นๆใน			
	LMS อย่างสม่ำเสมอ			

จากกลยุทธ์การเรียนรู้ข้างต้น นักศึกษาชอบกลยุทธ์ใคมากที่สุด กรุณาระบุ 3 กลยุทธ์ตามลำดับ

1)	 	 
2)		 
3)		

นักศึกษาใช้กลยุทธ์อื่นที่ไม่ได้ระบุไว้ในแบบสอบถามตอนที่ 2 หรือไม่ ถ้ามี โปรดระบุ

# ตอนที่ 3 การจัดการด้านอารมณ์ในการเรียนภาษาอังกฤษแบบ (890-100) ผ่าน LMS <u>คำชี้แจง</u>

## โปรดทำเครื่องหมาย ( $\sqrt{}$ ) ที่ตรงกับกวามเห็นของท่าน

ข้อ	ข้อความ	ระดับความเห็น				
		เห็นด้วย	เห็นด้วย	ไม่เห็น	ไม่เห็นด้วย	
		อย่างยิ่ง		ด้วย	อย่างยิ่ง	
1	การเรียนภาษาอังกฤษผ่าน LMS ส่งเสริมการเรียนรู้ด้วย ตนเองของข้าพเจ้า					
2	การเรียนภาษาอังกฤษผ่าน LMS สะควกทั้งในเรื่องเวลาและ สถานที่					
3	้ข้าพเจ้าชอบเรียนภาษาอังกฤษผ่าน LMS เพราะมีสื่อการเรียน ที่หลากหลาย					
4	ข้าพเจ้าตั้งใจเรียนภาษาอังกฤษผ่าน LMS เพราะเป็นวิชา บังคับก่อนการเรียนวิชาภาษาอังกฤษวิชาอื่น					
5	การเรียนภาษาอังกฤษผ่าน LMS มีความท้าทาย ตื่นเต้น น่าสนใจ และแตกต่างจากการเรียนในห้อง					
6	ข้าพเจ้าชอบเรียนภาษาอังกฤษผ่าน LMS เพราะสามารถ ทบทวนได้ตลอดเวลา					
7	ข้าพเจ้าไม่ชอบการเรียนภาษาอังกฤษผ่าน LMS เพราะไม่มี เพื่อนเรียนด้วย					
8	ข้าพเจ้าไม่ชอบเรียนภาษาอังกฤษผ่าน LMS เพราะไม่มีครู อธิบายเนื้อหาและตอบข้อสงสัย					
9	ข้าพเจ้ากังวลกับการเรียนวิชาภาษาอังกฤษผ่าน LMS เพราะ ไม่คุ้นเคยกับการเรียนออนไลน์					
10	ข้าพเจ้ากังวลว่าจะขอความช่วยเหลือจากใครไม่ได้ หากมี ปัญหาเกี่ยวกับระบบอินเตอร์เน็ตระหว่างเรียนภาษาอังกฤษ ผ่าน LMS					
11	้ ข้าพเจ้ากังวลเกี่ยวกับเนื้อหาที่มีจำนวนมากจนทำให้เรียนไม่ ทัน					
12	ข้าพเจ้ารู้สึกกังวลหากระบบอินเทอร์เน็ตขัดข้องเพราะทำให้ การเรียนไม่เป็นไปตามตารางที่กำหนดไว้					

นักศึกษามีความคิดเห็นอื่นเกี่ยวกับตัวแปรทางด้านอารมณ์ที่ไม่ได้ระบุไว้ในแบบสอบถามตอนที่ 3 หรือไม่ ถ้ามี โปรดระบุ

# ตอนที่ 4 ความคิดเห็นที่มีต่อบทเรียนและรูปแบบของบทเรียน LMS

# <u>คำชี้แจง</u> โปรดทำเครื่องหมาย ( √ ) เพื่อระบุระดับการใช้ที่ตรงกับความเห็นของท่าน

ข้อ	ข้อความ	ระดับความเห็น						
		เห็นด้วย	เห็นด้วย	ไม่เห็น	ไม่เห็นด้วย			
		อย่างยิ่ง		ด้วย	อย่างยิ่ง			
บทเรี	ยนไวยากรณ์ใน LMS (Media stream, Self-study, บทเรียน	แสริม)		1	I			
1	ความยากง่ายเหมาะสมกับระดับความสามารถของ							
	ข้าพเจ้า							
2	เนื้อหามีปริมาณเหมาะสม							
3	เนื้อหาน่าสนใจ							
4	ข้อเสนอแนะอื่น (โปรคระบุ)			1	I			
บทเรี	ยนการฟังใน LMS							
1	ความยากง่ายเหมาะสมกับระดับความสามารถของ							
	ข้าพเจ้า							
2	ความเร็วของบทฟังเหมาะสม							
3	เนื้อหาน่าสนใจ							
4	้ข้อเสนอแนะอื่น (โปรคระบุ)	I	I					

บทเรื	ยนกำศัพท์ใน LMS			
1	ความยากง่ายเหมาะสมกับระดับกวามสามารถของ			
	ข้าพเจ้า			
2	คำศัพท์มีจำนวนเหมาะสม			
3	การจัดหมวดหมู่คำศัพท์เหมาะสม			
4	้ข้อเสนอแนะอื่น (โปรคระบุ)	I		
Tell r	ne more			
1	บทเรียนและแบบฝึกหัดมีปริมาณเหมาะสม			
2	การจัดบทเรียนและแบบฝึกหัดเหมาะสม			
3	การกำหนดให้ทำแบบฝึกหัดจำนวน 60 ชม. มีความ			
	เหมาะสม			
4	ข้อเสนอแนะอื่น (โปรคระบุ)	L		
รูปแบ	เบบทเรียน LMS			
1	คำอธิบายในการเข้าใช้ LMS มีความยาวเหมาะสม			
2	การจัดกลุ่มเนื้อหาและประกาศต่างๆเหมาะสม			

ข้อ	ข้อความ	ระดับความเห็น					
		เห็นด้วย	เห็นด้วย	ไม่เห็น	ไม่เห็นด้วย		
		อย่างยิ่ง		ด้วย	อย่างยิ่ง		
3	การจัดวางตัวอักษร ช่องว่างระหว่างบรรทัด และการใช้สี						
	มีความเหมาะสม						
4	ภาพและเสียงจากของมัลติมีเดียเช่น Media stream บทฟัง						
	ชัคเจน						
5	คำอธิบายคำตอบของแบบฝึกหัดในส่วนไวยากรณ์						
	เพียงพอ						
6	การเชื่อมต่อ (Link) ไปยังแหล่งความรู้อื่นๆมีปริมาณ						
	เพียงพอ						
7	ข้อเสนอแนะอื่น (โปรคระบุ)		•	•			

### ตอนที่ 5 ปัญหาและอุปสรรคในการเรียนภาษาอังกฤษ (890-100) ผ่าน LMS

### <u>ดำชี้แจง</u> โปรดทำเครื่องหมาย (√) ที่ตรงกับความเห็นของท่าน

ข้อ	ข้อกวาม	ระดับความเห็น						
		เห็นด้วย	เห็นด้วย	ไม่เห็น	ไม่เห็นด้วย			
		อย่างยิ่ง		ด้วย	อย่างยิ่ง			
1	งาดแรงจูงใจในการเรียน							
2	ไม่ชอบเรียนวิชาภาษาอังกฤษ							
3	งาดการปฏิสัมพันธ์ระหว่างผู้เรียนกับกรู							
4	ไม่คุ้นเคยกับการเรียนด้วยตนเอง							
5	งาดทักษะการใช้คอมพิวเตอร์							
6	คอมพิวเตอร์ที่ใช้เรียนผ่าน LMS มีปริมาณไม่เพียงพอ							
7	ระบบอินเตอร์เน็ตที่มหาวิทยาลัยเกิดขัดข้องบ่อยครั้ง							
8	ที่บ้านหรือที่พักไม่มีระบบเชื่อมต่ออินเตอร์เน็ต							
9	มีข้อจำกัดของระบบบฏิบัติการ เช่น การดู Media							
	Stream ต้องดู บน Internet Explorer เท่านั้น							

### ปัญหาและอุปสรรคอื่นๆในการเรียนภาษาอังกฤษผ่าน LMS ที่ไม่ได้ระบุในแบบสอบถามตอนที่ 5 (ถ้ามี)

ข้อเสนอแนะ\_\_\_\_\_

\*\*\*หากคุณสนใจที่จะร่วมในการเป็นกลุ่มตัวอย่างในการศึกษาเพิ่มเติมในเรื่องกลยุทธ์ในการเรียนภาษาอังกฤษ ผ่าน LMS กรุณากรอก e-mail ของคุณ \_\_\_\_\_

\_\_\_\_\_

### **APPENDIX B**

Thai version of Stimulated Recall and in-depth interview procedure

### ข้อมูลส่วนตัวของผู้เข้าร่วมกระบวนการ Stimulated Recall

1. คณะ\_\_\_\_\_ ชั้นปี\_\_\_\_\_

2. จำนวนครั้งที่ลงเรียนวิชานี้ รวมปีการศึกษา 2558 () 1 () 2 () 3 () มากกว่า 3

3. หนังสือหรือเอกสารประกอบการเรียน ( ) มี ( ) ไม่มี

### กระบวนการ Stimulated Recall และ คำถามสัมภาษณ์เชิงลึก ในกระบวนการ Stimulated Recall

<u>หมายเหตุ</u>

1) คำถามย่อยเป็นคำถามที่มีลักษณะคล้ายคลึงกันเพียงแต่เปลี่ยนไปตามทักษะที่ผู้เรียนเข้าเรียน ใน LMS

2) ลำดับในการถามคำถามอาจไม่เรียงตามทักษะใน LMS ขึ้นอยู่กับผู้ตอบคำถามว่าจะตอบ ทักษะไหนก่อน

1. ขอให้นักศึกษาแสดงวิธีการเข้าใช้บทเรียน Media Stream และสาธิตการเรียนบทเรียน Media Stream

1.1 นักศึกษาจดบันทึก สรุปใจความสำคัญ ทบทวน เนื้อหาจาก Media Stream หรือไม่ อย่างไร

1.2 นักศึกษามีความเข้าใจเนื้อหาใน Media Stream ครบถ้วนหรือไม่ หากไม่เข้าใจทำอย่างไร

1.3 นักศึกษาเข้าเรียน Media Stream ซ้ำ และเข้าเรียนอย่างสม่ำเสมอ หรือไม่ เพราะเหตุใด

1.4 นักศึกษาพบปัญหาในการเรียน Media Stream หรือไม่อย่างไร หากมี มีวิธีการแก้ปัญหา อย่างไร

 2. ขอให้นักศึกษาแสดงวิธีการเข้าศึกษาใช้บทเรียนด้วยตนเอง (Self-Study) และสาธิตการเรียน บทเรียน Self-Study

2.1 นักศึกษาจดบันทึก สรุปใจความสำคัญ ทบทวน เนื้อหาจาก Self-Study หรือไม่ อย่างไร

2.2 นักศึกษามีความเข้าใจเนื้อหาใน Self-Study ครบถ้วนหรือไม่ หากไม่เข้าใจทำอย่างไร

2.3 นักศึกษาเข้าเรียน Self-Study ซ้ำ และเข้าเรียนอย่างสม่ำเสมอ หรือไม่ เพราะเหตุใด

2.4 นักศึกษาพบปัญหาในการเรียน Self-Study หรือไม่ หากมี มีวิธีการแก้ปัญหาอย่างไร

 3. ขอให้นักศึกษาแสดงวิธีการเข้าศึกษาเนื้อหาบทเรียนเพิ่มเติมสำหรับการสอนเสริม วิชา 890-100 และสาธิตการเรียนเนื้อหาบทเรียนเพิ่มเติมสำหรับการสอนเสริม วิชา 890-100

3.1 นักศึกษาจดบันทึก สรุปใจความสำคัญ ทบทวน เนื้อหาจาก เนื้อหาบทเรียนเพิ่มเติม สำหรับการสอนเสริม วิชา 890-100หรือไม่ อย่างไร

3.2 นักศึกษามีความเข้าใจเนื้อหาใน เนื้อหาบทเรียนเพิ่มเติมสำหรับการสอนเสริม วิชา 890 100 ครบถ้วนหรือไม่ หากไม่เข้าใจทำอย่างไร

3.3 นักศึกษาเข้าเรียน เนื้อหาบทเรียนเพิ่มเติมสำหรับการสอนเสริม วิชา 890-100 ซ้ำ และ เข้าเรียนอย่างสม่ำเสมอ หรือไม่ เพราะเหตุใด

3.4 นักศึกษาพบปัญหาในการเรียน เนื้อหาบทเรียนเพิ่มเติมสำหรับการสอนเสริม วิชา 890 100 หรือไม่ หากมี มีวิธีการแก้ปัญหาอย่างไร

4. ขอให้นักศึกษาแสดงวิธีการทำแบบฝึกหัดทบทวน (Revision) และสาธิตทำแบบฝึกหัดทบทวน (Revision)

4.1 นักศึกษามีความคิดเห็นอย่างไรกับแบบฝึกหัดทบทวน (Revision)

4.2 นักศึกษาทำแบบฝึกหัดทบทวน (Revision) ซ้ำ หรือไม่ เพราะเหตุใด

4.3 นักศึกษาพบปัญหาในการทำแบบฝึกหัดทบทวน (Revision) หรือไม่ หากมี มีวิธีการ แก้ปัญหาอย่างไร

5. ขอให้นักศึกษาแสดงวิธีการทำแบบฝึกหัดการฟัง (Listening) และสาธิตทำแบบฝึกหัดการฟัง (Listening)

5.1 นักศึกษามีความคิดเห็นอย่างไรกับแบบฝึกหัดการฟัง (Listening)

5.2 นักศึกษาทำแบบฝึกหัดการฟัง (Listening) ซ้ำ หรือไม่ เพราะเหตุใด

5.3 นักศึกษาพบปัญหาในการทำแบบฝึกหัดการฟัง (Listening) หรือไม่ หากมี มีวิธีการ แก้ปัญหาอย่างไร

6. ขอให้นักศึกษาแสดงวิธีการทำแบบฝึกหัดคำศัพท์ (Vocabulary) และสาธิตทำแบบฝึกหัด คำศัพท์ (Vocabulary)

6.1 นักศึกษามีความคิดเห็นอย่างไรกับแบบฝึกหัดคำศัพท์ (Vocabulary)

6.2 นักศึกษาทำแบบฝึกหัดคำศัพท์ (Vocabulary) ซ้ำ หรือไม่ เพราะเหตุใด

6.3 นักศึกษาพบปัญหาในการทำแบบฝึกหัดคำศัพท์ (Vocabulary) หรือไม่ หากมี มีวิธีการ แก้ปัญหาอย่างไร

## คำถามในการสัมภาษณ์เชิงเลิก จำนวน 5 ข้อ เกี่ยวกับความคิดเห็นต่อบทเรียนและ รูปแบบของบทเรียนการเรียนภาษาอังกฤษผ่าน LMS

1. นักศึกษาชอบหรือไม่ชอบบทเรียนและรูปแบบของบทเรียนในการเรียนภาษาอังกฤษผ่าน LMS อย่างไร ช่วยอธิบายโดยละเอียด

2. เนื้อหาส่วนใดที่ท่านชอบมากที่สุดและไม่ชอบมากที่สุด เพราะเหตุใด โปรดอธิบาย

 3. รูปแบบการนำเสนอหรือสื่อการสอนในส่วนใดที่ท่านชอบมากที่สุดและไม่ชอบมากที่สุด เพราะ เหตุใด โปรดอธิบาย

4.ท่านเข้าใจเนื้อหาในบทเรียนมากน้อยเพียงใด ท่านคิดว่าความยากง่ายของบทเรียนมีความ เหมาะสมหรือไม่อย่างไร โปรดอธิบาย

5. นักศึกษามีข้อเสนอแนะอะไรเพื่อให้เกิดการปรับปรุงเกี่ยวกับบทเรียนและรูปแบบของบทเรียนใน การเรียนภาษาอังกฤษผ่าน LMS

## คำถามในการสัมภาษณ์เชิงเลิก จำนวน 5 ข้อ เกี่ยวกับปัญหาและอุปสรรคในการเรียน ภาษาอังกฤษผ่าน LMS

1.นักศึกษาคิดว่ามีปัญหาและอุปสรรคอะไรมากที่สุดให้เรียงลำดับมาสามข้อ พร้อมทั้งอธิบาย 2.หากให้เลือกระหว่างการเรียนในห้องเรียนกับการเรียนแบบออนไลน์นักศึกษาจะเลือกเรียนแบบ ไหนเพราะอะไร โปรดอธิบาย

 3.ท่านทราบหรือไม่ว่าอะไรหรือทำไม จึงทำให้ท่านสอบผ่านหรือสอบตกในวิชานี้ โปรดอธิบาย
 4. ท่านมีความสามารถในการแก้ปัญหาต่างๆในการเรียนภาษาอังกฤษผ่าน LMS ที่ท่านกล่าวมา ข้างต้นได้หรือไม่อย่างไร โปรดอธิบาย

5.นักศึกษามีข้อเสนอแนะอะไรที่เกี่ยวข้องกับการแก้ไขปัญหาและอุปสรรคในการเรียน ภาษาอังกฤษผ่าน LMS

## หมายเหตุ : คำถาม 10 ข้อข้างต้นเป็นคำถามหลัก ซึ่งอาจมีคำถามอื่นๆ เพื่อช่วยดึงข้อมูล จากผู้เข้าร่วมในกระบวนการ Stimulated Recall เพิ่มเติม

### PAPER 1

University Students' Perceptions of an Online English Language Course

# University Students' Perceptions of an Online English Language Course

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### Abstract

Online learning has become more prominent in higher education (Chapelle, 1989; Kramsch, 2014). Despite its benefits, EFL students encounter many difficulties when taking online courses due to the shift from the traditional classroom setting to an online learning environment (Appana, 2008; Shopova, 2104). This study aimed to investigate 346 Thai university students' perceptions of problems related to learning English online. Two hundred and sixty two of these students received an "S" for satisfactory, and the remaining 84 a "U" for unsatisfactory. The findings indicated that both groups agreed that when learning online, they encountered problems associated with technology and self-motivation. In addition, both groups perceived the design and content of the online learning tasks were appropriate for their language proficiency. This study suggests that students need to get ready and be prepared for online learning. The faculty should solve the technological problems and provide quality design and content of the learning an online course.

Keywords: Online language learning; online learning problems; LMS

### Background of the study

Previous research has indicated that online learning, an intended use of network and communication technology, has begun to play a vital role in language teaching and learning. It might even replace several components of traditional, classroom-based language learning (Mohammadi, Ghorbani & Hamidi, 2011; Zamari, Adnan, Idris & Yusof , 2012). This is because the Internet allows learners to access a tremendous amount of authentic language resources that can assist learners in acquiring proficiency in the skills of listening, speaking, reading, and writing (Chen & Lin, 2007). In online language learning, Learning Management System (LMS) replaces classroom lectures (Jais, Ismail, Hussin & Khan, 2009) and is fully equipped with posted announcements, instructions, slides, lecture notes, video, audio, links, assignments, homework, discussion board, and

any other features instructors can use to support learning (Georgouli, Skalkidis, Guerreiro, 2008).

At one of the universities in the South of Thailand, LMS has been employed to support the teaching and learning of English. The Department of Languages and Linguistics at the Faculty of Liberal Arts has been using an online English course for almost ten years. The course is designed to help first year students whose English scores of Ordinary National Education Test (ONET) were equal to or below 30 out of 100. This means students are low proficiency in English. The management of the course is based on a self-directed learning approach. No classroom instruction is provided. Instead, throughout the semester, during a time and at a place of their choosing, students need to log in to LMS and complete learning tasks. Grades are given for the course based on students' performance on the midterm (35%) and final examination (35%), completion of listening, vocabulary and grammar lessons (28%), and 60 hours of attending English self-learning program "Tell Me More" (2%). Students who obtain scores of 50% or more earn a score of "Satisfactory" (S); those who obtain less than 50% earn an "Unsatisfactory" (U).

The majority of the students earned a grade of "S" or satisfactory; however, the number of the students earning a "U" or unsatisfactory has been continually increasing from 11% in the academic year 2012 to 20% in the academic year 2014 (Department of Languages and Linguistics, 2016). One possible explanation for students' lack of success may be unfamiliarity with online learning (Song, Singleton, Hill & Koh, 2004). Additional factors affecting students' success in learning online may include students' motivation and attitude towards online learning; interaction within online learning; technology and internet quality and accessibility; computer skills; internet/online learning skills; selflearning skills; and course and content quality/flexibility (Cantoni, Cellario & Porta, 2004; Kerr, Rynearson & Kerr, 2006; Song et al., 2004; Sun et al., 2008). Similarly, a study by Song et al. (2004) concluded that most students agreed that course design, students' motivation, time management, and convenience of online technologies impacted the success of online learning.

At the university in Southern Thailand, however, little is known about the problems the students encounter using the online course or what students think about the design and content of that course. Therefore, it is beneficial to investigate students' perspectives and the perceptions of the problems they may have faced and the design and content of the learning tasks. With these perspectives, all stakeholders might be better positioned to know what can be modified so as to maximize learning.

#### **Research questions**

1. What are SLs and ULs' perceptions of problems related to online learning?

2. What are SLs and ULs' perceptions towards the design and content of learning tasks in an online course?

### **Definitions of terms**

**1. Successful Online Language Students** (SLs) refers to students who obtained a "S" (Satisfactory) grade from an online English course.

**2. Unsuccessful Online Language Students** (ULs) refers to students who obtained a "U" (Unsatisfactory) grade from an online English course.

### Literature review

The Internet is a powerful form of communication technology (Hismanoglu, 2008). It can also be a valuable pedagogical tool used to improve language teaching and learning by offering up-to-date learning resources, cultural information, and authentic materials in a target language (Lee, 2000). There are a considerable number of advantages of using e-learning in language learning (Ghorbani et al., 2011, Kim, Liu & Bonk, 2005; Song, Singleton, Hill & Koh, 2004). Firstly, online students could learn autonomously with teachers playing the role of facilitator (Means & Olson, 1997; Mohammadi, Ghorbani & Hamidi, 2011). Students have more freedom to direct their own learning in terms of learning time and materials. They can also set their goals and evaluate their own learning (Benson 2001; Motteram 1997). The second advantage is flexibility in learning and Internet accessibility. Learners can choose what lessons to learn first based on their interests or access learning materials from any location that is convenient for them (Poole, 2000). Thirdly, online learning can encourage richer interactions between students, peers, and instructors using synchronous web-based technology. Chat messengers, discussion boards, or blogs encourages students, peers, and instructors to work together in real time basis (Dang & Robertson, 2010). Asynchronous communication also promotes better critical thinking (Benbunan-Fich & Hiltz, 1999). Finally, online learning could increase students' motivation because these interactions lessen the pressure often felt in the face-to-face classroom interactions (Tsai, 2009).

Online learning environments are not without their challenges. Tsai (2009) categorized four types of drawbacks: 1) unstable accessibility could lessen students' satisfaction. 2) the absence of face-to-face interaction could cause frustration for students who are accustomed to receiving immediate feedback from teachers. A lot of online students expect to get clarification from instructors when they have problems just as they can in classroom 3) the abundance of resources can be overwhelming for learners, particularly if they do not possess the strategies or skills to cope with a large amount of information 4) embedded images, sounds, text, multimedia, require students to be familiar with learning materials that are different than those found in textbooks. Therefore, students need new skills to access and effectively utilize these materials.

Even though online learning has long been established, problems still persist. A number of related studies have investigated problems, difficulties, and challenges in an online learning environment. Sun, Tsai, Finger, Chen and Yeh (2008) conducted a survey study and found out that students' computer anxiety, instructors' attitudes towards e-Learning, flexibility, e-Learning course quality, perceived usefulness, perceived ease of use, and diversity in assessments are critical factors affecting students' satisfaction. Furthermore, the low or poor quality of the materials, design, and contents of an online course could have a negative effect on student. To become an online successful students, they need to learn the language at their own pace and preferred style of input format (Zamari et al. , 2012). As discussed above, it is evident there are different problems, limitations and challenges affecting online language learning.

#### Methodology

#### **Participants**

The population of the study is 2,359 university students in the South of Thailand who earned an "S" or "U" grade from an online English course in the first semester of the 2015 academic year. The sample for the study included 453 students: 322 students receiving a grade of "S" and 131 getting a grade of "U". However, the participants of this study were 346 students, 262 SLs and 84 ULs, completing and returning the questionnaires.

#### Instrument

The main instrument in this study was a four-point Likert scale questionnaire. The questionnaire developed by the researcher was divided into three sections. The first

section collected data regarding students' general bio-data. The second section contained nine closed-questions and one open-ended question to elicit problems students faced when taking an online course. The third section consisted of five main closed-questions, 18 sub-questions and five open-ended questions and focused on students' perceptions of the design and content of the learning tasks in the online English course. In December, 2015, a pilot study was conducted with the questionnaire administered to 50 first year students enrolling in an online English course. The content validity was reviewed by three experts using index of item-objective congruence (IOC). From the results of the total Cronbach's Alpha coefficient, it was determined that the items of the questionnaire was highly reliable ( $\alpha = 0.89$ ).

#### Data collection and data analysis

The data was collected in January 2016, the beginning of the second semester of Thailand's 2015 academic year. The overall response rate of the questionnaire was 76.38% (81.37% from SLs and 64.12% from ULs). The SPSS program was employed to statistically analyze the data. To find out students' perceptions, means and standard deviations were used. The independent-sample t-test was employed to discover the differences between the mean scores of SL and UL's perceptions. For interpretation, the mean values of the students' agreement level were as follows: 3.00-4.00 was high, 2.00-2.99 was moderate and 1.00-1.99 was low. In addition, data from open-ended questions were classified based on the emerging themes.

#### Results

#### **Research question 1: Problems related to online learning**

As shown in Table 1, nine problems related to online learning were reported. The level of each problem is shown ranging from the highest mean score to the lowest mean score. For SLs, the first three highest rated problems were limitation of online operating system ( $\bar{X} = 2.95$ ), connectivity of the Internet ( $\bar{X} = 2.85$ ), and lack of interaction between instructors and students ( $\bar{X} = 2.78$ ), respectively. The lowest mean was lack of computer skills ( $\bar{X} = 2.15$ ). For ULs, the first three highest means of perceptions were lack of motivation in online learning ( $\bar{X} = 2.79$ ), connectivity of the Internet ( $\bar{X} = 2.68$ ) respectively. The lowest mean was lack of notivation between instructors and students ( $\bar{X} = 2.79$ ), connectivity of the Internet ( $\bar{X} = 2.73$ ), and lack of interaction between instructors and students ( $\bar{X} = 2.21$ ).

The overall students' perceptions of problems were in the range of moderate ( $\bar{X}$  = 2.56). Among the nine problems, the first three highest means of perceptions were limitation of online operating system ( $\bar{X}$  = 2.90), connectivity of the Internet ( $\bar{X}$  = 2.81), and lack of interaction between instructors and students ( $\bar{X}$  = 2.76). Lack of computer skills ( $\bar{X}$  = 2.17) was ranked as the least of the problems. The results of the t-test showed a significant difference at the 0.05 level (p < .05) between the mean scores of SLs and ULs in terms of the limitation of online operating system (t = 2.59\*) and lack of motivation in online learning (t = 1.89\*).

No	Problems	SL (n=262)		UL (n=84)		Total		+
NU.	1 i obiellis					(11-54)	0)	ι
		Ā	SD	Ā	SD	Ā	SD	-
9.	Limitation of online operating system	2.95	0.79	2.68	0.87	2.90	0.82	2.59*
7.	Connectivity of the Internet	2.85	0.81	2.73	0.78	2.81	0.81	1.20
3.	Lack of interaction between instructors and	2.78	0.68	2.68	0.64	2.76	0.68	1.23
stu	dents							
1.	Lack of motivation in online learning	2.63	0.77	2.79	0.64	2.66	0.75	-1.89*
4.	Unfamiliarity with self-learning	2.53	0.74	2.67	0.70	2.56	0.74	-1.48
2.	Preference in studying English	2.48	0.84	2.64	0.80	2.51	0.83	-1.58
6.	Insufficient computers for online learning	2.34	0.74	2.44	0.81	2.37	0.76	-1.06
8.	No internet connection at home or at	2.30	0.82	2.40	0.78	2.32	0.81	-1.05
	dormitory							
5.	Lack of computer skills	2.15	0.73	2.21	0.75	2.17	0.73	-0.66
Tot	al	2.55	0.46	2.58	0.47	2.56	0.46	-0.44

Table 1: Students' perceptions of the problems related to online language learning

\* Statistically significant at 0.05

The responses from the open-ended questions supported the findings from the questionnaires. Six students commented that Media stream could be run on "Internet Explorer" only and this caused them inconvenience since it took time to install the "Internet Explorer" platform. They suggested that the administrator should enhance the operating system to be able to run on any Internet browser platform or to develop a way to run Media Stream via a smart phone. In addition, nine students mentioned that they lacked motivation in learning English online due to the complexity of learning tasks, access to lessons and materials and unattractive designs.

# Research question 2: Perceptions towards the design and content of learning tasks in an online course

As Table 2 shows, the design and content of the learning tasks are ranked from the highest to the lowest mean scores. For SLs, the content of vocabulary lessons ( $\bar{X} = 3.14$ ),

overall design ( $\bar{X}$  = 3.11), content of listening lessons ( $\bar{X}$  = 3.08), and content of grammar lessons ( $\bar{X}$  = 3.07) were ranked as high satisfaction while content of Tell Me More was the lowest rank. For ULs, content of vocabulary lessons and content of listening lessons ( $\bar{X}$  = 3.04), and overall design ( $\bar{X}$  = 3.03) were in the range of high while the lowest mean was content of Tell Me More ( $\bar{X}$  = 2.87).

For overall perceptions of the design and content of learning tasks, SLs and ULs were highly satisfied ( $\bar{X} = 3.06$ ). There was a statistically significant difference between both groups (t=1.97\*). The SLs group had a more positive attitude towards the design and content of learning tasks ( $\bar{X} = 3.08$ ) while ULs had a less positive attitude ( $\bar{X} = 2.80$ ). One significant difference between the perceptions of SLs and SLs included content in grammar lessons (t=2.19\*).

			=262)	UL (r	1=84)	Total	(n=346)	
No.	Design and content of learning tasks							t
		Ā	SD	Ā	SD	Ā	SD	
3.	Content of vocabulary lessons	3.14	0.46	3.04	0.43	3.11	0.46	1.78
5.	Overall designs	3.11	0.41	3.03	0.36	3.09	0.40	1.76
2.	Content of listening lessons	3.08	0.48	3.04	0.42	3.07	0.47	0.89
1.	Content of grammar lessons	3.07	0.45	2.96	0.37	3.03	0.44	2.19*
4.	Content of Tell Me More program	2.95	0.56	2.87	0.46	2.93	0.54	1.20
Tota	al	3.08	0.38	2.80	0.33	3.06	0.37	1.97*

Table 2: Students' perceptions towards the design and content of learning tasks

\* Statistically significant at 0.05

From the open-ended questions, 43 students mentioned that the content of learning tasks in grammar lessons needed to be improved. They requested more interesting lessons as well as clear and sufficient explanations for their self-learning. The content of the vocabulary lesson should also match their proficiency; the ULs believed that the vocabulary lessons were too difficult and the difficulty level of the lesson should be gradually increased.

#### Discussion

According to Table 1, SLs and ULs perceived problems related to technological problems and lack of motivation. With regard to technological problems, it is consistent with several studies (Piccoli, Ahmad & Ives, 2001; Song et al., 2004; Webster and Hackley, 1997) which found that technical problems seemed to be the biggest challenges for online learners which in turn can cause dissatisfaction of online learners. Similarly, the reliability in IT and the Internet quality could affect online learning (Hiltz, 1993). Poor Internet accessibility could discourage EFL online learners (Aydin, 2007; Lyashenko & Malinina 2015). Singhal (1997) and Tsai (2009) pointed out that unfamiliarity and lack of Internet skills could cause anxiety in online learning environment. This can be supported by the students' suggestion in an open-ended question. The students commented that "Media Stream" should be able to run on any Internet platforms and not be limited to only Internet Explorer. Even though both groups reported problems related to technology in online learning, SLs had more concern about technological problems than ULs. In terms of the lack of motivation in online learning, both SLs and ULs encountered motivation problems. The finding is supported by number of studies (Tsai, 2009; Song et al., 2004; Zamsari et al., 2012) which indicated that student's motivation was one of the difficulties that affected students' success in online learning environment. From the findings, however, ULs had greater motivation problems than the SLs. This might be because the ULs required much more time to adjust to the new learning environment to increase their motivation in online learning. They might not have been familiar with environment and did not know how to cope with online learning. They had higher anxiety because they had to cope with both language problems and unfamiliarity with online learning environment, which was different from traditional classroom setting. Hurd (2006)'s study also showed that insufficient interactions cause adverse effect on motivation.

In the area of the design and content of learning tasks, SLs and ULs agreed that the design of the course was satisfactory. In terms of course content, they responded that the degree of difficulty was appropriate to their proficiency level, and the content was interesting. However, SLs and ULs had different opinions about the grammar learning tasks. ULs reported that the grammar lessons were not interesting enough. In their responses to the open-ended questions, SLs and ULs stated that they preferred more interesting and a variety of more up-to-date exercises. They also mentioned a desire for more detailed explanations in each lesson. Since the design and content of the learning tasks are vital components in online learning, the finding implies that the grammar learning tasks need to be improved. The findings are in line with Song et al. (2004), Sun et al. (2008), and Sun (2014) who posited that course quality was very critical in online learning, as it is needed to motivate and appeal to students' interests. According to Cantoni, Cellario and Porta (2004), good course designs could improve students' retention by varying the content, such as bringing texts, images and sound together.
Furthermore, the quality of online course in both designs and contents of learning tasks had a relationship with online learners' satisfaction, which was considered a factor of successful online learning (Chen, Finger, Sun & Tsai, 2008).

#### **Conclusion and suggestions**

Online language learning will continue to be an important learning tool at the university level (Appana, 2008; Hişmanoğlu, 2008; Lee, 2000). This study has explored limitations and problems students have encountered with this tool. Some are technological problems such as limitation of online operating system, online connectivity, and a lack of computer skills. Other problems are related to individual learners, and include a lack of motivation and interaction between instructors and students, and unfamiliarity with online learning. With regard to the design and content of the learning tasks, the content of grammar lessons was rated the lowest, particularly by ULs. Therefore, this study suggests that students must adapt themselves and get ready for online learning which is different from traditional classroom setting. They also need to prepare themselves to deal with technological problems. For the faculty and instructors, a plan to use motivational strategies to encourage students to learn English online successfully should be taken into consideration. Moreover, when delivering an online course, instructors need to provide sufficient explanation of key answers in order to prevent students' ambiguity. In addition, adequate access to the Internet needed to support online learning should be considered. Future research investigating successful online learning strategies is recommended.

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PAPER 2

Is Online Learning Suitable for All English Language Students?

## Is Online Learning Suitable for All English Language Students?

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#### Abstract

This study aimed to examine online language learning strategies (OLLS) used and affection in online learning of successful and unsuccessful online language students and investigate the relationships between OLLS use, affection in online learning and online English learning outcomes. The participants included 346 university students completing a compulsory online English course. Based on the grade results at the end of the course, the participants were divided into two groups; successful online language students (SLs, n=262) and unsuccessful online language students (ULs, n=84). Participants rated their use of three OLLS: cognitive, metacognitive, resource management, and rated their perceptions of affection in online learning. Additional data from in-depth interviews and stimulated recall was gathered from 10 participants; 5 from each group, and analyzed to triangulate the questionnaires. The results revealed that SLs significantly employed more OLLS than ULs. There were significant differences between SLs and ULs use of cognitive and metacognitive strategies; however, no significant difference between SLs and ULs use of resource management strategies was found. Regarding affection in online learning, there was a significant difference in terms of perceptions. Metacognitive strategies and affection in online learning had significant correlations with online English learning outcomes. The results suggest that low English proficiency students lacked online learning skills are not ready for learning English online.

**Keywords:** unsuccessful learners; online learning strategies; online language learning strategies; learning outcome

#### Introduction

Online learning has become an important component in education, and it is believed to provide unique advantages in the learning process (Appana, 2008; Dolence & Norris, 1995; Katz & Associates, 1999; Shopova, 2014). Therefore, in many countries, instruction has begun to shift away from traditional or face-to-face classroom settings to online learning environments. This shift has been occurring in all fields of education, including English language instruction (Vovides, Sanchez-Alonso, Mitropoulou, Nickmans, 2007). Clarke and Hermens (2001) posited that online learning is student-centered because students can control their own learning pace, and activities can be flexible so as to better suit a student's preferred learning style. Online learning also creates opportunities for active learning (Dolence & Norris, 1995). In addition, with good online learning applications/software, students have opportunities to participate in the discussion, express opinions, and share knowledge equally regardless of classroom size and time (Harasim, Calvert & Groeneboer, 1997).

Despite the benefits of online teaching and learning environment, students taking online courses could face difficulties that they might never have encountered in a traditional teaching and learning environment (Tsai, 2009) and these difficulties could have a negative impact on their learning performance (Davies & Graffs, 2005). These difficulties can be classified into four areas; cognition, metacognition, technical anxiety, and learning style and preferences.

In the area of cognitive challenges, learners need higher cognitive ability to deal with the more multi-dimensional learning tasks and complex content (Tyler-Smith, 2006). Normally, online courses are equipped with dynamic functions, such as online exercises, audio, video, and text downloads. Students learning online have to know how to click, drilldown, open new windows, and save files (Tsai, 2009; Wang & Chen 2007; Wu, Fitzgerald & Witten, 2014).

With regard to metacognitive challenges, online learners have great freedom of learning as there are no specific class schedules and classroom attendance is not required (Tsai, 2009). The absence of both of these components can result in learners'

total independence. Learners then need to monitor and self-regulate their learning by setting up a learning schedule to ensure they can complete all the lessons (Zimmerman, 2000). Research has shown that students with poor metacognitive skills seem to have poorer academic outcomes in online learning than in traditional learning (Barnard, Lan, To, Paton & Lai, 2009).

The third challenge involves computer and Internet anxiety. According to Piccoli, Ahmad and Ives (2001), computer anxiety has a significantly negative impact on learners' achievement. When a computer system or network system is down, students feel frustrated because they might not be able to follow the lessons. This causes anxiety among lower Internet skilled students (Saadé & Kira, 2009).

In terms of learning styles and preferences, Lee (2001) posited that in new learning environment students need time to adapt to some of the new challenges they will face. For some learners, these challenges might arise from the need to deploy a different learning style. For many field-dependent learners, they may feel a sense of isolation because of the absence of teachers and other students (Shih & Gamon, 2002). For learners who are less skilled in the use of technology, this lack of skills may be problematic (Lee, 2001). Most of the young and teenage learners prefer and are more familiar with studying with peers (Vonderwell, 2003). Without teachers and peers, when students need their immediate assistance to clarify the problems that may arise, they might get frustrated and experience a level of anxiety (Arbaugh, 2002; Petrides, 2002; Thurmond, Wambach, Connors & Frey, 2002). The findings of Surjono's (2015) study revealed that students in which their multimedia preferences and learning style matched with the online course materials were likely to be successful in online learning.

Possible learning difficulties students may encounter in an online learning environment requires that attention be paid to how to help students cope with these difficulties. Previous research has revealed that learners' use of effective and appropriate online learning strategies will led to successful academic achievement (Fuller, Chalmers, & Kirkpatrick, 1994; Hattie, Biggs, & Purdie, 1996; Pintrich & Johnson, 1990; Shih, 2005; Zimmerman, 1998). Additionally, Solak and Cakir (2015)

argued that employing effective online learning strategies is essential because, in doing so, students learn faster, have more pleasure, and learn more efficiently and effectively.

#### **Literature Review**

Online Learning Strategies (OLS) is defined as students' ability to understand and control their learning by employing a range of cognitive, metacognitive and resource-management skills in order to achieve online learning goals. Another factor that contributes to online learning achievement is affection in online learning (Hu & Grambling; 2009; Tsai, 2009; Zarisky & Styles, 2000).

Cognitive strategies, according to Cook and Mayer (1983), Payne, (1992), Pintrich, Smith, Garcia and McKeachie (1993), and Puzziferro (2008), are defined as the behaviors needed to acquire knowledge while engaging in the learning process. These behaviors include selection, acquisition, construction, and integration of information. Cognitive strategies are sub-divided into six strategies namely (1) Rehearsal strategies, (2) Elaboration strategies, (3) Organization strategies, (4) Comprehension/Critical thinking strategies, and (5) Internet skills.

Metacognitive strategies refer to the ways that learners monitor their cognitive processes by preparing and planning to learn as well as regulating and evaluating their learning process (Pintrich et. al, 1993). Metacognitive strategies are sub-divided into seven strategies; (1) Self-regulation/volitional strategies, (2) Time management strategies, (3) Goal setting strategies, (4) Self-monitoring/self-management strategies, (5) Self-evaluation strategies, (6) Concentration/effort regulation strategies, and (7) Self-awareness strategies.

Resource management strategies are defined as the ability of learners to manage learning resources such as their study environment and learning time, and their ability to learn from peers or more knowledgeable students and seek help from peers and instructors (Pintrich & De Groot, 1990). It is further divided into 3 sub-strategies; (1) Environmental management strategies, (2) Help seeking strategies, and (3) Use of resources/Resourcing strategies.

Affection in online learning, according to Tsai, (2009) are students' perceptions towards the benefits they gain from online learning. It also includes the willingness to learn by having a positive attitude, motivation, and ways to reduce anxiety in a particular learning environment. It is sub-divided into 3 sub-strategies: attitude, motivational and anxiety control.

The review of difficulties confronted by students in an online learning environment, OLLS and affection in online learning as discussed above were used as a framework to develop the questionnaire used in this study. It has been highlighted so far that OLLS is one of the factors that affects students in online learning environment to become successful online learners. Much research related to OLLS, academic success, motivation, and anxiety has been conducted and these studies are presented below.

In Turkish context, Altunay, Campus and Antakya (2014) surveyed strategies used by 63 Turkish distance learning university students. The study found that students sometimes used all types of language learning strategies, but rarely used affective strategies because they felt relaxed and less tense than they did in a face-toface classroom. However, the students with low proficiency levels still had more anxiety than the ones with higher proficiency.

In Khabbaz and Najjar's (2015) study, students' language learning strategies in a Moodle-based language learning program was examined. It was found that new technology in language learning could impede autonomous learning due to the challenges presented by the new technology. This resulted in lower use of the metacognitive strategies and was considered to have a direct negative impact on the academic results.

Shih (2005) conducted a study to assess the online learning strategies of Taiwanese EFL learners. It was also found that successful learners applied a larger variety of strategies and used metacognitive and cognitive strategies more frequently than unsuccessful learners.

A similar result was found in Chen, Zhang, and Liu's (2014) study. Eightytwo intermediate level Chinese students' use of listening strategies in a Web-based CALL was investigated. It was found that students tended to use meta-cognitive strategies the most, followed by cognitive strategies; affective strategies were used the least.

Conducted with college students, Puzziferro (2008) examined the relationship between self-regulated learning strategies and students' online learning outcomes. The top strategies used were effort regulation followed by time and study environment, while peer learning and help seeking were the least used strategies. It was also found that the online learning strategies that could predict students' grades were time and study environment. Students were more likely to achieve online course when they managed the study time well and studies in a good environment.

Research conducted by Liu and Feng (2011) discovered a relationship between metacognitive strategies and online learning behavior and test achievement. The authors of the study concluded that the students in the high-mark group of test achievements used more metacognitive strategies than those in the low-mark group. The authors also found that the students who spent more time learning online and taking more online tests achieved higher scores on the final examination.

Chang (2013) explored the effects of the use of self-monitoring strategies for study time, study environment, and attempted to use it to predict test scores in a webbased course as well as to measure the motivational effects. The results indicated that the students who adopted the self-monitoring strategy performed academically better than those who did not on the test of general English proficiency and gain higher motivation.

As discussed above, employing effective online language learning strategies appears to be a key in achieving a successful outcome in online language learning. Previous literature has also indicated a relationship between online language learning strategies use and academic achievement. Many students, however, are not successful in an online learning environment; they prefer face-to-face classroom setting (Webster & Hackley, 1997). Although there have been some studies related to online learning conducted in Thailand (Sukseemuang, 2009; Waemusa, Srichai & Wongphasukchote, 2008), none of those studies has focused on using OLLS and affection in online learning.

Accordingly, the current study was conducted to examine student's use of OLLS, affection in online learning and the relationship between OLLS, affection in online learning and student learning outcomes. The study serves to fill a gap in the literature by focusing on the university students' use of OLLS and perception of affection. The results provide some new insights that come from students' perspectives on the use of OLLS. The limitation of students' OLLS use is revealed while effective OLLS use is presented. The results might have implications for educators creating and facilitating online courses and students who wish to be more successful in online English learning.

The following research questions were addressed.

1. Are there any significant differences in online language learning strategies use, affection in online learning between successful and unsuccessful students? If so, what are they?

2. Is there any significant relationship between the use of online language learning strategies, affection in online learning and online English learning outcomes?

#### **Definitions of Terms**

1. Successful Online Language Students (SLs) refers to students earning "S" (Satisfactory) grades from an online English course in the first semester of 2015 academic year.

2. Unsuccessful Online Language Students (ULs) refers to students earning "U" (Unsatisfactory) grades from an online English course in the first semester of 2015 academic year.

#### Methodology

#### **Participants**

This study involved 2,359 Thai university students who were enrolled in an online English course in the first semester of the 2015 academic year and earned "S" or "U" grade. This particular online English course is a remedial course designed for students who obtained an unsatisfactory English score (30 or below) on the Ordinary National Examination Test (ONET) university entrance examination. The participants of the study were 453 students: 322 students receiving a grade of "S" and 131 getting a grade of "U". Nevertheless, the participants who completed and returned the questionnaires were 346 students, 262 SLs and 84 ULs. Out of 256 SLs and 84 ULs, five from each group was randomly selected for Stimulated Recall (SR) and an indepth interview.

#### Instruments

In this study, two main instruments were employed, an online language learning strategy questionnaire (OLLSQ) and a Stimulated Recall (SR) with an indepth interview. OLLSQ was based on the literature review about online language learning and the OLLSQ was developed to elicit use of OLLS and affection in online learning. The first section of the questionnaire elicited general data regarding students' views about taking an online course. The second section of the questionnaire contained twenty-seven 5-point Likert scale closed-questions and two open-ended questions to elicit online language learning strategies' level of use. The third section of the questionnaire consisted of twelve 4-point Likert scale closed-questions and one open-ended question and focused on students' perception of affection in online learning measuring the level of agreement. The content validity was reviewed by three experts using an index of the Item Objective Congruence (IOC). The pilot study of the OLLSQ was conducted in December 2015 with 50 first year students enrolled in an online English course. Cronbach's alpha index was performed to measure the reliability of the OLLSQ. It was found that the questionnaire items were reliable for both section two and three ( $\alpha = 0.90$  and 0.62 respectively).

A SR procedure and an in-depth interview were conducted for two main purposes. First, the SR was focused on observing the cognitive behaviors of the SLs and ULs when they learned English online. In addition, the SR helped the SLs and ULs to more accurately reply to the interview questions. The information from the SR and an in-depth interview was used to triangulate the OLLSQ. Final interview questions were reviewed by three experts. The pilot study of the SR and an in-depth interview was conducted in December 2015 with three students who were not the participants of the study.

#### **Data Collection and Data Analysis**

The data was collected in January 2016, the beginning of the second semester of Thailand's 2015 academic year. The overall response rate of the questionnaire was 76.38% (81.37% from SLs and 64.12% from ULs). Descriptive statistics was employed to analyze the data. To find out students' OLLS level of use and affection in online learning's level of agreement, means, and standard deviations were used. In addition, Point Biserial Correlation analysis was performed in order to find the relationship between OLLS, affection in online learning, and learning outcome. The independent-sample t-test was employed to determine the differences between the mean scores of SLs and ULs' OLLS, level of use, affection in online learning's level of agreement, and the level of correlation among OLLS, affection in online learning and learning outcomes. The mean values of the students' OLLS level of use were as follows: 4.21-5.00 was very high, 3.41-4.20 was high, 2.61-3.40 was medium, 1.81-2.60 was low, and 1.00-1.80 was very low. The scale interpretation for affection in online learning's level of agreement: 3.28-4.00 was very high, 2.82-3.27 was high, 1.76-2.51 was low and 1.00-1.75 was very low. The last scale interpretation for level of correlation; 0.50-1.00 was high, 0.30-0.49 was moderate, and 0.10-0.29 was low. In addition, data from open-ended questions were classified based on the emerging themes. The data gained through interview was also analyzed according to the content analysis.

#### Results

The results are organized according to the two research questions: 1) the differences in OLLS use, affection in online learning between SLs and ULs, and 2) the relationship between the use of OLLS, affection in online learning and online English learning outcome.

#### The differences in OLLS use between SLs and ULs

Table 1 summarized the level of OLLS used by SLs and ULs.

Strategies	SL (n=262)			UL (n=				
	Mean	SD	Level of use	Mean	SD	Level of use	t	p- value
Cognitive	3.25	0.63	Medium	3.08	0.56	Medium	2.19*	.028
Metacognitive	3.61	0.62	High	3.40	0.63	High	2.66**	.008
Resources management	3.13	0.69	Medium	3.01	0.66	Medium	1.44	.150
Total	3.35	0.56	Medium	3.18	0.51	Medium	2.50**	.010

#### Table 1: OLLS employed by SLs and ULs

\*\* Statistically significant at 0.01, \* Statistically significant at 0.05

The result of t-test showed that there was a significant difference at the level of 0.01 (p<.01) for the level of use (t= $2.50^{**}$ ). SLs employed the overall OLLS significantly more than ULs (SLMean=3.35, ULMean=3.18, respectively). Among the three strategy types, significant differences were found at the level of 0.01 (p<.01) between the mean values of SLs and ULs for metacognitive strategies (t= $2.66^{**}$ ). There is no significant difference between SLs and ULs for resources management strategies. Interestingly, both SLs and ULs used metacognitive strategies at the highest level of use while resources management strategy was the least used.

		SL (n=262)			UL (n=84)				
Strategie	Sub-strategies	Mea	SD	Level	Mea	SD	Level	t	p- valu
Strategie		n	50	of use	n	50	of use		e
5	Rehearsal	3.06	0.7	Mediu	2.89	0.6	Mediu	1.88	.06
		0.00	4	m	2109	9	m	1100	
	Elaboration	3.23	0.7	Mediu	2.94	0.6	Mediu	3.22*	.00
			2	m		6	m	*	
ve	Organization	3.04	0.8	Mediu	2.91	0.8	Mediu	1.23	.21
niti			6	m		5	m		
lgo	Comprehension/Critic	3.61	0.7	High	3.58	0.7	High	0.30	.76
Ŭ	al thinking		8			9			
	Internet skills	3.35	1.1	Mediu	3.19	1.2	Mediu	1.08	.27
			7	m		1	m		
	Total	3.25	0.6	Mediu	3.08	0.5	Mediu	2.19*	.28
	G 16	2.74	3	m	2.15	6	m	2 70*	0.0
	Self-	3.76	0.9	High	3.45	0.8	High	2.70*	.00
ive	regulation/Volitional	2 77		TT: 1	2 40	6	TT' 1	2.04	00
	Time management	5.77	0.7	High	3.48	0.7	High	2.94	.00
	Goal satting	3 67	9	Uigh	3 18	 Q	High	1 77	07
	Obai setting	5.07	0.9	Ingn	5.40	1	Ingn	1.//	.07
	Self-monitoring&	3 98	0.9	High	3 68	10	High	2.41*	01
<u>ğ</u> nit	management	5.70	2	111911	5.00	4	111911	2.11	.01
300	Self-evaluation	3.48	0.8	High	3.36	0.8	Mediu	1.09	.27
leta			9	0		2	m		
Σ	Concentration/Effort	3.14	1.2	Mediu	3.01	1.0	Mediu	0.92	.36
	regulation		5	m		4	m		
	Self-awareness	3.31	0.9	Mediu	3.25	0.9	Mediu	0.52	.60
			1	m		3	m		
	Total	3.61	0.6	High	3.40	0.6	High	2.66*	.00
			2			3		*	
onment gement	Environmental	3.94	0.7	High	3.67	0.7	High	2.63*	.00
	management		7			7		*	
	Help seeking	2.68	0.8	Mediu	2.67	0.8	Mediu	0.11	.91
			9	m		5	m		
vir ma	Use of	3.33	1.1	Mediu	3.02	0.9	Mediu	2.44*	.01
Env	resources/Resourcing	2.12	2	m	2.01		m	*	1.5
	Total	3.13	0.6	Mediu	3.01	0.6	Mediu	1.44	.15
			9	m		n	m		

Table 2: Sub-OLLS employed by SLs and ULs

\*\* Statistically significant at 0.01, \* Statistically significant at 0.05

Table 2 shows that SLs employed OLLS with the mean score between 2.68 and 3.98. ULs used OLLS with the mean score between 2.67 and 3.68. Self-monitoring/self-management strategies were used most by SLs and ULs (SLMean=3.98, ULMean=3.68), the environmental management strategies were second (SLMean=3.94, ULMean=3.67), and the third most used strategies were time management strategies (SLMean=3.77, ULMean=3.48). The least used by both

groups was help seeking strategies (SLMean=2.68, ULMean=2.67). Among 15 substrategies, there were significant differences at the 0.01 level (p<.01) between SLs and ULs for 4 sub-strategies namely, elaboration strategies (t= $3.22^{**}$ ), self-regulation (t= $2.70^{**}$ ), environmental management (t= $2.63^{**}$ ), and use of resources (t= $2.44^{**}$ ) respectively.

Five SLs and another five ULs were randomly selected to take part in an interview and in a SR. All of five SL respondents reported that they always used metacognitive strategies. SLs allocated sufficient time and were able to access the online course to finish the tasks consistently. One of the SLs mentioned:

"I always access the online lessons during the weekend because there is no distraction and I had plenty of free time. I determined in advance that what online quizzes and exercises I should complete. I noted my study schedule on the calendar to remind me and I strictly follow it." SL1

In contrast, all five UL respondents lacked this type of strategy. Four ULs reported that they did not plan their study time and depended on friends to remind them when it was a time to study.

With regard to cognitive strategies, four of the SLs used all of cognitive substrategies, especially elaboration strategies. SLs took notes on important language structures and summarized each lesson for study. ULs did not report using these same strategies and stated that they were not able to summarize the lessons due to the abundance of information in the online course. One of the ULs' pointed out that:

"There are so many, ....too many learning materials. I do not know where to start." UL1

In terms of resources management strategies, all the SL respondents reported that they used resources management strategies (environmental management and use of resources) to cope with various problems while learning English online. For example, they could find quiet places and good Internet connectivity. They could ask peers about language ambiguities when they had problems with computers. However, all of ULs reported that they rarely used resources provided in the online course (e.g. online Dictionary or other useful links) because they did not know how to find or use them).

	SL (n=262)			UL (n=84)				
Affection	Mean	SD	Level of agreement	Mean	SD	Level of agreement	- t	p- value
Attitude	3.10	0.52	High	3.04	0.53	High	0.97	.33
Motivation	2.85	0.39	High	2.64	0.39	High	4.15**	.00
Internet Anxiety	2.27	0.57	Low	2.26	0.62	Low	0.19	.84
Total	2.75	0.35	High	2.61	0.38	High	2.94**	.00

Table 3: Perceptions of affection in online learning reported by SLs and ULs

\*\* Statistically significant at 0.01, \* Statistically significant at 0.05

Regarding affection in online learning's perception, Table 8 presents the agreement level of SLs and ULs' perceptions of the online English course. Both SLs and ULs expressed a high level of beliefs in the usefulness and advantages of the online English course (SLMean=2.75, ULMean=2.61). According to the results of the three sub-affections, perception of attitude and motivation were at a high level of agreement while Internet anxiety perception was at a low level of agreement. There was, however, a significant difference at the 0.01 level (p<.01) between SLs and ULs (t=2.94\*\*). This indicates that SLs had a higher positive attitude and motivation compared to ULs.

One of the three sub-affections within the affection domain was perceived differently by SLs and ULs, with a significant difference at the 0.01 level (p<.01) for motivation (t= $4.15^{**}$ ).

According to the SR and interview, all of SLs had a very high level of motivation for learning and perceived that the online course was beneficial. Even though four of them preferred face-to-face classroom learning to the online course, they continued to study with low levels of anxiety in the online course because they believed the online course was beneficial. One of the SLs said,

"Even though, I prefer to study with teacher, but in my opinion, online learning is able to save my time because I can skip the parts that I have already known and study only a new topic. Sometimes teacher teaches what I have already known because he/she also needs to teach others students." SL2

In comparison, even though most of the ULs perceived the online course was beneficial, they felt that they were not familiar with this new learning environment and were quite anxious and worried about it. Therefore, they were not willing to learn via the online English course. Three of ULs mentioned that they did not think online course promoted self-learning. Below is a statement from one of the ULs.

"I have never taken an online course before. I feel so nervous and I am not sure I can solve the problems while learning online." UL2

## The relationships between the use of OLLS, affection in online learning and the online English learning outcomes

Table 4 shows the correlation analysis between the 342 participants' use of OLLS and their learning outcomes using the Point Biserial Correlation analysis. The interpretation of the correlation was based on Brown (1988, p. 150). The value 0.50-1.00 indicates a high relationship, 0.30-0.49 indicates a moderate relationship and 0.10-0.29 indicates a low relationship.

Sturtes is a	Online learning outcome				
Strategies	rpb	Correlation level	p-value		
Cognitive	0.118*	Low	0.020		
Metacognitive	0.142**	Low	0.004		
Resources management	0.077	No correlation	0.075		
Total	0.134*	Low	0.006		

 Table 4: Relationships between OLLS's level of use and learning outcomes

\*\*Correlation is significant at the 0.01 level (1-tailed)

\* Correlation is significant at the 0.05 level (1-tailed)

As shown in Table 4, overall OLLS and online English learning outcome were correlated significantly at the low level (r=0.134\*, p<0.05). In other words, students who used OLLS more were likely to achieve better learning outcomes. Two OLLS, cognitive and metacognitive, were correlated with the online English learning outcome at a low level (r=0.118\*, p<0.05 and 0.142\*\*, p<0.01 respectively). Metacognitive strategies had the highest correlation among the three strategies. On the other hand, no significant relationship between the use of resources management and the outcome were found.

		Online learning outcome				
Strategy	Sub-strategy	<b>r</b> pb	Correlation level	p-value		
	Rehearsal	0.101*	Low	0.030		
	Elaboration	0.171**	Low	0.001		
itive	Organization	0.066	No correlation	0.109		
logn	Comprehension/Critical thinking	0.016	No correlation	0.383		
0	Internet skills	0.058	No correlation	0.140		
	Total	0.118*	Low	0.020		
	Self-regulation/Volitional	0.144**	Low	0.004		
O	Time management	0.157**	Low	0.002		
	Goal setting	0.095*	Low	0.039		
gnitiv	Self-monitoring/Self- management	0.137**	Low	0.005		
stacc	Self-evaluation	0.059	No correlation	0.137		
Me	Concentration/Effort regulation	0.045	No correlation	0.203		
	Self-awareness	0.028	No correlation	0.303		
	Total	0.142**	Low	0.000		
at ut	Environmental management	0.140**	Low	0.005		
eme	Help seeking	0.006	No correlation	0.458		
esou	Use of resources/Resourcing	0.121*	Low	0.012		
R ma	Total	0.077	No correlation	0.080		

Table 5: Relationships between OLLS sub-strategy and learning outcome

\* Correlation is significant at the 0.05 level (1-tailed)

\*\* Correlation is significant at the 0.01 level (1-tailed)

As illustrated in Table 5, eight out 15 of the OLLS were significantly correlated with the online English learning outcome at the low level. Among OLLS's sub-strategies, elaboration strategies had the highest correlation ( $r=1.71^{**}$ , p<0.01); time management had the second highest correlation ( $r=0.157^{**}$ , p<0.01); and self-regulation had the third highest correlation ( $r=0.144^{**}$ , p<0.01). However, it should be noted that seven of the OLLS were not significantly correlated with the online English learning outcomes.

The results from SR and interview were in line with the responses from the questionnaire which reported that SLs used both cognitive and metacognitive strategies in order to complete the online English learning tasks. For instance, all of the SLs took notes and made a summary of the online lessons and they repeated some difficult lessons before taking mid-term and final examination. In addition, all of SLs tended to manage study time and be discipline. In contrast, none of the ULs used many cognitive and metacognitive strategies. One of the SLs stated:

"I am not worried that I would not have enough time to study. Just once a week, if you access the course...... take some notes and do the exercises immediately after reviewing the lessons, you will understand the lesson and you will not waste the time to review it again for the exam." SL3

**Table 6**: Relationships between affection in online learning's level of agreement and learning outcome

	Online learning outcome				
Sub-affections	rpb	Correlation level	p-value		
Attitude	0.052	No correlation	0.166		
Motivation	0.218**	Low	0.000		
Internet Anxiety	0.010	No correlation	0.423		
Total	0.157**	Low	0.000		

\* Correlation is significant at the 0.05 level (1-tailed)

\*\* Correlation is significant at the 0.01 level (1-tailed)

As illustrated in Table 11, the correlation between affection in online learning's level of agreement and the online English learning outcomes was significant at the low level (r= $0.157^{**}$ , p<0.01). It indicates that students with a higher degree of motivation, but lower anxiety could have more possibilities to success in the online English course. Among sub-affections, motivation had the highest correlation with the online English outcomes (r= $0.218^{**}$ , p<0.01). No correlation was found in the rest.

Relevant comments stated in SR and the interviews corroborate the statistical results. The SLs said that they possessed a strong level of motivation to successfully complete the course; moreover, they had a good attitude towards online learning. One of SLs stated:

"This course helped me to be more responsible. Scores obtained from the tasks made me motivated. Arranging time-table to finish those exercises kept me motivated too and I did it with enthusiasm." SL4

In comparison with SLs, the ULs tended to lack positive attitudes and strong motivation as exemplified in the following statement:

"I felt motivated when I studied in the classroom. Class attendance motivated me to attend the class. The teacher can answer my question. In online learning environment no one can help me to clarify the points; I do not want to ask my friends because I trust the teacher more." UL3

#### Discussion

Online English language learning has been used at a university in the south of Thailand since 2002; however, due to the continuous development in Internet/online technology; there are many current and emerging challenges with this particular learning environment. The findings of this research, which focused on OLLS use, affection in online learning provide useful information that can help stakeholders better understand how students could become successful online learners and how the instructors might help them in this mode of learning. The findings of this study are summarized and discussed as follows:

# The differences in OLLS use between SLs and ULs, the different perceptions of affection in online learning between SLs and ULs

In terms of OLLS, there are significant differences between OLLS level of use between SLs and ULs. The results indicate that SLs significantly employed more OLLS than ULs. Metacognitive strategies were the highest level of use among SLs and ULs. It should be pointed out that the online English learning required all students to be more self-regulated since in the online course the time for completing each learning task was set and nonnegotiable. Moreover, students had to review their quiz scores and check whether they had completed all of the tasks. This may be explained in relation to the nature of the online English course that requires students to be more self-monitored & management, time managed, self-regulated, goal set. Otherwise they could not accomplish the course. Most of SLs had these skills and they were more self-regulated and self-monitored/self-managed than ULs. They aimed to achieve the course, set study time, accessed the course consistently, and checked quiz scores. These behaviors resulted in good learning outcomes. This is consistent with Amir (2006), Liu and Feng (2011) and Puzziferro (2008) that metacognitive strategies are the key and mostly used by achieving online learners.

The results also showed that cognitive strategies were the second most used strategy employed by both SLs and ULs. SLs used more cognitive strategies than ULs significantly. This can be explained that SLs consistently access the course to study and this particular online course required students consistently access learning materials and do exercises and quizzes for grades. As a result, it directly promoted cognitive skills, particularly elaboration strategies. Students needed to study all the materials before summarizing, taking notes, and comprehending many lessons on their own. This required high cognitive abilities in terms of both English subject matter and Internet/computer skills. These findings are in line with Chen, Zhang, and Liu (2014) whose study revealed that 82 intermediate Chinese students used metacognitive strategies the most, followed by cognitive strategies when they learned listening lessons in Web-based CALL.

With regard to the level of agreement on affection in online learning, they were perceived by students at the high level. Attitude was at the highest degree of agreement in all three affection sub-categories. There were significant differences in the agreement level of overall affection in online learning' perceptions and sub-strategies in motivation between SLs and ULs. SLs were more positively motivated in learning English online than ULs. One possible explanation is that SLs had a specific goal and determination to accomplish the course. Passing the course was very important to them, and as stated by SLs, they gained benefits from independent learning. SLs might already have high metacognitive and cognitive abilities. Their motivation might have been higher because they were able to learn online English course without much trouble. This is consistent with Matuga's (2009) study, which indicated that high achieving online secondary students' motivation increased after finishing the course due to the confidence in their ability of learning. In contrast, low achieving students' motivation had decreased because they did not have goal-oriented behavior.

Another possible explanation of why ULs lacked motivation is that the students might have some dissatisfaction with the overall course design and the quality of the online learning tasks. Sun, Tsai, Finger, Chen and Yeh (2008) posited that the critical factors affecting students' perceived satisfaction that lessens students' motivation to learn online included course flexibility, course quality, perceived usefulness, and perceived ease of use.

### The relationships between the use of OLLS, affection in online learning and the online English learning outcomes

This research also revealed a significant correlation at a low level between OLLS level of use, affection in online learning's level of agreement, and online English learning outcomes. For OLLS, metacognitive had the strongest relationship, followed by cognitive strategies. However, resources management strategies had no relationship with online English learning outcome.

It can be explained that students who had more metacognitive strategies were the ones who could control their study well. Accordingly, this may lead to academic achievement because they could consistently access the course, study the lessons, and complete the learning tasks on a timely basis, all of which is critical to learners' success. The results are similar to those found in Amir (2006), Liu and Feng (2011) and Puzziferro's (2008) study which found that there were the relationships between self-regulated learning strategies and college students' online learning outcomes.

Based on the results, cognitive strategies were also correlated with online English learning outcome. This is because this online English course provided an abundance of learning materials and resources, and only students being able to cope with the heavy cognitive load and the bombardment of too much information could be successful in the course.

For resource management strategies, no relationship with online English learning outcome was found. This might be because the learning environment they were in was suitable enough for online learning, for example, the university provides a good Internet connection for all students. Therefore, it required minimum efforts to overcome the resource problems. Both SLs and ULs could use this type of strategy equally. In addition, students could immediately ask peers for clarification when it was needed since they might stay in the university dormitory and it was convenient for them to contact and ask for help from peers with minimum efforts.

According to affection in online learning, motivation was found to be the strongest correlation with online English achievement compared to other affection sub-strategies. One possible explanation may be related to self-learning skills. Students who did not possess self-learning skills tended to lack motivation associated with anxiety and lack levels of interest. ULs still preferred learning English in a face-to-face classroom since they were not ready to learn independently. Ushida (2005) found that, in general, students had high anxiety at the beginning of the course due to a lack of familiarity, but later, as the course went on, that anxiety lessened.

Interestingly, even though correlations between OLLS and online English outcomes existed, it was only at the low level. There may be other possible factors that influenced online English learning outcomes. In fact, OLLS might help individual online students to overcome difficulties or problems in online learning in certain ways. However, there might still be other challenges in online English learning environment which students would encounter. Additionally, ULs used OLLS at the low level and had low motivation in learning online English course. It might imply that ULs are not ready to study online English course due to many factors, not only the factor of lacking of OLLS and motivation. This is in line with Chen, Chou, and Hung's study (2010) who examined online learning readiness of 1,051 students in three Taiwanese universities in 5 dimensions (1) computer/Internet self-efficacy, 2) self-directed learning, 3) learner control, 4) motivation for learning, and 5) online communication self-efficacy). It was found that the higher grade year students were more ready to study online course when compared to lower grade year students in all dimensions of online readiness scales. This was because most students still needed time to adapt themselves to a new learning mode since they had been learning within traditional mode for a long time and are still attached to it. Therefore, proficiency, maturity, and experiences in online learning could also play an important role in online learning.

#### **Implications and Suggestions**

Implications from this study can be drawn as follows:

1. Since technical problems and individual problems that students encountered are the main challenges in online learning, helping students to overcome these two challenges would increase the satisfaction with the new mode of learning and promote online learning motivation. To solve technological problems, sufficient and effective access to the Internet and twenty-four hour connectivity of the Internet are also needed.

2. Interesting and practical online course design and content is very important. Sufficient explanations for the lessons and exercises are also required. Additionally, the design and content of learning tasks must be evaluated and revised from time to time.

3. Online language learning strategies (OLLS) training should be conducted before the course begins and throughout the course to encourage students' motivation

to learn online. Moreover, interesting and motivating orientation at the beginning of the course must be implemented. In addition, the interaction between instructors and students must be increased in order to motivate students to take responsibilities for and control their own online learning.

4. Students 'readiness for online learning should be measured before the course starts. Low English proficiency students need to prepare themselves to deal with changing mode of learning. The measurement would include students' preference and style of learning, confidence, comfortable and competency in using Internet and computers, ability to engage in self-direct learning, and intrinsic and extrinsic motivation and positive attitude towards online learning.

5. To take an online course, online English students need assistance. The following model is proposed by the researcher as a guideline for a university offering an online course. The proposed model is illustrated in Figure 1:



Figure 1. Procedure to improve online English course learning process

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